University of Nebraska - Lincoln
DigitalCommons@University of Nebraska - Lincoln

Management Department Faculty Publications | Management Department

4-1-2011

Hospital boards and hospital strategic focus: The impact of board involvement in strategic decision making

Karen Ford-Eickhoff
University of Tennessee, Knoxville, Karen-Ford.Eickhoff@uncc.edu

Donde Ashmos Plowman
University of Nebraska-Lincoln, dplowman2@unl.edu

Reuben R. McDaniel Jr.
University of Texas at Austin, reuben.mcdaniel@mccombs.utexas.edu

Follow this and additional works at: http://digitalcommons.unl.edu/managementfacpub

Part of the Management Sciences and Quantitative Methods Commons

Ford-Eickhoff, Karen; Plowman, Donde Ashmos; and McDaniel, Reuben R. Jr., "Hospital boards and hospital strategic focus: The impact of board involvement in strategic decision making" (2011). *Management Department Faculty Publications.* Paper 67.
http://digitalcommons.unl.edu/managementfacpub/67

This Article is brought to you for free and open access by the Management Department at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Management Department Faculty Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Published in *Health Care Management Review* 36:2 (April/June 2011), pp. 145–154; doi: 10.1097/HMR.0b013e3182099f6e
Copyright © 2011 Lippincott Williams & Wilkins, Inc. Used by permission. http://journals.lww.com/hcmrjournal/toc/2011/04000

Hospital boards and hospital strategic focus: The impact of board involvement in strategic decision making

Karen Ford-Eickhoff, MBA
Research Assistant and PhD Candidate in Organizations and Strategy,
College of Business Administration, University of Tennessee, Knoxville;
email: KFE@utk.edu

Donde Ashmos Plowman, PhD
Dean, College of Business, University of Nebraska-Lincoln

Reuben R. McDaniel Jr., EdD
Charles and Elizabeth Prothro Regents Chair in Health Care Management,
McCombs School of Business, University of Texas at Austin

Abstract

Background: Despite pressures to change the role of hospital boards, hospitals have made few changes in board composition or director selection criteria. Hospital boards have often continued to operate in their traditional roles as either "monitors" or "advisors." More attention to the direct involvement of hospital boards in the strategic decision-making process of the organizations they serve, the timing and circumstances under which board involvement occurs, and the board composition that enhances their abilities to participate fully is needed.

Purposes: We investigated the relationship between broader expertise among hospital board members, board involvement in the stages of strategic decision making, and the hospital's strategic focus.

Methodology/Approach: We surveyed top management team members of 72 nonacademic hospitals to explore the participation of critical stakeholder groups such as the board of directors in the strategic decision-making process. We used hierarchical regression analysis to explore our hypotheses that there is a relationship between both the nature and involvement of the board and the hospital's strategic orientation.

Findings: Hospitals with broader expertise on their boards reported an external focus. For some of their externally-oriented goals, hospitals also reported that their boards were involved earlier in the stages of decision making.

Practice Implications: In light of the complex and dynamic environment of hospitals today, those charged with developing hospital boards should match the variety in the external issues that the hospital faces with more variety in board makeup. By developing a board with greater breadth of expertise, the hospital responds to its complex environment by absorbing that complexity, enabling a greater potential for sensemaking and learning. Rather than acting only as monitors and advisors, boards impact their hospitals' strategic focus through their participation in the strategic decision-making process.

Keywords: board of directors, hospital governance, hospital strategic orientation, sensemaking, strategic decision making

The shifting health care landscape over the last two decades has complicated the role of hospital governing boards. Massive changes in health care financing, the growing complexity in health care delivery, changing physician-hospital relationships, rapid technological advances, intense competitive pressures, and increasing concerns about access, quality, and cost represent a few of the complex issues facing hospital boards (Alexander, Weiner, & Griffith, 2006; Fennell & Alexander, 1993). These pressures suggest a changing role for boards in the governance of hospitals. However, in a study of more than 2,000 hospitals, Alexander, Weiner, and Bogue (2001) found that board structure, board composition, and director selection criteria changed very little over the previous

decade. However, some hospital boards have responded to the complex health care environment by changing the way they do things. For example, Jiang, Lockee, Bass, and Fraser (2009) described the efforts of some hospital boards to improve their oversight of quality of care and patient safety, including taking such actions as establishing a board quality committee and developing strategic goals specific to quality performance, in response to the increasing pressure for quality improvement from purchasers and consumers of health care as well as governmental and accreditation agencies. In this study, we focused specifically on the degree of board involvement in hospital strategic decision making given this increasingly complex environment in the health care industry.

