



Strategy Formation Processes in Health Care Organizations: A Context-Specific Examination of Context-Free Strategy Issues

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The current research literature on strategy formation processes (formulation and implementation) in health care organizations is reviewed. A new, integrated model of the linkages between strategy formation process and content is developed based on the general strategic management literature. This framework is applied systematically to the health care organizational literature. Issues of control, collectivity, change, choice and thinking are examined in detail as they apply to strategy formation processes in health care organizations.

As management scholars we should be interested in the health care sector. It currently accounts for about 12% of our national GNP, and health care costs have been growing every year. Health care organizations can be found in the three major sectors of our economy (i.e. public, non-profit, and for-profit). In addition to its size, many observers point to the "social transformations" taking place within the industry (Starr, 1982), and the uniqueness of many of its organizational forms (Luke, Begun, & Pointer, 1989) as reasons why the health care sector should be of particular interest.

For example, Shortell, Morrison and Friedman (1990) subtitle their recent book on American hospitals "Managing change in turbulent times." In addition, Blair and Fottler (1990) point out the challenges facing health care managers due to the conflicting demands being placed on their organizations by powerful, but changing stakeholders.

The potential uniqueness or fundamental similarity of the health care sector to other, more commonly researched, general organizational contexts has been of in-

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terest and considerable debate among scholars. For example, Fottler (1987), in his review of health care organizations, questioned the straightforward applicability of generic management principles and cited eight characteristics that in their totality make health care organizations unique. The characteristics are shown in Table 1. These characteristics led him to question the external validity of generic management findings to the health care sector.

In addition to the characteristics cited by Fottler (1987), Luke, Begun, and Pointer (1989) argue that "existing models of organizational structures inadequately capture the essence of the interorganizational arrangements emerging in the health care and other industries" (9). These organizational forms and arrangements differ in the degree to which they share a strategic purpose and are tightly coupled. Terms associated with these other organizational forms include latent firm, quasi firm, and network. As Luke et al. (1989) point out, the ability of these alternate organizational forms to make and implement strategic decisions is problematic. Even such questions as the locus of strategic decision making is uncertain. All of the above suggests that the size and uniqueness of health care organizations make them worthy of study in their own right. Further, there is the possibility that research findings from other industrial/service sectors may not generalize to the health care sector.

Blair and Hunt (1986) have examined the broader issues and implications of focusing research efforts on specific organizational contexts (e.g., military, public, or health care organizations) as opposed to examining key management variables (e.g., leadership, motivation, or strategic management) across types of organizations in order to develop theory free of any specific organization context. They described the first approach to research as *context-specific* and the second as *context-free*.

There have been at least two recent reviews of strategic management in health

Table 1
Characteristics of Health Care Organizations That Create Uniqueness

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- Defining and measuring output is difficult.
 - The work involved is highly variable and complex, highly specialized, and highly interdependent, requiring a high degree of coordination among diverse professional groups.
 - The work often involves emergency or non-deferrable activities, permits little tolerance for ambiguity or error, and uses professionals whose primary loyalty belongs to the profession rather than to the organization.
 - There exists little effective organizational or managerial control over physicians, the profession most responsible for generating work and expenditures (although recent managerial initiatives may change this situation).
 - In many health care organizations, there exist dual lines of authority that create role ambiguity, role conflict, and problems of coordination and accountability.
 - Most health organizations tend to be "loosely coupled" in the sense that organizational segments are only mildly responsive to one another and to the environment and organizational goals are vague.
 - The political, legal, and financial environments that confront health organizations are extremely complex and pluralistic, requiring the development and maintenance of complicated intra- and inter-system linkages.
 - Because the preservation and enhancement of human life supersedes purely "rational" administrative concerns if or when the two conflict, services must be individualized to a greater extent than those of other human service organizations.
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Adapted from Fottler, Myron D. 1987. Health Care Organizational Performance: Present and Future Research. *Yearly Review of Management, Journal of Management*, 13(2): 367-391.

Table 2
Context-Free Management and Context-Specific Health Care
Management Journals Reviewed

Journal	
Context-Free Journals:	
	<i>Academy of Management Journal</i>
	<i>Academy of Management Review</i>
	<i>Administrative Science Quarterly</i>
	<i>Harvard Business Review</i>
	<i>Journal of Management</i>
	<i>Strategic Management Journal</i>
Context-Specific Journals:	
	<i>Health Affairs</i>
	<i>Health Care Management Review</i>
	<i>Health Services Research</i>
	<i>Hospital and Health Services Administration</i>
	<i>Inquiry</i>
	<i>Journal of Health and Social Behavior</i>
	<i>Medical Care</i>
	<i>Medical Care Review</i>
	<i>Social Science and Medicine</i>

care organizations (Shortell, Morrison, & Robbins, 1985; Topping & Hernandez, 1991). However, because of our interest in responding to the uniqueness questions raised by Fottler (1987) and Luke et al. (1989) and in accepting the challenge posed by Blair and Hunt (1986) to more fully integrate context-free and context-specific research, we have written this review in a somewhat unusual way. In each part, we first examine the context-free strategic management issues and then review the context-specific health care management literature in terms of context-free issues. To facilitate this integration, we have also developed a new context-free framework on strategy formation processes (as opposed to content) that we believe significantly extends and elaborates some recent work by Mintzberg (1990).

