1. Community Accountability among Hospitals Affiliated with Health Care Systems

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COST-CONTAINMENT EFFORTS BY MANAGED-CARE firms, government agencies, and employer coalitions have precipitated widespread consolidation in the health-care delivery system (Shortell, Gillies, and Anderson 1994; Feldman, Wholey, and Christianson 1999). Along with increasing numbers of closures and mergers, the combining of hospitals and other delivery organizations into horizontally and vertically integrated health care systems has perhaps been the most visible manifestation of this trend (Ackerman 1992; Burns, Bazzoli, Dynan, et al. 1997). The emergence of large, and sometimes geographically dispersed, health systems has rendered the freestanding, locally based hospital, once the mainstay of the U.S. health delivery system, a less central player in today's health care environment (Shortell, Gillies, and Devers 1995; Cerne 1994).

The shift from local, community-based organizations to more complex delivery systems raises critical questions about the community orientation and accountability of health systems and their affiliated organizations (Berry and Seavey 1994). Unlike freestanding hospitals, whose loyalty and accountability to the local community are clearly established

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in their bylaws and are traditionally reflected in the composition of their governing boards, systems are often characterized by multiple layers of governance and health care operations comprising multiple vertically or horizontally linked provider organizations. Under these arrangements, power, resources, and services within the system reside not in a single organization but across its multiple constituent organizations and in its administrative authorities. This creates a situation whereby community members, patients, their families, and advocates find direct access to leadership more problematic than is the case in freestanding hospitals. Further, the extralocal managing entities of health care systems may have no particular ties to the community served by the hospital, and their priorities or strategic goals may differ from those envisioned by the local community as well (Relman 1996; Manning 1997; Scott 1997).

A fundamental question, then, is whether affiliation with a health care system changes the traditional accountability of hospitals to the local community and, if so, in what ways. The question is particularly relevant to nonprofit hospitals, whose tax-exempt status rests primarily on providing benefit to the community as a whole, rather than to investors or parent corporations.

In this study, we examine how community accountability differs between system-affiliated hospitals and freestanding hospitals and whether community accountability differs in degree or form across hospitals affiliated with different types of systems. We particularly emphasize hospital governance, which traditionally has been the principal means by which the community informs the hospital of local health needs and holds the institution accountable for meeting them. Based on a national sample of 2,079 hospitals, we compare system-affiliated hospitals and freestanding hospitals according to how they exercise community accountability in the composition, structure, and activity of their governing boards. Further, in a subsample of 587 hospitals, we perform similar comparisons among system-affiliated hospitals on three potentially important system attributes: size, geographic scope, and ownership.

Conceptual Framework

Accountability implies relationships of monitoring, control, and answerability to superiors or public constituencies by administrators and policy makers (Chisolm 1995; Fry 1995; Gamm 1996). Community

accountability, more specifically, applies these relationships to the interests and needs of all individuals "residing within a reasonably circumscribed geographic area, in which there is a sense of interdependence and belonging" (Griffith 1987; Sigmond 1995, 36). Among health-services delivery organizations, community accountability has traditionally focused on certain objectives, such as care for the poor, access to emergency care, cost containment, and ensuring high-quality care. More recently, the notion of community accountability has been broadened to include intentions to improve overall community health, reduce the gap between the health and well-being of rich and poor (or at least not permit it to widen), and, in general, support linkages between health and community development (Gamm 1996).

Historically, hospitals have relied on their governing boards as the principal mode of exercising community accountability (Weiner and Alexander 1998). Hospital boards represent an interface between the hospital and its environment insofar as members are drawn from, and have a primary affiliation with, organizations and agencies outside the hospital (Middleton 1987). This dual alliance with the organization and the outside locality not only permits direct exchanges of information and resources across boundaries but also serves as a mechanism for holding hospitals accountable to serving the needs of their communities (Pfeffer and Salancik 1978; Griffith 1987).

The literature on hospital and health-system governance suggests that boards can exercise community accountability in a variety of ways. Some literature has highlighted board structure and composition, stressing that hospitals have greater potential to exercise community accountability when their boards comprise a mix of experts and community representatives (Griffith 1987; Hash 1989; Arkus 1993; Gamm 1996). Other writers have highlighted board activities, suggesting that hospitals are more likely to exercise community accountability when their boards are engaged in monitoring the local environment and gathering information (Proenca 1998). Finally, a third research perspective stresses the role of governing boards in creating links with community agencies to enhance community health (American Hospital Association 1993; Proenca 1998; Gamm 1998). Drawing from past literature, we have classified hospitals' exercise of community accountability into three categories:

1. the presence and structure of a community-based hospital board
2. the existence of initiatives for monitoring and reporting information about community health and hospital performance

3. collaboration with other local agencies to enhance community benefits

Each of these dimensions is discussed below.