Hospital boards, like corporate boards, have traditionally functioned separately from top-level executives, and the primary duties of the board have been to monitor and to advise the chief executive officer (Forbes & Milliken, 1999; Kor & Sundaramurthy, 2009). In either of these two functions, the board maintains distance from hospital administrators and acts independently. In this vein, scholars have directed attention to the structural characteristics of boards that enhance independence, and the popular press has devoted much attention to high-profile cases where boards failed in their monitoring responsibilities and advisory capacities, leading to catastrophic results. Although a number of health care researchers have advocated the need for closer working relationships between boards and hospital top executives (e.g., Bader, 1997), few inroads have been made into understanding how or under what conditions this might happen. Carpenter and Westphal (2001) found that in unstable environments, boards composed of directors whose other board appointments were in firms with different strategies from the focal firm's strategies advised executives about strategic decisions to a greater extent. In addition, Alexander et al. (2001) found an increase in the number of chief executive officers (CEOs) who have an active role on hospital governing boards. But much about how boards and top management teams work together remains to be explored. Boards are potentially in a position to play a crucial role in determining the strategic direction of their hospitals because directors bring their perspectives and expertise from their own fields to the hospital board, adding depth to the resources available for sensemaking and learning in the face of the hospital's complex environment. More attention needs to be directed at the involvement of boards in setting the future course of their organizations and to how the breadth of expertise board members bring to the boardroom makes a difference in strategic choices the hospital makes.

Hospitals, like other organizations, choose strategies for delivering services and competing effectively. Although management scholars have explored the relationship between organizational strategies and information use (e.g., Citrin, Lee, & McCullough, 2007), firm capabilities (Song, Di Benedetto, & Nason, 2007), and organizational internal complexity (Ashmos, Duchon, & McDaniel, 2000), almost no work has examined the relationship between board involvement in hospital strategic decision making and the strategic orientation of the hospital. Does board involvement suggest that hospitals will choose certain strategic goals over others? Is board involvement in strategic decision making more often associated with hospitals with certain kinds of strategic focus? These are questions we attempted to address in this study.

Understanding the board's role in strategic decision making involves considering the specific stages of decision making: identifying the problem, clarifying the issues, generating and evaluating alternatives, and making a choice (Russo & Schoemaker, 2002). When boards act in the traditional roles as monitors and advisors, by definition they do not take part in the early stages of decision making. Rather, boards assess the outcomes of decisions as monitors and remain on the periphery of the decision-making process as advisors. Although there has been some research on the involvement of physicians in strategic decisions (Ashmos & McDaniel, 1991, 1996) and the involvement of other groups such as clinical professionals, middle managers, and top managers (Ashmos, Duchon, & McDaniel, 1998; Ashmos, Huonker, & McDaniel, 1998), more attention to the hospital board's role in the stages of strategic decision making and how that might influence an organization's strategic direction is needed.

In this study, we explored the connection of both the hospital board's direct involvement in the stages of strategic decision making and the breadth of expertise among board members with a hospital's strategic orientation. Our theoretical argument draws on two related theories: requisite variety (Ashby, 1956) and complexity absorption (Boisot & Child, 1999). We tested our theoretical perspective using data from a survey of 72 hospitals in the southwestern United States. The theoretical perspective and the empirical analysis we present address the need for research about boards of directors that moves beyond an emphasis on their structural characteristics (e.g., Datta, Musteen, & Herrmann, 2009; Kim, Burns, & Prescott, 2009) to considering the decision-making behaviors of boards. We agree with Carpenter and Westphal (2001, p. 640) that we need to move "our understanding [of boards] beyond the simple number of such appointments or director independence as predictors of board influence and decision making."

Conceptual Framework

Organizational scholars and executives alike recognize that organizations operating within environments that are complex and turbulent cannot rely on simple solutions for problems or on the strategic skills of an individual CEO. Rather, complex environments require organizations to develop flexible strategic decision processes

that incorporate multiple perspectives at all levels of the organization, including the board. The notion of multiple perspectives is often explored by viewing board makeup as either heterogeneous (diversity in backgrounds) or homogenous (similarity in backgrounds). In this vein, Miller and Triana (2009) found a positive relationship between board racial and gender diversity and firm innovation, for example. However, evidence suggests that organization-specific characteristics also influence the degree of involvement in strategic decision making (Ashmos, Huonker, & McDaniel, 1998) and that organizations within the same industry can look and behave quite differently from one another. Organizations within the same turbulent industry differ in their strategic approaches. We argue that who is at the decision-making table and when they are at the table not only define the parameters for selecting decision alternatives but also affect the nature of the organization's strategic focus.