Our framework identifies and organizes strategy formation research issues in relation to the traditional content concerns reviewed by Fahey and Christensen (1986). Thus, our review places the health care strategy formation process literature within a specific, issue-focused framework that interprets the broader strategic management literature.

Most of the research is found in context-specific journals that focus primarily on the health care organizational context rather than on the specific set of strategic management variables we are concerned with here. Thus our review draws both from traditional context-free management journals (e.g., *Academy of Management Review* or *Strategic Management Journal*) as well as from context-specific journals (e.g., *Health Care Management Review* or *Medical Care Review*). The complete list is shown in Table 2. This review covers the period beginning in 1985 and ending in late 1990.

Research Domain of Strategic Management

As a young discipline, the domain of strategic management has been evolving. However, recently scholars in the field (e.g., Hambrick, 1989; Summer et al.,

1990) appear to agree that the domain of strategic management consists of four main components and their interactions:

1. The context or environment (general, industry, or organizational specific) in which decisions are made and actions taken.

2. The strategic content of the decision itself. Here a distinction is usually made between decisions that focus on the range of businesses the organization chooses to compete in (corporate level strategy) or decisions concerning how the organization chooses to compete (business level strategy).

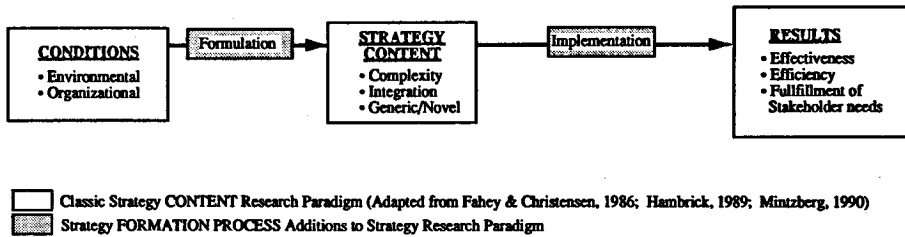
3. The who and how of the decision-making process. Here the focus is usually on the CEO or top management team at the upper echelon (Hambrick & Mason, 1984) or strategic apex (Mintzberg, 1979; 1983) of the corporation or SBU, although increasingly researchers are also focusing on middle managers (Westley, 1990; Wooldridge & Floyd, 1990).

4. The outcomes/performance of those decisions. Typically, these are financial or market-based measures, though there are increasing calls to broaden the conception of performance, especially from a stakeholder (Freeman, 1984; Hambrick, 1979) or multiple constituency (Cameron, 1986) perspective.

Although early theorists who wrote on strategic planning (e.g., Lorange & Vancil, 1977; Steiner, 1969) tended to blur the distinction between the content of the plan and the process of planning, more recently, following the suggestions of Andrews (1971) and Schendel & Hofer (1979), researchers and research in strategic management have tended to group along the lines of content versus process. The value of this distinction, however, has been questioned by some (e.g., Huff & Reger, 1987). *Content* issues concern the what of the strategic decisions. Fahey and Christensen (1986) in their review of the content issues, identified three meta categories: goals, scope, and competitive strategy. *Process* issues concern how such decisions are formulated and/or implemented (Huff & Reger, 1987). Huff and Reger question the value of this distinction as had Ginsberg and Venkatraman (1985).

Because of the relative youth and multidisciplinary roots of strategic management, writing and research in each of the different domains of strategic management takes on many different perspectives. Mintzberg (1990) for example has recently identified 10 major perspectives on strategic management. Three of these—the design school (with its emphasis on aligning external threats and opportunities with internal strengths and weaknesses to achieve distinctive competence), the planning school, (with its emphasis on a normative sequence of phases in planning), and the positioning school, (with its emphasis on portfolio, industry, and competitive analysis)—are highly prescriptive and have traditionally dominated academic and practitioner writing in the field. The other perspectives—entrepreneurial, cognitive, learning, political, cultural, environmental, and configurational—are less prescriptive and more descriptive (Mintzberg, 1990). The interested reader should consult Fahey & Christensen (1986), Huff & Reger (1987), and Mintzberg (1990) for more recent reviews of the content and process literature. In addition, recent critiques of the field have appeared (e.g., Montgomery, Werenfelt, & Balakrishnan, 1989; Hirsch, Friedman & Koza, 1990; plus several in a volume edited by Fredrickson, 1990).

Figure 1
Basic Research Paradigm for Strategy Formulation Process and Content Issues



In their previous review of the process literature, Huff & Reger (1987), as did Fahey & Christensen (1986) in their review of the content literature, noted that prescription had far exceeded description. This prescription bias was also earlier noted by Mintzberg and Waters (1984). They attributed this to the desire for immediate utility. Others seem to echo this desire for utility by viewing strategic management as a professional field (Summer, et al., 1990), and still others suggest that this search for utility is dysfunctional to the development and testing of theory (Montgomery, Werenfelt & Balakrishnan, 1989; Daft & Buenger, 1990).