Board Structure and Composition

The existence and legal form of the hospital board itself may either advance or deter community accountability. We assume that the existence of a legally constituted governing board at the hospital advances community accountability by providing greater local control. A legally constituted hospital governing board bears sole and ultimate responsibility for hospital affairs and has nondelegable powers that are recognized by statute and common law (Pointer and Ewell 1994). Hospitals that do not possess legally constituted governing boards either have no board at all or they have an "advisory board" that exists at the discretion of a health care system or some other higher authority to which the hospital is accountable (e.g., university, religious order, or unit of government). These boards often have limited powers or responsibilities and exist primarily to advise the management or board of the system or higher authority (Pointer and Ewell 1994). Although such "advisory boards" provide a structural interface between the hospital and the community and often offer a channel for communicating local issues to the hospital, their lack of fiduciary powers renders them less influential in advancing community accountability than legally constituted governing boards. (Claxton, Feder, Schachtman, et al. [1997] offer a similar argument.)

Beyond the existence and legal form of the hospital board, its composition may also be critical to the exercise of community accountability. Community representation on a board is believed to enhance its ability to reflect the interests of the whole community and ensure that hospital policies, strategies, and operations are consistent with those interests (Scott 1997). Hence, community accountability is apt to be greater among hospitals with higher percentages of "outside" board members—that is, board members who hold neither management positions nor clinical privileges at the hospital or health system. Similarly, community accountability is greater among hospitals with higher percentages of board members residing in the community served by the hospital.

Finally, we consider one structural attribute of governance that is specific to system-affiliated hospitals: the role of the hospital board in

policy development and strategic decision making. We assume that the exercise of community accountability is enhanced when the hospital board has authority independent of the system board to make a wide range of hospital policy and strategic decisions.

Information Gathering and Scanning of Local Environments

Another area that we examine is how hospital boards exercise community accountability through the activities executed by board members. In particular, we are interested in the extent to which hospital boards reflect a focus on community accountability through their information monitoring, and more specifically, their monitoring, evaluating, and reporting activities related to community health. The information that a board routinely collects and monitors indicates the scope of its attention and the priorities it holds for the institution that it governs (American Hospital Association 1997). Similarly, the information that a board uses to evaluate hospital performance and to issue reports to the community reflects its views on the range of activities the hospital is obliged to perform. Hence, there is greater potential to exercise community accountability when the hospital board conducts information-monitoring activities related to routine reviews of community health measures and immunization rates. Further, community accountability is enhanced when the hospital board undertakes the following initiatives: uses community health standards, or benchmarks, to evaluate hospital performance; evaluates the hospital chief executive officer (CEO) on community health improvement; and disseminates reports to the community on hospital quality and costs.

Collaborative Relationships with Other Agencies to Enhance Community Benefits

Hospital boards can also exercise community accountability by directing hospital management to identify and respond to unmet community health needs, particularly community-level risk factors that lead to extensive health-services utilization, increasing health care costs, and other adverse outcomes (Sigmond 1995; Schlesinger and Gray 1998). Although no single organization possesses all the resources and competencies necessary to improve community health, hospitals could increase

their leverage by working with other local organizations and agencies to address underlying community risk factors (Weiner and Alexander 1998). Hospitals could take certain initiatives to exercise community accountability:

- work with other organizations and agencies to assess community health status
- develop assessments of appropriate health-services capacity in the community
- use such assessments to identify unmet needs, excess capacity, or duplicative services
- collect, track, and communicate clinical and health information

System Characteristics and Community Accountability

Comparisons of system-affiliated and freestanding hospitals offer a useful starting point for investigating potential shifts in their community accountability, but a narrow focus on such comparisons may mask critical disparities in the degree and form of community accountability exhibited by hospitals that operate within different types of health care systems. For example, policy makers and community leaders have scrutinized real or perceived differences in the degree of community accountability shown by hospitals affiliated with either a not-for profit or an investor-owned (IO) system. Beyond ownership, other system characteristics, such as size or geographic scope, might also systematically affect the degree to which system-affiliated hospitals hold themselves accountable to communities. Larger systems, for example, may cede greater authority to local hospital boards over community relations because their size precludes effective centralized decision-making by the system board. Alternatively, however, larger systems may not be as attentive to any given local community. Because of their orientation to a wide array of organizations operating in various localities, they are often forced to subordinate the interests of any given community and to devise strategies and policies that benefit the whole system.

In sum, we expect that system-affiliated hospitals and freestanding hospitals may differ in the ways they exercise community accountability, given differences in their key stakeholders (i.e., hierarchically

structured delivery systems or local community agencies) and their respective goals. Further, we expect that hospitals affiliated with different types of health care systems may differ in the ways they exercise community accountability, thereby reflecting the different goals of their respective key stakeholders.