Board Involvement in Strategic Decision Making

Considerable research on decision making in groups has focused on the impact of the relative heterogeneity versus homogeneity of various characteristics of members on group processes. Although heterogeneity is not always beneficial (Chatman & Flynn, 2001; Kirkman, Tesluk, & Rosen, 2004), scholars have observed that heterogeneity broadens the field of view and expands networks of contacts, increasing the ability of the group to evaluate issues on multiple fronts and enhancing the opportunities of the group to take appropriate actions (Carpenter, Geletkanycz, & Sanders, 2004; Erhardt, Werbel, & Shrader, 2003). When board members bring a variety of functional backgrounds to the board, the board has the potential to contribute a wide range of expertise to strategic decision making.

Most studies of participation in decision making use an overall measure of participation, asking people general questions such as "how participative is your organization?" Kane, Clark, and Rivenson (2009) explored the behavioral dynamics of boards in decision making through structured interviews, asking, for example, the degree to which the interviewee felt "the decision-making process is open and clear to all board members" and "board members feel comfortable raising concerns." They found that the boards of high-performing hospitals expressed greater satisfaction with the degree of transparency, clarity, and inclusiveness in the decision-making process than did boards of low-performing hospitals. However, decision making occurs in stages (Russo & Schoemaker, 2002), and participant involvement varies by stages in the decision-making process (Ashmos & McDaniel, 1991). Focusing on the specific stages in the decision-making process will improve our understanding of board involvement in determining hospital strategy.

Strategic Focus

Organizations express their strategic focus through the strategic goals they set. Strategic goals represent the choices that the organization makes about how to compete (Porter, 1980) and essentially link the organization to its environment (Scott, 2003). Two of the more popular formulations of strategic choice, Miles and Snow (1978) and Porter (1980), depict organizations as choosing strategic goals with either an internal or external orientation. Organizations with internally focused goals such as defenders (Miles & Snow, 1978) and cost leaders (Porter, 1980) emphasize activities aimed at improving efficiencies in internal processes and structures for a limited set of products and services and a narrow target market. Organizations with externally focused goals such as prospectors (Miles & Snow, 1978) and differentiators (Porter, 1980), on the other hand, emphasize activities that allow the organization to find and exploit new products and services to offer its external constituencies and new market opportunities to gain an edge over competitors in its environment. Thus, organizations operating within the same industry differ in their choice of strategic focus, with some emphasizing internally-oriented goals and others emphasizing externally-oriented goals.

The Relationship

Our argument for the relationship between board involvement in strategic decision making and hospital strategic focus draws on the notions of requisite variety (Ashby, 1956) and complexity absorption (Boisot & Child, 1999). The theory of requisite variety (Ashby, 1956) suggests that an organization's internal diversity must be as great as the variety and complexity of its environment for it to deal with the challenges posed by the environment. To illustrate the concept of requisite variety, Ashby (1958) uses the metaphor of an organism that is subject to attacks by many different strains of bacteria, each requiring its own antitoxin. If the organism is to remain healthy, it must have at least as many antitoxins in its repertoire of responses as there are bacterial species in its environmental context. Similarly, organizations must develop extensive repertoires because they operate within environmental contexts composed of multiple, complex threats-and opportunities-that are ever-changing. To realize internal requisite variety, organizations take such actions as flattening the organizational structure or developing organization-wide information systems to provide organizational members information about the environmental context in real-time (Nonaka, Umemoto, & Senoo, 1996) and utilizing boundary spanners to interpret complex information in the environment and transmit their interpretations to organizational members (Janowicz-Panjaitan & Noorderhaven, 2009).

A related perspective that also contributes to our argument that board involvement in strategic decision making influences strategic focus comes from the notion that organizations facing complex environments choose either complexity *absorption* or complexity *reduction* responses (Boisot & Child, 1999). Organizations that absorb environmental complexity will develop "multiple and sometimes conflicting representations of environmental variety" (Boisot & Child, 1999, p. 238) and will emphasize the importance of connections among the parts of the organization and between the organization and its environment to maintain a greater potential for sensemaking and learning. Ashmos et al. (2000) found that organizations that react to turbulent, complex environmental contexts with complexity absorption responses outperform organizations that attempt to reduce complexity. This was attributable in part to the greater number of people at many levels of the organization putting more interpretations of issues into play, resulting in more options for action. An organizational repertoire with more viable options increases the chances for successfully responding to changes in the environment (Eisenhardt & Tabrizi, 1995).

The theoretical perspective developed here suggests that hospitals with boards composed of members representing a wide range of expertise match the variety in their complex environments with greater internal variety in board expertise, absorbing environmental complexity rather than attempting to reduce it. Developing a board composed of individuals with a wide range of expertise therefore indicates significant attention to the hospital's environment and suggests an externally oriented strategic focus. In addition, hospitals that involve board members early in the strategy formulation process are tapping into the wealth of expertise on the board to match the complex environment, again indicating an externally oriented strategic focus. Thus, we hypothesize the following:

> *Hypothesis 1:* When a wider range of board member expertise is represented in the stages of strategic decision making, the hospital strategic focus will be externally oriented.
>
> Hypothesis 2: When board members are involved in earlier stages of strategic decision making, the hospital strategic focus will be externally oriented.