Despite such cautions and the call for more research, many of the strategic management models and their prescriptions have found their way into the health care literature. As noted earlier, our intention is to review some of the theoretical questions raised about strategy formation within the context-free literature and then examine these issues within the context of the health care literature.

Strategy Formation

We choose the term *strategy formation* in recognition of the fact that strategies can form either explicitly or implicitly, that what was intended is not necessarily what is realized, that thought occurs in action, and that formulation, implementation, and evaluation are continuous processes interactive in nature (Mintzberg, 1978; Pettigrew, 1990; Weick, 1983). However, we extend this concept by suggesting linkages between process and content. Current content models focus on the linkages between *conditions*, *strategies*, and *results* (Fahey & Christensen, 1986). Figure 1 shows a simplified strategy content model. To this model, we have superimposed the process concerns of *formulation* and *implementation*. Process models are less precise, often focusing on either issues only involving planning models, implementation, process or decision aids, or miscellaneous issues. Rarely are these areas linked conceptually or empirically (Huff & Reger, 1987). Boal and Bryson (1987) have argued that planning models, at least, need to link context, process, and outcomes. Three content issues discussed by Mintzberg (1990) are shown in the center "strategy content" box of Figure 1 and are labeled *complexity*, *integration*, and *generic/novel*. We have included them to complete the content model and will return to these issues at the end of the review. However, *strategy formation process* is our specific focus for this review.

Although individual researchers are starting to look at interactions within con-

tent or process, there is yet no model adequately linking the process with the content domains of strategic management. Below we outline the beginnings of such a model and use it to interpret the strategic management literature within the health care sector. This model builds upon the work of Boal & Bryson (1987) and Hambrick (1989), but especially draws on Mintzberg (1990).

Mintzberg (1990) suggested that the variety of perspectives used in studying strategic management raised eight emergent issues that cut across different schools of thought. We first discuss the process issues (which are our main focus), then link these to the content issues. There are five process issues that Mintzberg labeled control, collective, change, choice, and thinking.

C1: Control Issues in Strategy Formation

Control raises the issue of whether planning processes should follow a comprehensive rational problem-solving paradigm or be allowed to emerge. In addition, control is concerned with whether an intentional or emergent model is more accurate descriptively. Mintzberg and Waters (1985) previously pointed out that realized strategies may reflect intended strategies, emergent strategies, or a combination. Therefore, strategists must choose between attempting to control *process* (how one decides), *content* (what one decides), or both. If planning is intentional, we would want to control both. But if planning is an emergent process, then we need to control only the process—but not content—to encourage discovery and learning. Mintzberg suggests, much in the vein of March and Simon's (1958) argument concerning decision premises, that the management of process is the management of content from this perspective. Traditional planning models assume that organizational effectiveness is most likely to be achieved when strategists follow a particular sequence of phases or steps (e.g., Delbecq & Van de Ven, 1971; Mintzberg, Raisinghani & Theoret, 1976), or employ certain tactics (Nutt, 1987). This assumption follows from their normative character and rationality assumptions (Huff & Reger, 1987). Researchers who view the strategists as less than perfectly rational or the environment as inherently unpredictable favor less comprehensive approaches (Lindblom, 1959). Ultimately, Mintzberg argues that it is not an either/or decision but a choice of to what degree, when, and where. As Wooldridge and Floyd (1989) point out in discussing top management team (TMT) decisions, "If consensus on goals precedes agreement about the nature of the environment, environmental perceptions are likely to be colored by the TMT preferences. If agreement on means precedes consensus on goals or the environment, strategies are likely to be inappropriate or suboptimal" (300).

All of this, of course, assumes the purpose of planning is to provide direction and control. But if the purpose of planning is to provide justification for actions—past, present, or future (cf. Langley, 1989)—then planning should be evaluated for its symbolic, not its instrumental effects. Furthermore, engaging in intentional and public planning may give an illusion of control to key stakeholders that someone cares and that something is being done.

Following a simple three-part model of intentions, actions, and outcomes, the issue of control manifests itself in several ways. Control relates to the processes intended to be used to formulate strategy and to the purposes they may serve. For

example, the management literature typically recommends that practitioners follow a normative phase model and use particular decision aids to scan the environment and collect data. Do practitioners follow these recommendations in a prospective rational manner? Reid (1989) suggests that many organizations lack the commitment necessary to integrate strategic planning into their operations, and thus many companies fail to benefit from their planning efforts. It might further be asked how the processes chosen will influence the intended content itself or vice versa (c.f. Boal & Bryson, 1987). For example, from a political viewpoint, when it is viewed as illegitimate to control content, it is still possible to do so by controlling access to the process (Nutt, 1984). Also, because different strategies have different informational requirements (Miles & Snow, 1978), the content of the strategy should influence how formalized and comprehensive the planning process is, whether the primary focus is on scanning the internal or external environment and whether the emphasis is on efficiency or effectiveness criteria.