Method

Data Sources

The American Hospital Association's (AHA) 1997 Hospital Governance Survey provided most of the data for the study. The survey was mailed to the CEOs of all U.S. general community hospitals, and it generated 2,079 responses (a 42 percent response rate). Compared with the population of U.S. general community hospitals, respondents overrepresented secular, not-for-profit hospitals (63 percent versus 59 percent), underrepresented IO hospitals (10 percent versus 15 percent), overrepresented urban hospitals (62 percent versus 56 percent), and underrepresented system-affiliated hospitals (28 percent versus 35 percent). No significant differences were observed for hospital bed size or for state and local government hospitals. The AHA's 1997 Annual Survey of Hospitals provided information on hospital community collaboration activities and data relevant to measures of health care–system size, geographic scope, and ownership.

Measures

Table 1 describes our measures of hospital community accountability. In addition, we constructed a measure to assess the degree of authority of system-affiliated hospitals over operational and strategic activities. This measure was the mean centralization score across 17 policy decisions: hospital board-member appointment; executive compensation; CEO evaluation; CEO appointment; capital budget; operating budget; control of assets; operational quality improvement; clinical quality assurance; community and government relations; bylaw changes; strategic planning; mission revision; service additions and deletions; managed-care contracting; credentialing of medical staff and delineation of their privileges; and new company formation. Principal components factor analysis with varimax (orthogonal) rotation suggested a single-factor solution and thus a single scale ($\alpha = .92$).

TABLE 1
Variable Categories and Descriptions

Variable category	Variable description	Mean	SD
Dependent variables			
Board structure and composition	Hospital has a legally constituted governing board (1 = yes, 0 = no)	0.87	0.33
	Percentage of policy decisions for which hospital board has independent authority (system hospitals only)	0.32	0.19
	Percentage of outside members on hospital board (i.e., those having neither management responsibilities nor clinical privileges at the hospital)	0.64	0.22
	Percentage of board members residing in the community served by the hospital	0.88	0.21
Information monitoring and reporting	Hospital board reviews community health measures on a routine basis (1 = yes, 0 = no)	0.44	0.50
	Hospital board reviews community immunization rates on a routine basis (1 = yes, 0 = no)	0.14	0.34
	Hospital board uses community health standards to evaluate hospital performance (1 = yes, 0 = no)	0.26	0.44
	Hospital board disseminates reports to the community on the quality and costs of health care services (1 = yes, 0 = no)	0.59	0.49
	Community health improvement used as a criterion for evaluating hospital CEO performance (1 = yes, 0 = no)	0.36	0.48
Collaborative relations	Hospital works with other local providers, public health agencies, or community representatives to conduct a health status assessment of the community (1 = yes, 0 = no)	0.80	0.40

	Hospital works with other local providers, public health agencies, or community representatives to develop a written assessment of the appropriate capacity for health services in the community (1 = yes, 0= no)	0.69	0.46
	Hospital uses assessment to identify unmet health needs, excess capacity, or duplicative services in community (1 = yes, 0 = no)	0.87	0.34
	Hospital works with other providers to collect, track, and communicate clinical and health information across cooperating organizations (1 = yes, 0 = no)	0.74	0.44
Independent variables			
System affiliation status	Hospital owned, leased, or sponsored by a health care system (1 = yes, 0 = no)	0.28	
System size	System is small (8 or fewer hospitals),	0.34	
	medium (9 to 24 hospitals), or	0.32	
	large (25 or more hospitals)	0.34	
System geographic scope	System is rural (1 = yes, 0 = no),	0.06	
	single-market (1 = yes, 0 = no), or	0.15	
	multimarket (1 = yes, 0 = no)	0.79	
System ownership	System is secular, not-for-profit (1 = yes, 0 = no),	0.37	
	religious (1 = yes, 0 = no), or	0.29	
	investor owned (1 = yes, 0 = no)	0.34	

System affiliation status was defined according to whether or not a hospital was owned, leased, or sponsored by a health care system. Network affiliations or contract management by a system were not components of our measure. In addition, we constructed three measures to compare hospitals affiliated with different types of systems. Health care systems were classified on the basis of three dimensions: size, geographic scope, and ownership. For system size, we constructed our small, medium, and large categories, using the terciles of the system size distribution for sample hospitals. Geographic scope comprises three categories: (1) single market; (2) multimarket; and (3) rural. Each system was assigned to one of the three categories, according to the number and location of their member hospitals operating inside or outside metropolitan statistical areas (MSAs) (Luke, Ozcan, and Olden 1995). Single-market systems manage owned, leased, or sponsored hospitals that operate within a single MSA. Multimarket systems manage owned, leased, or sponsored hospitals operating in two or more MSAs. Rural systems manage owned, leased, or sponsored hospitals that operate in non-MSA (i.e., rural) areas. System ownership consists of three categories:

1. investor owned
2. not-for-profit, religious
3. other private, not-for-profit, secular

We did not include state and local government hospitals in our analysis because of the small number of hospitals in this category that were identified as components of health care systems.