Research Methods

Data

The data for our study came from a survey sent to executives in 320 nonacademic hospitals in one U.S. state for the purposes of understanding the process of hospital strategic decision making and the participation of critical stakeholder groups in the process. Agreeing with Alexander, Hearld, Jiang, and Fraser (2007) that researchers need to communicate directly with health care administrators to better understand their priorities and decision-making processes, we solicited responses from four top-level executives in each hospital-the CEO, the chief financial officer (CFO), the chief medical officer, and the director of nursing-because these executives are most knowledgeable about decision making at the strategic level in their hospitals. Although past research has often relied on the responses of a single informant such as the CEO, we included all four executives to improve the validity of our findings and avoid the percept-percept bias that is problematic if the same respondent's view is used for both the independent and dependent variables (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Top-level executives returned 164 questionnaires. We aggregated the data from each informant by hospital to represent the hospital's responses to questions about the independent variables relating to board involvement in strategic decision making, yielding 72 hospitals and an institutional response rate of 23%. This response rate is a reflection of the time constraints of these top-level hospital executives and the time commitment of approximately one hour to complete our questionnaire. It is also consistent with response rates from studies relying on top executives for chief informants (Carpenter & Westphal, 2001; Kane et al., 2009). For the dependent variables relating to the strategic goals of the hospital, we used the responses of the CEOs because they are best able to report on the content and importance of the hospital's goals (Hambrick, 1981). When responses from the CEO for a hospital were not available (in 17 hospitals), we used the CFO's responses as the individual who would most likely be well informed on the hospital's strategic goals. We received responses from CEOs and/or CFOs for 62 hospitals.

An analysis of the responding and nonresponding hospitals revealed no systematic differences in terms of organizational characteristics such as ownership, size, and location and therefore indicated that the sample adequately represented hospitals in the state. We also analyzed the response rate by title and found that, with the exception of the chief medical officers (10% of respondent pool), the titles represented were almost equally distributed across the respondent pool.

Independent Variables-Board Involvement

We used a decision-scenario methodology to study board involvement in strategic decision making. This method presents respondents with realistic descriptions of typical scenarios, providing a common reference point for all respondents and enabling us to assess the differences among organizations facing the same issues. The scenario methodologies that provided uniform

stimuli across respondents in other studies guided our approach (e.g., Ashmos & McDaniel, 1991; Fredrickson, 1986; Thomas, Clark, & Gioia, 1993; Thomas & McDaniel, 1990). We constructed four decision scenarios appropriate for hospitals and asked the top-level executives to report, based on their experiences with strategic decision making in their hospitals, the likely degree of involvement of the board of directors in making each strategic decision. The four scenarios included (1) whether the hospital should provide long-term skilled nursing care, (2) whether the hospital should attempt to become a market leader through innovative/aggressive pricing policies, (3) whether the hospital should enter into a cooperative arrangement with another hospital, and (4) whether the hospital should run an advertising campaign targeted at the public.

Breadth of expertise

For each decision scenario, we asked respondents to report, using a 10-point scale, the breadth of expertise represented on the board in making that strategic decision. To obtain an overall measure of breadth of expertise of the board in strategic decision making, we averaged the scores across the four decision scenarios. To ensure that the decisions were perceived similarly and therefore reasonable to average the scores across the decisions, we examined the correlations across the decisions. All were significant ($p < .01$), indicating that averaging was justified.

Decision activities

To learn more about exactly how and when board members participate in strategic decision making, we asked the respondents to report for each strategic decision scenario the likely involvement of board members in each of five decision activities: raising the issue, clarifying the problem, generating alternatives, evaluating alternatives, and choosing alternatives. We averaged the scores across the four decision scenarios for each activity after again being assured that averaging was justified.

Dependent Variables-Hospital External Focus

Hospitals with an external focus direct attention at expanding the range of services and being innovative in the services they offer. This external focus also means that attention is directed at developing new market opportunities to gain an edge over competitors. We assessed the external focus of the hospitals by asking the CEOs of each hospital to indicate on a 10-point scale the importance (from 1 = *not important* to 10 = *very important*) of seven externally-oriented goals, including increasing the range of inpatient services offered, increasing the range of outpatient services offered, being more innovative in inpatient services offered, being more innovative in outpatient services offered, providing charity services to the community, enhancing the prestige of the hospital, and increasing market share. We created an overall measure of external orientation by averaging the scores for the seven goals. The Cronbach's alpha for the seven items was .82.