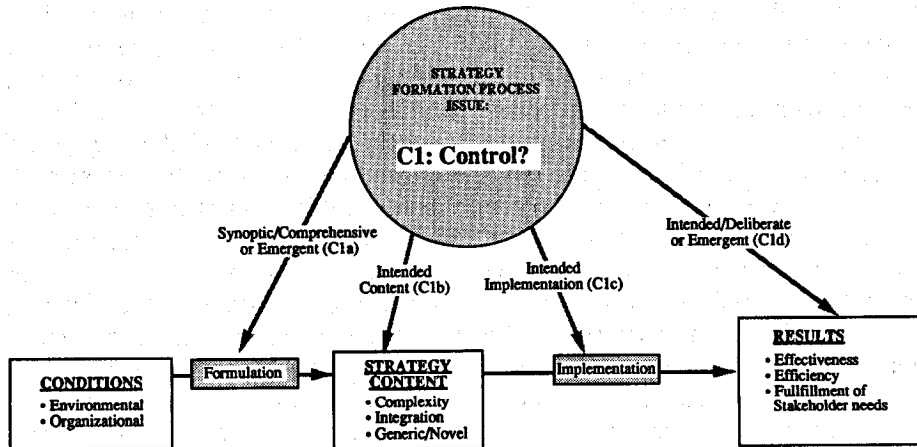
A basic question concerns whether deliberate or emergent strategies are more effective. Generally speaking, the literature suggests that there is a significant positive relationship between the formality of the strategic planning process and the financial performance of the firm (Bracker, Keats, & Pearson, 1988; Pearce, Robbins, & Robinson, 1987). However, the literature also suggests that there are several contextual or process factors that moderate the relationship of planning and strategy and of the strategy and results. For example, Ramanujam and Venketrman (1987) suggest that "resistance to planning" and "resources for planning" are important contributions to planning effectiveness. Also, Boal and Bryson (1987) found that task goal attributes (e.g., goal specificity) and other micro processes were positively related to planning outcomes. In addition the work of Earley and his colleagues (1990) suggest that goal setting and process/outcome feedback interact to influence performance and that process feedback, especially, influences information search and problem-solving strategies used. Thus, we might inquire under what conditions is *a priori* control more effective than *a posteriori* learning? Theorizing by Daft and Lengel (1986) and the research by Fredrickson and his colleagues (1984, 1989) suggest that under conditions of stability, certainty, and low ambiguity, intended processes should be more effectively implemented and intended strategies should more closely correspond to realized strategies. Emergent processes should be more effective under the opposite conditions. Here, intended strategies will not match realized strategies. Rather, emergent strategies will correspond to realized strategies.

Key Research Questions Focusing on Control Issues

The above discussion of the control issue in strategy formation suggests several key research questions. In this and following sections, we will show visually how different strategy formation process issues relate to the strategy content research paradigm discussed above. The following control research questions are also indicated by arrows in Figure 2:

- Do health care organizations follow an intentional/synoptic process in formulating strategies or is it best described as an emergent process? (See arrow C1a)

Figure 2
Identifying Specific CONTROL Research Issues in Strategy Formation Processes



Classic Strategy CONTENT Research Paradigm (Adapted from Fahey & Christensen, 1986; Hambrick, 1989; Mintzberg, 1990)
 Strategy FORMATION PROCESS Additions to Strategy Research Paradigm

- How does the degree of comprehensiveness in process affect the strategy content? (See arrow C1b)
- How does the degree of comprehensiveness in process affect intended implementation? (See arrow C1c)
- Are intended or emergent strategy formation processes more effective? (See arrow C1d)

Reviewing the Literature Focusing on Control Issues in Health Care Strategy Formation

Not surprisingly, issues of control have received considerable attention in the health care management literature. In an environment most researchers have pronounced turbulent, how one gains, regains, or maintains control over the strategy process is of primary concern. Fifteen papers were found during this review to have a primary focus on control issues. These may further be divided into two general subgroups: (a) How much control should there be? (C1a, C1d) and (b) How can or do managers act to proactively act to increase the level of control? (C1b, C1c)

First, we will look at prescriptions for increased control. Costello (1986) suggests that future success might be achieved with joint physician/hospital enterprises, but such alliances must have an entrepreneurial focus on the market being served. Boscarino (1989) provides a series of steps intended to lead to the successful strategic implementation of a hospital wellness center. The proactive use of data and the proper selection of support groups will allow the integration of actual practice and marketing theory. Hunter (1987) also discusses the strengthening of strategic implementation by integrating marketing into the decision sequence. A 7-S framework model is offered by Buller and Timpson (1986) as an alternative approach to integrating strategy formulation and strategy implementation. A ma-

trix form of management is suggested by McMahon et al. (1986) as the key to successful strategy implementation. Processes for identifying and interacting with key stakeholders to provide the hospital manager with tools to enhance control over the strategy formation process are illustrated by Fottler et al. (1990); Blair and Whitehead (1988); and Blair, Savage, and Whitehead (1989).