Results

Table 2 compares freestanding and system-affiliated hospitals, based on their measures of community accountability. System-affiliated hospitals rated lower than freestanding hospitals on the first dimension of community accountability: the legal form and structure of a hospital board. Specifically, system-affiliated hospitals were less likely than freestanding hospitals to possess a legally constituted, local governing board ($\chi = 328.01$, $p < .001$). Notably, all of the system-affiliated hospitals in our sample that did not operate a legally constituted governing board did possess an advisory board. This finding is consistent with those of

TABLE 2
Community Accountability of Freestanding and System-Affiliated Hospitals

	N	Free-standing hospitals (%)	System-affiliated hospitals (%)	*P* value for CHISQ or *t*-test
Board structure and composition				
Legally constituted governing board	2,068	96	66	0.001
Outside directors on board	1,954	67	56	0.0001[a]
Board members drawn from outside community	1,972	11	17	0.0001[a]
Information monitoring reporting and				
Community health measures reviewed by board	2,022	42	49	0.01
Immunization rates reviewed by board	2,002	12	16	0.05
Benchmark on community health standards	1,894	23	35	0.001
Disseminate cost and quality reports to community	1,842	57	66	0.001
Evaluate hospital CEO on community health improvement	1,591	34	40	0.02
Collaborative relations				
Work with others to conduct health status assessment	1,845	80	81	0.50
Work with others to develop written capacity assessment	1,843	67	75	0.01
Use assessment to identify unmet needs, excess capacity, or duplicative services	1,365	86	90	0.05
Work with others to collect, track, and communicate clinical and health information	1,845	71	80%	0.001

[a] *F*-value.

other surveys, indicating that most systems have some sort of multitiered governance structure, consisting of a system-level board and a subsidiary-level advisory board or governing boards (American Hospital Association 1997; Governance Institute 1997; 1999). Although advisory boards possess no legally mandated authority or responsibility, they do provide a structural interface between the hospital and the community. However, they may be less influential in advancing community accountability than legally constituted governing boards.

Further, system-affiliated hospitals had lower proportions of outside (i.e., nonhospital) members on their boards than freestanding hospitals ($t = 10.10$, $p < .0001$) and higher proportions of members who were not residents of the local community in which the hospital operates ($t = 6.05$, $p < .0001$). These findings suggest weaker ties to the community. First, boards dominated by insider members (e.g., management or active physicians) may be more likely to reflect the strategic priorities of the hospital or system without the potentially countervailing influence of community representation. Second, the presence of members who are physically (and perhaps emotionally) removed from the community may reduce the probability that the board will identify and address community concerns. Both attributes may reduce the capacity of boards to exercise community accountability.

Comparisons of hospitals across attributes associated with the second dimension of community accountability, information-monitoring activities, suggested that system-affiliated hospitals came out ahead. Specifically, system-affiliated boards were more likely than freestanding hospital boards to perform certain types of evaluation on a routine basis:

- evaluate the hospital CEO on community health improvement ($\chi = 5.16$, $p < .05$), review community health status measures ($\chi = 8.61$, $p < .01$)
- routinely review immunization rates ($\chi = 6.24$, $p < .05$)
- use performance benchmarks based on community health standards ($\chi = 28.60$, $p < .001$)
- disseminate reports on costs and quality to the community ($\chi = 11.42$, $p < .001$)

To the extent that the information-monitoring and processing activity of a board reflects its values and priorities, the boards of system-affiliated hospitals appear to be more responsive to community needs and issues than their freestanding counterparts.

Finally, comparisons of attributes of community accountability associated with the third dimension, collaborating with other agencies to enhance community benefits, demonstrated three statistically significant differences between system-affiliated and freestanding hospitals. Specifically, the former were more likely than the latter to work with others to develop written capacity assessments ($\chi = 9.45$, $p < .01$), use assessments to identify unmet needs, excess capacity, or duplicative services ($\chi = 4.53$, $p < .05$), and work with outside agencies to collect, track, and communicate clinical and health information ($\chi = 13.98$, $p < .001$). Although both types of hospitals frequently organized themselves and collaborated with others to address unmet needs, adjust their capacity, and deal with community issues, system-affiliated hospitals displayed a pattern of results that suggested greater community accountability than their freestanding counterparts.

In sum, our findings indicate that system-affiliated hospitals were less likely to exercise community accountability in terms of governance structure and composition. However, they were actually more likely than freestanding hospitals to monitor information and collaborate with other health care agencies. It is worth noting that we observed the same pattern of results even after we removed IO hospitals from our sample (results available from authors). Thus, the differences observed between system-affiliated and freestanding hospitals do not appear to result from the disproportionate presence of IO hospitals in health care systems.