Analyses

Descriptive statistics are reported in Table 1. Because our unit of analysis was the hospital, analyses are based on the hospital-level variables rather than individual respondent scores. We ran hierarchical linear regressions to examine the relationship of the hospital board's breadth of expertise and the board's involvement in the stages of decision making with the overall measure of hospital external orientation. We also ran separate regressions to examine these relationships with each of the seven external goals individually. We ran these regressions controlling for system affiliation, ownership in terms of government/nongovernment status and nonprofit/investor-owned status, and hospital size in terms of staffed beds. The control variables were entered in Block 1, breadth of expertise was entered in Block 2, and the stages of the decision-making process were entered in Block 3 in the hierarchical regressions, with Blocks 2 and 3 using stepwise regression. These results are reported in Table 2.

Findings

Results for Overall External Orientation

As reported in Table 2, breadth of expertise was significantly related to the hospital's goal orientation after taking the control variables into account. That is, the wider the breadth of expertise on the board, the more externally focused is the hospital's goal orientation. This supports our first hypothesis that when a wider range of board member expertise is represented in strategic decision making, hospital strategic focus will be more externally oriented. In addition, we found that the decision stage of "clarifying the problem" was significantly related to external goal orientation above and beyond the influence of breadth of expertise. More specifically, when hospital boards are involved earlier in decision making, the hospital's goals are more externally focused. This lends support to our second hypothesis that when board members are involved earlier in the stages of decision making, hospital strategic focus will be more externally oriented.

Results for Individual External Goals

For a more detailed analysis, we examined the relationship of the independent variables to each of the components of the overall measure of goal orientation. Af-

Table 1. Descriptive statistics of hospital external focus, board involvement in strategic decision making, and control variables for the responding hospitals (n = 72)

	N	*M*	*SD*
Hospital external focus			
Goal to increase the range of inpatient services offered	62	7.48	1.60
Goal to increase the range of outpatient services offered	62	8.52	1.65
Goal to be more innovative in inpatient services offered	62	7.87	1.81
Goal to be more innovative in outpatient services offered	62	8.34	1.93
Goal to provide charity services to the community	62	6.60	2.60
Goal to enhance the prestige of the hospital	62	8.71	1.37
Goal to increase market share	62	8.66	1.38
Overall (Cronbach's α = 0.82 for seven goals)	62	8.03	1.20
Board involvement in strategic decision making			
Breadth of expertise	72	5.89	2.38
Decision activity of raising the issue	68	4.56	2.84
Decision activity of clarifying the problem	68	2.87	2.61
Decision activity of generating alternatives	68	2.47	2.47
Decision activity of evaluating alternatives	68	5.65	2.80
Decision activity of choosing alternatives	68	6.39	3.01
Control variables			
Member of system	72	54%	—
Government hospital	72	22%	—
Not-for-profit hospital	72	62%	—
Size of hospital (number of staffed beds)	72	196.21	175.49

ter taking the control variables into account, breadth of board expertise had a positive significant impact on the importance of the goals of increasing the range of inpatient services, increasing the range of outpatient services, being more innovative in inpatient services, being more innovative in outpatient services, and increasing market share. For the goal of being more innovative in inpatient services, the decision stage of generating alternatives significantly impacted the goal importance over and above the influence of breadth of expertise. Breadth of expertise was not significant for the goal of enhancing the prestige of the hospital, but the decision stages of raising the issue (a negative relationship) and clarifying the problem were significant predictors for this goal. Lastly, neither breadth of expertise nor any decision stage variables predicted the goal of providing charity services to the community.

Breadth of expertise on the board significantly predicted the importance of five of the seven external goals, providing support for our first hypothesis. Furthermore, for two of the goals, the board being involved in the early decision-making stages significantly influenced the importance of the goals, lending support to our second hypothesis. The stage of decision making was not significant above and beyond the influence of breadth of board expertise except in the case of one goal, indicating that the breadth of board expertise is more influential when both breadth of expertise and decision-making stage are taken into consideration together.

Discussion

Traditionally, hospital boards have acted independently from management and played two major roles-as monitors and advisors to the CEO. As *monitors* of the actions of the top management team, boards represent the interests of stakeholders by reviewing the strategic plans developed by the top management team and either approving the plans for implementation or sending the top management team back to the drawing board. Boards have too often treated this approval process as a formality, earning the reputation as mere "rubberstampers" in the strategic planning process when they automatically approve strategic plans as presented by top management.