The second subgroup considers the degree to which proactive and effective control of the strategic planning process is actually possible or desirable. Seven papers focus on identifying external and internal environmental conditions that affect when deliberate versus emergent processes are the most effective (Files, 1988; Greaf, 1988; Luke, Begun & Pointer, 1989; Starkweather & Carman, 1988; Weinstein, 1986; Wodinsky, Egan, & Markel, 1988; and Zelmon, 1990). In general, they view strategy formation as a process that, due to conflicting goals and environmental forces, should emerge from the interplay of multiple forces, not drive them.

The questions related to increasing/clarifying control (C1b, C1c) are covered fairly extensively in the literature. Given the chaotic conditions in the health care industry throughout the time period evaluated, such a focus is to be expected. Times of crises create tremendous demands for practitioner applications that can be quickly implemented. However, the queries with regard to how deliberate control should be (C1a, C1d) received less attention. Yet perhaps more of a focus on deliberate versus emergent strategy formulation would better serve those involved in researching *or* managing health care organizations. Identifying when comprehensive control is necessary and which situations should be minimally controlled and allowed to evolve in their own time would decrease the demand for practical applications that often lead to poorly conceived "quick-fix" solutions.

Throughout this review, we coded the specific health care strategic literature that addressed particular strategy formation processes along several key dimensions: the primary research or managerial issue addressed; the strategy formation focus (as specified by the arrows in our models); the intent of the article (theory building or theory testing or theory application); and the methods used, if appropriate. The coding by conceptual issue or research question was very difficult and performed independently by multiple raters. At times, of course, this coding may or may not capture the broader substantive intent of the author(s) of the article. Our objective was to focus on the extent to which each context-free research question was addressed in this context-specific literature.

In each table, we first list those articles with a *primary focus* on the specific issue (such as those relating to control—C1a, C1b, C1c or C1d) reflected in the following figure and discussion. We then show other issues (such as those relating to collectivity or control) that were also focused on in that article. This format permits readers to locate easily both those articles most directly related to their specific interests as well as those that may also address related issues, at least to some extent. Further, the last two columns on the right of each table ("article intent" and "method") can be used by readers themselves to judge the state of the field concerning certain questions. For example, readers can assess the level of descriptive versus prescriptive or theory-building versus theory-testing research published. In

Table 3
Articles Focusing on Control (C1) in Health Care Strategy Formation

Authors	Primary Research/ Managerial Issue Addressed	Strategy Formation Focus or Foci	Article Intent	Method
Buller & Timpson, 1986	What can hospitals learn from other businesses about strategic planning	C1d, C2a, C2b, C3c	Theory Application (Seven-S Framework)	Discussion
Costello, 1986	Using an entrepreneurial perspective	C1d, C2b, Tb	Prescription	Discussion
McMahon, Fetter, Freeman, & Thompson, 1986	Succeeding at cost control by integrating med staff into management	C1c, C2c, C3a	Prescription, Theory Building	Discussion
Weinstein, 1986	How a hospital successfully evolved over time and key principles for change	C1c, C2c, C2d	Prescription/Description	Case Study
Hunter, 1987	The need to close the gap between marketing theory and practice	C1c, C2a, Tb	Prescription	Case Study
Blair & Whitehead, 1988	Stakeholder analysis	C1b, C1c, Ta, Tb, C2a	Theory Building	Discussion
Files, 1988	Review of hospitals' levels of strategic sophistication	C1a, C1b, C2a	Review	Discussion
Graef, 1988	Is strategic planning different in public hospitals	C1b, C4a, Ta	Description	Survey
Starkweather & Carman, 1988	What limits power in hospital markets	C1a, C3d, C4d	Theory Building	Secondary Data
Wodinsky, Egan, & Markel, 1988	Comparing theoretical PLM with a real case	C1c, C1d, Ta, Tb	Theory Testing	Case Study
Blair, Savage, & Whitehead, 1989	Managing stakeholders via negotiation tactics	C1c, C2b, C2d, C3d	Theory Building	Discussion
Boscarino, 1989	Setting up a wellness center	C1b, C1c, Ta	Prescription	Discussion
Luke, Begun, & Pointer, 1989	Using Quasi-Firms in the health care industry	C1d, C4c, C2a	Prescription/Description	Discussion
Fotler, Blair, Whitehead, Laus, & Savage, 1990	Who matters to hospitals and why — key stakeholders	C1b, C1c, Ta, C2a, C2b	Theory Building	Illustrative, qualitative/quantitative data
Zelman & Parham, 1990	Strategies for PLM in health care	C1c, C2c, Ta	Theory Building	Discussion

addition, the extent of the "data base" for the issues addressed is shown as well. For example, when the method is listed as "discussion," no specific quantitative or qualitative data beyond examples have been used in the article.

Table 3 provides the details on this first part of the literature. The articles are ordered first by year of publication and then alphabetically by author.