Community Accountability in Different Types of System Hospitals

Because health care systems are not uniform in their structures or strategies, global comparisons between freestanding and system-affiliated hospitals may mask important differences among system-affiliated hospitals. To address these concerns, we compared hospitals affiliated with different system attributes—specifically, size, geographic scope, and ownership—in order to discover how, and to what extent, they express community accountability. Table 3 presents the results for system size. We found several significant differences in structural attributes of the hospital board that are associated with higher community accountability. For example, hospitals in smaller systems were more likely to have a legally constituted governing board ($\chi = 72.56$, $p < .001$), a higher proportion of outside

TABLE 3
Community Accountability of System-Affiliated Hospitals (by System Size)

		Systems (%)				
	N	Small (A)	Medium (B)	Large (C)	*P* value for CHISQ or *F*-test	Significant contrast effects
Board structure and composition						
Legally constituted governing board	585	81	75	43	0.001	A vs. C B vs. C
Outside directors on board	548	63	63	41	0.0001[a]	A vs. C B vs. C
Board members drawn from outside community	548	13	23	17	0.0001[a]	B vs. A B vs. C
Hospital board decision-making authority	587	29	31	34	0.02[a]	A vs. B A vs. C
Information monitoring and reporting						
Community health measures reviewed by board	573	48	54	46	0.32	
Immunization rates reviewed by board	567	22	20	9	0.001	C vs. A C vs. B
Benchmark on community health standards	528	30	34	42	0.04	A vs. C
Disseminate reports to community on quality and cost	501	71	60	64	0.09	
Evaluate the hospital CEO on community health improvement	494	43	40	37	0.53	
Collaborative relations						
Work with others to conduct health status assessment	502	84	80	80	0.45	
Work with others to develop written capacity assessment	501	80	75	70	0.14	
Used assessment to identify unmet needs, excess capacity or duplicative services	397	96	85	88	0.02	A vs. B A vs. C
Work with others to collect, track, and communicate clinical and health information	502	78	80	82	0.59	

[a] *F*-value.

(versus inside) members on the board ($F = 64.54$, $p < .0001$), and a lower proportion of board members drawn from outside the community ($F = 10.16$, $p < .0001$), all structural indicators of greater community accountability. However, the boards of hospitals in smaller systems retained less authority to make independent decisions ($\chi = 3.85$, $p < .05$), a factor that may somewhat offset the greater participation of community members in hospital governance.

Only three additional significant differences were obtained for attributes of community accountability that inhere in the other two dimensions (information monitoring and reporting; collaborative relationships). Boards of hospitals affiliated with smaller systems were more likely to routinely review immunization rates in the community ($\chi = 13.66$, $p < .001$) but less likely to establish benchmarks for community health standards ($\chi = 6.52$, $p < .05$). Further, although smaller systems were only somewhat more likely than larger ones to work with others to develop a written capacity assessment, hospitals affiliated with smaller systems were significantly more likely to use these capacity assessments to identify unmet needs, excess capacity, and duplicative services ($\chi = 8.38$, $p < .05$).

In sum, hospitals affiliated with smaller systems generally displayed higher community accountability than hospitals affiliated with medium or large systems, particularly on board structure and composition measures.

Table 4 presents the results of comparisons across systems on the basis of their geographic scope. In general, we observed few statistically significant differences in community accountability among rural, single-market, and multimarket systems. To some extent, this may be an artifact of our classification scheme. Eighty percent of the hospitals in our sample belong to multimarket systems, whereas only 6 percent belong to rural systems. Thus, unequal cell sizes and consequent lack of statistical power may contribute to the rather low number of significant differences we observe. Notwithstanding this potential limitation, we did observe three statistically significant differences in the structural forms of community accountability. Specifically, hospitals affiliated with multimarket systems were less likely than hospitals affiliated with single-market and rural systems to have either a legally constituted governing board ($\chi = 8.35$, $p < .05$) or a large proportion of outside members on the board ($F = 12.16$, $p < .0001$). We observed only one significant difference in terms of board information

TABLE 4
Community Accountability of System-Affiliated Hospitals (by Geography)

		Systems (%)				
	N	Rural (A)	Single-market (B)	Multi-market (C)	*P* value for CHISQ or *F*-test	Significant contrast effects
Board structure and composition						
Legally constituted governing board	584	78	77	63	0.01	C vs. B
Outside directors on board	547	62	66	53	0.0001[a]	C vs. A C vs. B
Board members drawn from outside community	547	22	15	17	0.40[a]	
Hospital board decision-making authority	584	45	45	41	0.48[a]	
Information monitoring and reporting						
Community health measures reviewed by board	572	34	56	50	0.09	
Immunization rates reviewed by board	566	17	19	16	0.73	
Benchmark on community health standards	527	19	37	36	0.13	
Disseminate reports to community on quality and cost	500	44	76	65	0.01	A vs. B A vs. C
Evaluate the hospital CEO on community health improvement	493	32	41	40	0.73	
Collaborative relations						
Work with others to conduct health status assessment	501	74	86	81	0.33	
Work with others to develop written capacity assessment	500	85	80	73	0.22	
Used assessment to identify unmet needs, excess capacity, or duplicative services	397	87	97	89	0.12	
Work with others to collect, track, and communicate clinical and health information	501	78	79	80	0.93	

[a] *F*-value.

and management processes. Specifically, hospitals affiliated with rural systems were less likely than those affiliated with single-market or multimarket systems to disseminate reports on hospital quality and costs to the community ($\chi = 9.14$, $p < .01$). Finally, we observed no significant differences in the collaborative relationships among hospitals affiliated with rural, single-market, and multimarket systems. It is worth noting that the pattern of results for multimarket systems generally coincides with a centralized, corporate approach to system governance. Multimarket systems are less likely to have legally constituted boards at the hospital level, and they have fewer outside (versus inside) directors serving on the hospital board. Multimarket systems are also more likely to receive community input from separate community-advisory boards.