The other traditional role that hospital boards have played is that of *advisors*. Although advisors are at the periphery of the decision-making process, directors may act as important sounding boards for top executives, allowing executives to get reactions to strategic options as the strategic plan is being developed. When board members are not well versed in the issues affecting the hospital industry or when top management fails to seek their coun-

Table 2. Results of hierarchical regression analyses[a] of breadth of board expertise, decision activities, and control variables with hospital external focus variables (n = 59)

	Range of inpatient services	Range of outpatient services	Innovative in inpatient services	Innovative in outpatient services	Charity services	Prestige	Market share	Overall external focus
Breadth of board expertise	.31 (.09)**	.27 (.10)**	.28 (.11)**	.27 (.12)*			.27 (.08)**	.23 (.07)**
Decision activity								
Raising issue						–.28 (.07)**		
Clarifying problem						.17 (.07)*		.13 (.06)*
Generating alternatives		.21 (.10)*						
Evaluating alternatives								
Choosing alternative								
Control variables								
System	–.89 (.49)	–.66 (.50)	–.90 (.53)	–.86 (.61)	.46 (.71)	–.19 (.40)	.79 (.40)	–.38 (.34)
Government hospital	–.52 (.53)	–.01 (.55)	–.12 (.58)	–.01 (.67)	.01 (.76)	–.44 (.43)	–.71 (.43)	–.33 (.38)
Not-for-profit hospital	–1.23 (.54)*	–.40 (.55)	–1.01 (.59)	–.41 (.68)	3.53 (.77)**	.32 (.44)	–.15 (.44)	.09 (.38)
Size of hospital	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)

a. Standard errors in parentheses.

* $p < .05$

** $p < .01$

sel, boards are not effective as advisors and the expertise that board members bring from their own industries provides little value to the hospital.

Our findings suggest that, under certain circumstances, boards participate more fully in the decision-making process itself and are involved earlier in the process than the traditional roles for boards imply. When this is true, the hospital is more likely to have strategic goals that emphasize external issues; that is, the hospital's strategy will be externally focused. When the involvement of boards in the decision stages had an impact, it was involvement in the early stages of decision making-raising issues, clarifying issues, and generating alternatives-that influenced the importance of those goals. However, it was the breadth of expertise available on the board that had the greater impact when we assessed both the breadth of expertise and involvement in the decision stages together.

These findings suggest that when a wider variety of areas of expertise is available on the board, the hospital seems to be able to manage the complex nature of an externally-oriented strategy. For the same reasons that Ashby (1958) described an organism being in a better position to defend itself against a multitude of different strains of bacteria by having a large repertoire of antitoxins, matching the greater diversity of issues in the environment with a board composed of a greater diversity of perspectives is an important mechanism that the hospital uses to focus on responding to threats and capitalizing on opportunities in its environment. A hospital board composed only of physicians or only of bankers, for example, does not command the expertise to recognize threats and opportunities in the hospital's environment as well as a board composed of members with expertise in health care, marketing, finance, manufacturing, and so forth. A more complex board with greater breadth of expertise has the requisite variety required for matching a complex environment.

This variety in board member expertise is important because of the need for diverse perspectives as the board attempts to make sense of and learn in complex environments. Making sense of and learning in complex environments is considerably more difficult, and the quality of the sensemaking and learning that takes place will be a function of the nonlinear interactions among individuals who are able to leverage the creative tensions that diversity can bring (McDaniel, 2007). Sensemaking facil-

itates the process of turning the diverse experiences of many individuals into an intelligible world (Weick & Sutcliff, 2001). Because enhancing organizational sensemaking and learning capabilities leads to improved organizational performance and outcomes (Anderson, Issel, & McDaniel, 2003; Ashmos et al., 2000; Thomas et al., 1993), matching the complex environment with greater breadth of expertise on the board has important ramifications.

Hospitals that develop boards with greater breadth of expertise seem to choose complexity absorption responses to their turbulent, complex environmental contexts. The greater breadth of expertise enables the hospital to fully appreciate the threats and opportunities in the environment rather than attempting to reduce the complexity of the issues in their field of view. With this complexity absorption response, board members with different areas of expertise are available to "mix and match" with issues in the environment as needed. Because evidence suggests that organizations that respond to complex environments with complexity absorption responses outperform organizations that attempt to reduce the complexity in their environments (Ashmos et al., 2000), this complexity absorption choice also has important ramifications.

The limitations of this study invite future research in several areas. The decision-scenario methodology we chose had several benefits, but with this method, we were not referencing actual situations in the hospitals. Although we made extensive efforts to ensure that the scenarios were both realistic for hospitals and strategic in nature, it is difficult to be sure that respondents will answer in the same way for real rather than hypothetical decisions. Future research that explores actual decisions made in hospitals will therefore be valuable. We limited our analysis to a single industry in a single state in the United States to focus on organizations with similar environmental contexts and regulatory pressures, but we did not attempt to assess the specific environments of individual hospitals. Also, these data representing responses from 72 organizations in a single industry may limit the generalizability of our findings, so similar studies of organizations in other industries will be beneficial. Because our data are cross-sectional, we cannot conclusively establish causality between the independent and dependent variables. Longitudinal studies in the future could perhaps add insights to the issue of causality. Future research may also extend our exploration of the relationships between the composition of boards and the involvement of boards in decision-making activities through research designs that use board members as well as top executives as informants or that involve actually observing the decision-making process itself. Up to this point, much attention has been focused on the composition of boards in terms of the proportions of outsiders versus insiders and the impact of outsiders on the independence of boards. Our study has provided a peek inside the "black box" of strategic decision making in hospitals, and we hope future research will build on our work by exploring further the role of boards in the strategic decision-making process.