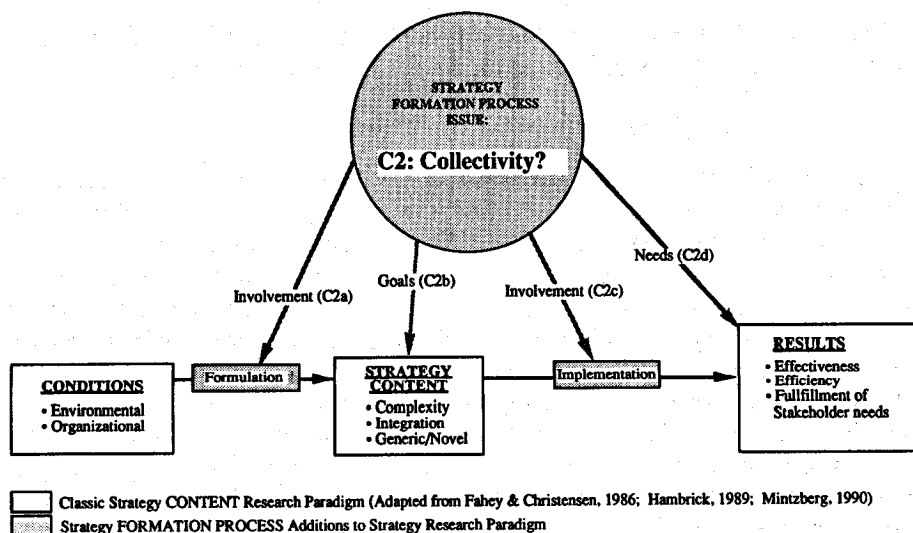
C2: Collectivity Issues in Strategy Formation

The second issue discussed by Mintzberg was labeled *collective*. Here, one asks, "Who is the strategist?" or even "Is there a strategist?" We think these questions really subsume several other issues. From a stakeholder (Freeman, 1984) or multiple-constituency perspective (Cameron, 1986), the answer to the question of "Who is the strategist?" partially depends on whose needs/goals we are trying to satisfy. Thus, the single constituency model, which follows from the industrial organizational economics perspective and leads us to define the strategist in terms of the CEO or top management team, may not be appropriate for quasi-organizations (Eccles, 1981; Luke et al., 1989) or hybrid organizations (Borys & Jemison, 1989). Many health care organizations are of this form. The recognition that strategies often emerge from the organization's grass roots without any deliberate planning or plan suggests that strategy formation involves not only members of the top management team, but lower order participants as well. The research by Wooldrige and Floyd (1990) suggests that organizational effectiveness is enhanced when middle level managers are involved in the strategy formation process. Guth and MacMillan (1986) found that middle managers cannot only redirect and delay, but totally sabotage a strategy that is perceived to compromise their self-interest. Within the health care context, hospitals are increasingly involving their boards in planning activities (Koska, 1990). The composition of these boards may be homogeneous or heterogeneous with respect to the use of insiders (e.g., physicians) or outsiders. From a resource dependence perspective (Pfeffer & Salancik, 1978), if the purpose of the board is to secure needed resources, then extra-organizational participants would be influential. This might also be true if the organization followed a prospector strategy (Miles & Snow, 1978) with its focus on scanning the external environment and meeting the effectiveness criteria of multiple stakeholders.

It has been noted that the health care sector is embedded in turbulence (e.g., Blair & Fottler, 1990; Shortell et al., 1990). Daft and Weick (1984) suggest that under conditions of uncertainty and ambiguity organizations become more proactive in their environmental scanning. Thus, the greater influence of extra-organizational participants might also be expected as well as a greater emphasis on engaging in the planning process. On the other hand, environmental turbulence could lead to threat-rigidity effects (Staw, Sanderlands, & Dutton, 1981), resulting in an increased focus on internal scanning with an emphasis on efficiency criteria. Under such conditions, it might be anticipated that physicians (who also provide needed resources) would become more influential. These results would also be expected for organizations following a defender strategy (Miles & Snow, 1978).

In addition to focusing on a single organization's actors, Astley and Fombrun

Figure 3
Identifying Specific COLLECTIVITY Research Issues in Strategy Formation Processes



(1983) propose the notion of collective strategy to account for strategy formation fashioned at the industry level, and Jarillo (1988) considers strategic networks. Finally the question of who is the strategist has implications for the content of the strategy. Hambrick and Mason (1984), among others, argue that an organization and its strategies are a reflection of its top managers. Gupta and Govindarajan (1984) suggest the need to match the manager with the strategy at the SBU level.

Key Research Questions Focusing on Collectivity Issues

The collectivity issue in health care strategy formation appears in several key research questions that are indicated in Figure 3:

- Who is involved in strategy formulation? (See arrow C2a)
- Whose goals are reflected in the content of the strategy? (See arrow C2b)
- Who is involved in strategy implementation? (See arrow C2c)
- Whose needs is the organization trying to satisfy? (See arrow C2d)

Reviewing the Literature Focusing on Collectivity Issues in Health Care Strategy Formation

Who should be included in the strategy formation processes (C2a, C2c) together with a consideration of relevant stakeholder/participant goals and needs (C2b, C2d) are the two most prevalent issues in the health care literature. Seven papers consider boards and the governance of health care organizations, generally, within the context of multihospital systems. Morlock and Alexander (1986) describe the types of governance structures being used in multihospital systems and pinpoint the locus of decision-making responsibilities. The degree of centralization of governance processes in such systems is considered by Alexander and