Table 5 presents results of comparisons among system-affiliated hospitals on the basis of their ownership. In general, hospitals affiliated with religious systems were more likely than their counterparts in secular, not-for-profit, and IO systems to display board structure and composition attributes associated with community accountability. Specifically, hospitals affiliated with religious systems were more likely to have a legally constituted governing board ($\chi = 113.23$, $p < .001$) and more locally based decision-making authority ($F = 198.61$, $p < .0001$). Hospitals affiliated with religious systems were also more likely (along with hospitals affiliated with secular, not-for-profit systems) to have a higher proportion of outside members on the board, relative to hospitals in IO systems ($F = 193.99$, $p < .0001$).

We observed a similar pattern for information-monitoring activities. Boards of hospitals affiliated with religious systems were more likely to evaluate the hospital CEO on criteria related to community health improvement ($\chi = 12.34$, $p < .01$) and to review community health indicators ($\chi = 8.38$, $p < .05$) and immunization rates ($\chi = 22.95$, $p < .001$). Hospitals affiliated with IO systems, however, were more likely than their counterparts in religious and secular not-for-profit systems to establish benchmarks for hospital performance on community health standards ($\chi = 5.93$, $p < .05$).

Finally, hospitals affiliated with a religious system were significantly more likely to collaborate with other agencies to enhance community benefits, especially compared with hospitals in IO systems. Specifically, religious-system hospitals were more likely to work with others to conduct community health-status assessments ($\chi = 11.73$, $p < .01$), to work with others to develop a written capacity assessment ($\chi = 18.51$,

TABLE 5
Community Accountability of System-Affiliated Hospitals (by Ownership)

		Systems (%)				
	N	Religious not-for-profit (A)	Secular, not-for-profit (B)	Investor-owned (C)	CHISQ or *F*-value (*p* value)	Significant contrast effects
Board structure and composition						
Legally constituted governing board	584	86	73	35	0.001	A vs. B A vs. C B vs. C
Outside directors on board	547	65	66	31	0.0001[a]	C vs. A C vs. B
Board members drawn from outside community	547	20	16	15	0.11[a]	
Hospital board decision-making authority	586	46	42	38	0.0001[a]	A vs. B A vs. C
Information monitoring and reporting						
Community health measures reviewed by board	572	57	48	42	0.01	A vs. B A vs. C
Immunization rates reviewed by board	566	24	19	5	0.001	C vs. A C vs. B
Benchmark on community health standards	527	35	30	43	0.05	B vs. C
Disseminate reports to community on quality and cost	500	70	65	61	0.19	
Evaluate the hospital CEO on community health improvement	493	50	35	33	0.003	A vs. B A vs. C

Collaborative relations						
Work with others to conduct health status assessment	501	86	84	71	0.003	C vs. A C vs. B
Work with others to develop written capacity assessment	500	84	76	63	0.001	A vs. B A vs. C B vs. C
Used assessment to identify unmet needs, excess capacity, or duplicative services	397	94	91	82	0.006	C vs. A C vs. B
Work with others to collect, track, and communicate clinical and health information	501	84	78	78	0.30	

[a] *F* -value.

$p < .001$), and to use these assessments for identifying unmet needs, excess capacity, and duplicative services ($\chi = 10.20$, $p < .01$). Hospitals affiliated with IO systems ranked behind, or tied with, religious and secular not-for-profit system hospitals on each of the four indicators of community collaborative relationships.

It is important to note that these findings do not take into account the potential association among our predictors and thus do not control for the possibility of confounding effects. For example, system size may be associated with geographic scope; hence, the results reported for size may be attributable to scope. Although we were not primarily concerned with testing causal arguments regarding the effects of our system characteristics, we did perform exploratory multivariate logistic and ordinary least squares regressions to assess the net effects of each system attribute on community accountability mechanisms (results available on request from the authors). In each regression model, we used the categorical specifications of system size, geographic scope, and ownership (minus a reference category for each) to predict the dependent variables. Results indicate that differences across size categories for information monitoring and reporting were no longer significant when other system characteristics were controlled. Similarly, differences across geographic-scope categories for board structure and composition were not significant when controlling for system size and ownership. All other results were consistent with those obtained in the categorical comparisons reported previously.