Practice Implications

Our study of a sample of hospitals provides strong evidence that the nature of an organization's strategic orientation, what its board looks like, and how its board is involved in its strategic decision-making processes are highly related. If the board is more complex in terms of the areas of expertise represented by the board members, then the hospital is more likely to focus on the complex, dynamic external environment. When the board is involved earlier in the strategic decision-making process, the focus is more likely to be on external issues. Given the turbulent nature of the health care environment, we expect to see increasingly diverse boards that are highly engaged in hospital strategic decision making. This will likely complicate the task of "managing" the board, because multiple perspectives lead to multiple ways of viewing the world and, ultimately, more conflict. However, the tensions that will likely arise from a complexity of perspectives in board makeup may be healthy tensions for an organization operating in a complex environment.

One ramification of these findings is that the roles of boards in hospitals today and in the future need to match the dynamic, complex, and nonlinear hospital environment. Those charged with nominating individuals to serve on hospital boards need to develop and maintain sufficient breadth of expertise among board members to produce an extensive repertoire of perspectives for dealing with the multitude of opportunities and threats found in the hospital environment. By developing a board with greater breadth of expertise, the hospital responds to its complex environment by absorbing rather than attempting to reduce that complexity, enabling a greater potential for organizational sensemaking and learning. When the board is involved in the strategic decision-making process, the hospital capitalizes on board members as boundary spanners and enhances its capacity to develop an external strategic focus. In the complex, dynamic environment of the hospital industry today, hospital boards should move away from acting only as monitors and advisors toward acting as fully engaged strategic decision makers in the organizations they serve.

References

Alexander, J. A., Hearld, L. R., Jiang, H. J., & Fraser, I. (2007). Increasing the relevance of research to health care managers: Hospital CEO imperatives for improving quality and lowering costs. *Health Care Management Review*, *32*, 150-159.

Alexander, J. A., Weiner, B. J., & Bogue, R. J. (2001). Changes in the structure, composition, and activity of hospital governing boards, 1989-1997: Evidence from two national surveys. *The Milbank Quarterly*, *79*(2), 253-279.

Alexander, J. A., Weiner, B. J., & Griffith, J. (2006). Quality improvement and hospital financial performance. *Journal of Organizational Behaviour*, *27*, 1003-1029.

Anderson, R. A., Issel, L. M., & McDaniel, R. R. Jr. (2003). Nursing homes as complex adaptive systems: Relationship between management practice and resident outcomes. *Nursing Research*, *52*(1), 12-21.

Ashby, W. R. (1956). *An introduction to cybernetics*. London: Chapman & Hall.

Ashby, W. R. (1958). Requisite variety and its implications for the control of complex systems. *Cybernetica*, *1*, 83-99.

Ashmos, D. P., Duchon, D., & McDaniel, R. R. Jr. (1998). Participation in strategic decision making: The role of organizational predisposition and issue interpretation. *Decision Sciences*, *29*, 25-51.

Ashmos, D. P., Duchon, D., & McDaniel, R. R. Jr. (2000). Organizational responses to complexity: The effect on organizational performance. *Journal of Organizational Change Management*, *13*, 577-594.

Ashmos, D. P., Huonker, J. W., & McDaniel, R. R. Jr. (1998). Participation as a complicating mechanism: The effect of clinical professional and middle manager participation on hospital performance. *Health Care Management Review*, *23*(4), 7-20.

Ashmos, D. P., & McDaniel, R. R. Jr. (1991). Physician participation in hospital strategic decision making: The effect of hospital strategy and decision content. *Health Services Research*, *26*, 375-401.

Ashmos, D. P., & McDaniel, R. R. Jr. (1996). Understanding the participation of critical task specialists in strategic decision making. *Decision Sciences*, *27*(1), 103-121.

Bader, B. S. (1997). *Board/CEO relationship builders*. Chicago: American Hospital Association.

Boisot, M., & Child, J. (1999). Organizations as adaptive systems in complex environments: The case of China. *Organization Science*, *10*, 237-252.

Carpenter, M. A., Geletkanycz, M. A., & Sanders, W. G. (2004). Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition. *Journal of Management*, *30*(6), 749-778.