Schroer (1985). Board influence on hospital decisions was measured by Proven (1988) for both independent and multihospital systems. Delbecq and Gill (1988); Shortell (1989); Griffith (1988); and Umbdenstock et al. (1990) offer prescriptions for enhancing the effectiveness of boards in general. The effect of new CEO-Board relationships is considered by Alexander and Morlock (1985) and Morlock, Alexander, and Hunter (1985). General findings conclude that the new governance relationships have increased the authority of the CEO, though reducing the authority and influence of the medical staff. It is noted that this increased authority has brought with it increased CEO accountability. How CEOs view their roles in these new relationships is described by Divore and Murray (1987), with leader and entrepreneur found to be the roles most critical to survival of the organization.

Four papers within the collectivity category focus on physician involvement issues. All see the involvement of the physician as a primary key to the successful formulation and implementation of strategy. Partnerships, alliances, and co-leaderships have been suggested as possible interactive strategies between hospitals and physicians by Greifinger and Bluestone (1986), Broyles and Reilly (1988), McDermott (1988); and Kover and Chin (1985).

Integrating human resource managers into the strategic formation process is vital to achieving competitive advantage, according to Fottler et al. (1990), though their interview with executives in health care organizations reveals a general lack of such integration.

Stakeholder/participant goals and needs are considered with respect to managing interorganizational relationships (Pointer, Begun, & Luke, 1988), revitalizing the HMO movement (Topping & Fottler, 1990), and successfully implementing a downsizing strategy (Watson & Strasen, 1987). We may say that analysis and management of key stakeholders is the underlying theme of these and, indeed, most of the articles in this category.

Who to involve in the strategy formulation process (C2a) and, subsequently, whose goals are then reflected in the content of the strategy devised (C2b) were explored in detail and from many perspectives in the literature. But the questions concerning involvement in implementation (C2c) and needs satisfaction (C2d) were never addressed as primary foci. As Buller and Timpson (1986) pointed out, strategic management must be an integration of the processes of planning *and* implementation to ensure success. In addition, further evaluation of the results of implemented strategies relating to whose needs were satisfied will provide feedback on the effectiveness of the original processes involved in the strategy formulation. As we did with control issues, in Table 4 we provide the detailed, systematic overview of the health care management articles focusing on collectivity issues.

C3: *Change* Issues in Strategy Formation

Change involves a number of related issues, its nature, pattern, and source. In addition, there is the concern over how to balance the conflicting forces for stability versus change or efficiency versus innovation. The health care sector affords a promising setting to study these issues due to the many changes taking place.

Table 4
Articles Focusing on Collectivity (C2) in Health Care Strategy Formation

Authors	Primary Research/ Managerial Issue Addressed	Strategy Formation Focus or Foci	Article Intent	Method
Alexander & Morlock, 1985	Do CEO-board relationships change after restructuring	C2a, C2b, C2c, C4b	Theory Building	Survey
Alexander & Schroer, 1985	How centralized is decision making in multi-hospital systems	C2a, C4a	Description	Survey
Kovner & Chin, 1985	Physician involvement in strategic decision making	C2a, C2b, C2c, C2d, Tb	Theory Building	Case Study
Morlock, Alexander, & Hunter, 1985	The impact of multisystems involvement on board relations with CEO's/Medical staff	C2a, C2c, C2d, C4a	Theory Testing	Survey
Greifinger & Bluestone, 1986	How to involve the physician in cost containment efforts	C2a, C2d, C4d	Prescription	Discussion
Morlock & Alexander, 1986	What are the governance structures being used in in multihospital systems	C2a, C2c, C2d	Description	Survey
Dwore & Murray, 1987	What are the characteristics of hospital administrators	C2a, C4b	Description/prescription	Survey
Watson & Strasen, 1987	How to implement a reorganization to improve productivity	C2a, C2b, C2c, C2d	Prescription	Case Study
Broyles & Reilly, 1988	Physician prescribing and admitting decisions can affect the fiscal health of a hospital	C2a, C2b, C4a	Prescription	Discussion
Delbecq & Gill, 1988	What are the characteristics of successful boards in rapidly changing industries How does this compare to health care boards	C2a, Ta	Theory application (Prescription)	Discussion
Griffith, 1988	What must boards do to improve volunteer hospital performance	C2a, C2b, C2c, C2d, C3d	Prescription	Discussion
McDermott, 1988	Hospital/physician relationships	C2a, C2b, C3a	Prescription	Discussion
Pointer, Begun, & Luke, 1988	The need to manage interorganizational dependencies	C2a, C2c, C2d	Prescription/Theory Building	Discussion

Table 4 (continued)
Articles Focusing on Collectivity (C2) in Health Care Strategy Formation