Discussion

Consolidation in the hospital sector has raised many concerns about the accountability of hospitals that are responsible to authorities other than the community. In view of these concerns, we decided to assess how community accountability is exercised by hospitals affiliated with health care systems. We focused on the structure, composition, and activity of hospital governing boards as the primary accountable entities linking hospitals with their communities. Our approach evaluated how community accountability in system-affiliated hospitals differed from freestanding hospitals and among different types of systems. Our results indicate that hospitals demonstrate community accountability in a variety of ways.

Several key findings emerge from comparisons between system-affiliated and freestanding hospitals on measures of community accountability. The first is that system-affiliated and freestanding hospitals differed significantly and systematically in how they expressed community accountability. In general, freestanding hospitals demonstrated community accountability through hospital governance structure and composition, whereas system-affiliated hospitals elected to have their boards monitor and gather relevant information and collaborate with other agencies in order to identify and respond to community health needs. Thus, system-affiliated hospitals' relative lack of traditional structural and compositional mechanisms for assuring community accountability (e.g., formally incorporated boards that include community representatives) does not seem to preclude them from engaging in activities that reinforce ties to community (cf. Relman 1996; Scott 1997). This finding suggests that policy makers, regulators, and others concerned about the effects of industry consolidation on community accountability need to recognize that hospitals and health systems can meet in multiple ways their legal, social, and institutional obligations to serve the broad interests of the community in which they operate.

The second central finding is that observed differences in how system-affiliated and freestanding hospitals approach community accountability are not necessarily attributable to the relative concentration of IO hospitals in health care systems. That is, we obtained the same pattern of results, even when we took into account the unequal distribution of ownership categories across system-affiliated and freestanding hospitals. This suggests that differences between system-affiliated and freestanding hospitals can be attributed to the fact that all system-affiliated hospitals (regardless of ownership type) are embedded in superordinate organizational structures with multiple agency relationships. These findings imply that community leaders and policy makers concerned about the sale of freestanding, not-for-profit hospitals to IO systems must be careful not to confound "ownership conversion effects" with "system affiliation effects." All system-affiliated hospitals, both IO and not-for-profit, are subject to multiple agency relationships that affect their legal, social, and institutional obligations to serve the broad interests of the community in which they operate. Our results suggest that system affiliation (that is, the act of embedding a hospital in a superordinate organizational structure) may itself change the way in which a formerly freestanding hospital expresses community accountability, regardless of ownership of

the system with which the hospital has affiliated (cf. Relman 1996; Scott 1997).

Perhaps a more fundamental question would be: Why do system-affiliated and freestanding hospitals adopt different approaches to community accountability. One possible explanation is that health care systems consider traditional forms of governance too cumbersome and expensive to maintain under conditions of structural complexity and broad strategic and operational goals (Johnson 1995). Coordination costs and response time increase when organizations must contend with multitiered governance arrangements that involve large boards, composed of members with potentially diverse interests (Pointer, Alexander, and Zuckerman 1995). However, systems may still view links to local markets and communities as essential to the ability of affiliated hospitals to compete in their local markets and, increasingly, to assume risk under managed care (Alexander, Zuckerman, and Pointer 1995). This may explain why system-affiliated hospitals emphasize the collection and reporting of information about community health and hospital performance and why they collaborate with local agencies to address community health needs. An alternative explanation may be that multi-institutional, multilayered health systems emphasize data systems and information exchange because they view these mechanisms as a means of coordinating and controlling the disparate elements of the system. Extending this form of internal accountability to the community may simply be a natural extension of a core capability to which considerable resources and value have been assigned. Freestanding hospitals, by contrast, may not face the same coordination demands and do not invest the same level of resources in information and data collection. These hospitals may instead achieve accountability by emphasizing the resources to which they do have access, namely, local citizenry who can serve as board members.

It may also be the case that freestanding hospitals emphasize board structural and compositional mechanisms for assuring community accountability (e.g., formally incorporated boards that include community representatives) because they are subject to strong, deeply embedded values favoring local control and volunteerism (Alexander and Scott 1984; Starkweather 1988; Alexander and D'Aunno 1990). These institutionalized values prescribe traditional governance structures and practices that, in turn, legitimize local hospitals as entities whose primary mission is to serve the needs of the community. System-affiliated hospitals can

perhaps afford to circumvent these traditional, prescribed structures and practices because the normative pressures that confront them to adopt or maintain these structures and practices are weakened by their multiple accountabilities: to the community, to system headquarters, and to other system-based organizations.

This discussion raises the interesting question of whether these traditional, prescribed governance structures and practices actually promote community accountability among system-affiliated or freestanding hospitals. As manifestations of institutionalized norms and values, the traditional hospital board may symbolically reflect community accountability through its composition and structure, yet have little real effect in terms of reflecting the interests of the entire community and ensuring that hospital policies, strategies, and operations are consistent with those interests. This raises the question of which attributes of accountability community leaders should emphasize when they are negotiatives with systems regarding the sale or affiliation of their freestanding hospital. Should they advocate for structural and compositional aspects of community accountability, or should they instead seek enforceable agreements on community monitoring, reporting, and collaboration?