Carpenter, M. A., & Westphal, J. D. (2001). The strategic context of external network ties: Examining the impact of director appointments on board involvement in strategic decision making. *Academy of Management Journal*, *44*, 639-660.

Chatman, J. A., & Flynn, F. J. (2001). The influence of demographic heterogeneity on the emergence and consequences of cooperative norms in work teams. *Academy of Management Journal*, *44*, 956-974.

Citrin, A. V., Lee, R. P., & McCullough, J. (2007). Information use and new product outcomes: The contingent role of strategy type. *Journal of Product Innovation Management*, *24*(3), 259-273.

Datta, D. K., Musteen, M., & Herrmann, P. (2009). Board characteristics, managerial incentives, and the choice between foreign acquisitions and international joint ventures. *Journal of Management*, *35*(4), 928-953.

Eisenhardt, K. M., & Tabrizi, B. N. (1995). Accelerating adaptive processes: Product innovation in the global computer industry. *Administrative Science Quarterly*, *40*, 84-110.

Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of director diversity and firm financial performance. *Corporate Governance: An International Review*, *11*(2), 102-111.

Fennell, M. L., & Alexander, J. A. (1993). Perspectives on organizational change in the U.S. medical care sector. *Annual Review of Sociology*, *19*, 89-112.

Forbes, D. P., & Milliken, F. J. (1999). Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups. *Academy of Management Review*, *24*, 489-505.

Fredrickson, J. W. (1986). An exploratory approach to measuring perceptions of strategic decision process constructs. *Strategic Management Journal*, *7*(5), 473-483.

Hambrick, D. C. (1981). Environment, strategy, and power within top management teams. *Administrative Science Quarterly*, *26*, 253-275.

Janowicz-Panjaitan, M., & Noorderhaven, N. G. (2009). Trust, calculation, and interorganizational learning of tacit knowledge: An organizational roles perspective. *Organization Studies*, *30*(10), 1021-1044.

Jiang, H. J., Lockee, C., Bass, K., & Fraser, I. (2009). Board oversight of quality: Any differences in process of care and mortality? *Journal of Healthcare Management*, *54*(1), 15-29.

Kane, N. M., Clark, J. R., & Rivenson, H. L. (2009). The internal processes and behavioral dynamics of hospital boards: An exploration of differences between high- and low-performing hospitals. *Health Care Management Review*, *34*, 80-91.

Kim, B., Burns, M. L., & Prescott, J. E. (2009). The strategic role of the board: The impact of board structure on top management team strategic action capability. *Corporate Governance: An International Review*, *17*(6), 728-743.

Kirkman, B. L., Tesluk, P. E., & Rosen, B. (2004). The impact of demographic heterogeneity and team leader-team member demographic fit on team empowerment and effectiveness. *Group & Organization Management*, *29*, 334-368.

Kor, Y. Y., & Sundaramurthy, C. (2009). Experience-based human capital and social capital of outside directors. *Journal of Management*, *35*(4), 981-1006.

McDaniel, R. R. Jr. (2007). Management strategies for complex adaptive systems: Sensemaking, learning, and improvisation. *Performance Improvement Quarterly*, *20*(2), 21-42.

Miles, R. E., & Snow, C. C. (1978). *Organizational strategy, structure and process*. New York: McGraw-Hill.

Miller, T., & Triana, M. (2009). Demographic diversity in the boardroom: Mediators of the board diversity-firm performance relationship. *Journal of Management Studies*, *46*(5), 755-786.

Nonaka, I., Umemoto, K., & Senoo, D. (1996). From information processing to knowledge creation: A paradigm shift in business management. *Technology in Society*, *18*, 203-218.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. -Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*, 879-903.

Porter, M. (1980). *Competitive strategy*. New York: The Free Press.

Russo, J. E., & Schoemaker, P. J. H. (2002). *Winning decisions*. New York: Currency Doubleday.

Scott, W. R. (2003). *Organizations*. Upper Saddle River, NJ: Prentice Hall.

Song, M., Di Benedetto, C. A., & Nason, R. W. (2007). Capabilities and financial performance: The moderating effect of strategic type. *Journal of Academy of Marketing Science*, *35*(1), 18-34.

Thomas, J. B., Clark, S. M., & Gioia, D. A. (1993). Strategic sensemaking and organizational performance: Linkages among scanning, interpretation, action, and outcomes. *Academy of Management Journal*, *36*, 239-270.

Thomas, J. B., & McDaniel, R. R. Jr. (1990). Interpreting strategic issues: Effects of strategy and the information-processing structure of top management teams. *Academy of Management Journal*, *33*(2), 286-306.

Weick, K. E., & Sutcliff, K. M. (2001). *Managing the unexpected: Assuring high performance in an age of complexity*. San Francisco: Jossey-Bass.