Notwithstanding the differences observed between system-affiliated and freestanding hospitals, our results clearly indicate that the community accountability practices of hospitals affiliated with different types of systems differ substantially. For example, hospitals affiliated with religious systems are more actively engaged in community accountability practices than hospitals that are part of secular, not-for-profit, and, particularly, IO systems. This orientation to community is deeply embedded in the doctrines and values of many religious systems and the orders with which they are associated. Indeed, our results indicate that hospitals in these systems practice what they preach. In addition, we discovered that hospitals affiliated with IO systems had instituted the fewest practices and structures for promoting community accountability. Although the concentration of IO hospitals in health care systems does not account for the differences that we observed between system-affiliated and freestanding hospitals, it does seem that hospitals affiliated with IO systems do not promote community accountability as actively as those affiliated with religious or secular not-for-profit systems. This may indicate that communities whose hospitals are considering affiliation with IO systems may better preserve their community benefit by looking instead to alternative affiliations with religious or secular not-for-profit systems.

We found few statistically significant differences in the forms of community accountability among hospitals affiliated with systems of differing geographic scope. As noted earlier, differences in sample size across geographic-scope categories may have limited our ability to detect significant patterns. Indeed, evidence from other sources, although limited to community collaboration, suggests that this may be the case. Among the system-affiliated hospitals that responded to the 1997 AHA Annual Survey, those belonging to rural systems were significantly less likely than hospitals affiliated with single- or multimarket systems to seek and monitor information as followings:

- work with others to conduct a health status assessment
- work with others to develop a written capacity assessment
- use that capacity assessment to identify unmet needs, excess capacity, or duplicative services
- work with others to collect, track, and communicate clinical and health information

Further research involving larger, more equally distributed sample sizes across geographic-scope categories would help to determine whether systematic, significant differences exist for the other two dimensions of community accountability examined in this study.

Finally, we found that system size is related to rather mixed patterns of community accountability. Hospitals within smaller systems were more likely to express community accountability through the structural and compositional attributes of their boards. However, with one notable exception, we saw few consistent or significant effects of system size on community monitoring and reporting or collaboration with community agencies. Interestingly, hospitals affiliated with large systems were significantly more likely to use community health standards or benchmarks to evaluate hospital performance, despite the fact that their boards were no more likely to engage in routine monitoring of community health measures. Perhaps the boards of hospitals affiliated with small systems monitor community health status but do not evaluate organizational performance in terms of community health improvement. Alternatively, they may evaluate organizational performance in terms of community health improvement, but they adopt a more localized frame of reference than the boards of hospitals affiliated with large systems. A local frame of reference might reflect a more provincial orientation, a lack of

information about community health benchmarks or standards, or insufficient resources for tracking community health status based on such benchmarks or standards. More focused research is needed to explore these tentative findings.

It is also important to note that our perspective on hospital accountability is deliberately circumscribed by our interest in *how* the hospital and its board exercise community accountability, rather than what they are accountable for or the specific benefits they provide to the community. Accountability for CEO performance, protecting the hospital's charitable assets (if nonprofit), and maintaining the quality of the medical staff are clearly responsibilities of the board. Similarly, providing uncompensated care, shortfalls in treating Medicare and Medicaid patients, providing teaching services, and sponsoring research are examples of hospital activities that may specifically benefit the community. Although we have not examined these expressions of accountability elements directly, our exploration of the structures and processes for exercising community accountability potentially subsumes many, if not all, of these elements.

In sum, our study provides evidence that the expression of community accountability differs in both degree and form between system-affiliated and freestanding hospitals and among hospitals affiliated with different types of systems. These findings give rise to an obvious question: Are differences in how (or how much) hospitals express community accountability associated with differences in how (or how much) hospitals provide community benefit? For example, do hospitals whose legally constituted boards comprise local citizens provide more uncompensated care than those that have only advisory boards or whose boards are composed primarily of members residing outside the community? Do community health status indicators (e.g., immunization rates, incidence of teen pregnancy) improve when hospitals routinely monitor such indicators and use them for evaluating executive and organizational performance? Are community health monitoring, evaluation, and reporting enough, or does community health improvement occur only when hospitals also collaborate with other community organizations to identify health care needs and coordinate care? As consolidation continues in the health care sector, such questions represent the next generation of inquiry in this emerging area of health policy and management research.

Our study provides policy makers and community leaders with insight into how community accountability is, and is not, exercised

differently by freestanding and system-affiliated hospitals and across different types of systems. In particular, our results challenge the claim that system-affiliated hospitals demonstrate less community accountability than freestanding hospitals. The former express community accountability differently, but perhaps no less strongly, than the latter. Further, hospitals affiliated with different types of systems vary in the type and degree accountability they demonstrate. These findings suggest the need for tailored policy making to encourage greater community accountability. Further, they highlight the need for careful consideration of system characteristics when communities are making decisions about potential affiliations between local hospitals and health care systems.

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