Authors	Primary Research/ Managerial Issue Addressed	Strategy Formation Focus or Foci	Article Intent	Method
Provan, 1988	Board influence on decision making in independent vs. multihospital systems	C2a, C2d, C4a	Theory Building	Survey
Shortell, 1989	How can boards redirect themselves to meet changing needs	C2a, C2b, C4c	Prescription	Survey
Fortler, Phillips, Blair, & Duran, 1990	Achieving competitive advantage through strategic human resource management	C2a, C2c, C4c, Tb	Theory building	Illustrative, Qualitative Data
Topping & Fortler, 1990	Revitalizing HMOs through improved stockholder management	C2b, C2c, C2d, C4c	Prescriptive, Theory Building	Anecdotal Evidence, Secondary Survey Data/Interviews
Umbdenstock, Hageman, & Amundson, 1990	Effective governance of not-for-profit hospitals Five critical areas	C2a, C2c, C4b	Prescriptive	Discussion/Secondary Data

Organizational change processes have been characterized in several ways: as continuous processes or as brief episodes of change sandwiched between long periods of inertia and stability and as volitional or the result of unforeseen shocks. Meyer, Brooks, and Goes (1990) propose that these change processes can be described along two dimensions. The first dimension they label the mode. Here, they contrast first-order change (where continuous change occurs within a stable system that itself remains unchanged) with second-order change (where discontinuous change transforms properties or states of the system). First-order change is incremental, with changes occurring either through adaptation (e.g. Quinn, 1978) or evolution (Hannan & Freeman, 1977). Second-order change occurs through metamorphosis (e.g., Miller & Friesen, 1980a) or revolution (e.g., Gould & Eldredge, 1977). The second dimension relates to the level of analysis—firm versus industry. For example, Quinn (1978) and Miller and Friesen (1980b) focus on changes at this firm level, whereas Hannan and Freeman (1977) and Gould and Eldredge (1977) focus at the industry level.

With respect to firm-level analysis, Meyer et al. (1990) point out that adaptation approaches suggest that organizations monitor their environments more or less continuously and adjust to them purposively. Metamorphosis theories suggest that organizations possess inertia and adopt stable configurations that must periodically be realigned. However, this realignment is rapid and organization-wide.

It is important to keep in mind the distinction between the nature of the change (first order versus second order) and the pattern of the change (evolutionary versus revolutionary). Although there is a tendency to equate first-order change with evolutionary processes and second-order change with revolutionary processes (e.g., Tushman & Romanelli, 1985), these are conceptually distinct (c.f., Gersick, 1991; Gould & Eldredge, 1977).

A related issue concerns the source of change. Both external and internal forces have been identified as sources (Grinyer & McKiernan, 1990). Our reading of the literature suggests that first-order changes are more likely to be influenced by internal sources. We believe that traditional intentional synoptic planning will result primarily in first-order change that follows an evolutionary pattern. Second-order change appears to be triggered either by performance crises or by external sources. Boal & Bryson (1988) further argue that second-order transformations do not require crises but can result from the vision of a leader. Organizational turnaround is often associated with a change in leadership.

As noted, models of strategy formation and content usually concern first-order change and are focused at the firm level because firms are assumed to be more mutable than are their environments (Freeman, 1978). Less attention has been paid to second-order change or the industry level of analysis. Even in those cases where industry-level concepts become assimilated in strategic management, the level of analysis tends to revert to the firm (McGee & Thomas, 1986).

We believe that the nature of change, stable/predictable versus dynamic/unpredictable, influences both formulation and strategic content. The review of the forecasting literature by Pant and Starbuck (1990) leads us to believe that, under environmental turbulence, traditional planning phase models will not work well,

nor will the use of traditional linear analytic techniques. This is because of the time lag between formulation, implementation, and outcomes. Or as one of our colleagues likes to say, "when you get there, there ain't no there, there." Mintzberg (1990), in his discussion of strategic content asks, "How complex should a good strategy be?" Pant and Starbuck's (1990) analysis suggests that, under turbulence, decision makers mistake noise for information. Therefore, under turbulence, the KISS principle applies. However, when the environment is stable, comprehensiveness (Fredrickson & Iaquinto, 1989) in formulation and content are appropriate.

Change also has implications for the content issue raised by Mintzberg regarding whether organizations should adopt generic or novel strategies. At the firm level, change allows organizations a wide latitude of choices. However, because of equifinality, it is not clear which niches will be most profitable or how best to exploit those niches. On the other hand, at the industry level, the same change forces lead organizations to conform and mimic each other (DiMaggio & Powell, 1983; Levitt & Nass, 1989). Thus, turbulence on one hand increases the number of choices available, but limits the number of choices chosen.

A related problem concerns the relationship between strategy content and results. As Pant and Starbuck (1990) suggest, models that predict trends well do not predict transition points. Transition points may only be knowable retrospectively. This is why emergent strategies form out of results, feeding back to strategic content. Transition points, or change patterns characterized as punctuated equilibrium (Miller & Friesen, 1980a; 1980b; Romanelli & Tushman, 1986) also suggest why the best laid plans "aft do go astray" and do not resemble the realized strategy. The results realized would feed back on the industry structure (Porter, 1980; 1985) affecting its stability and attractiveness.

Key Research Questions Focusing on Change Issues

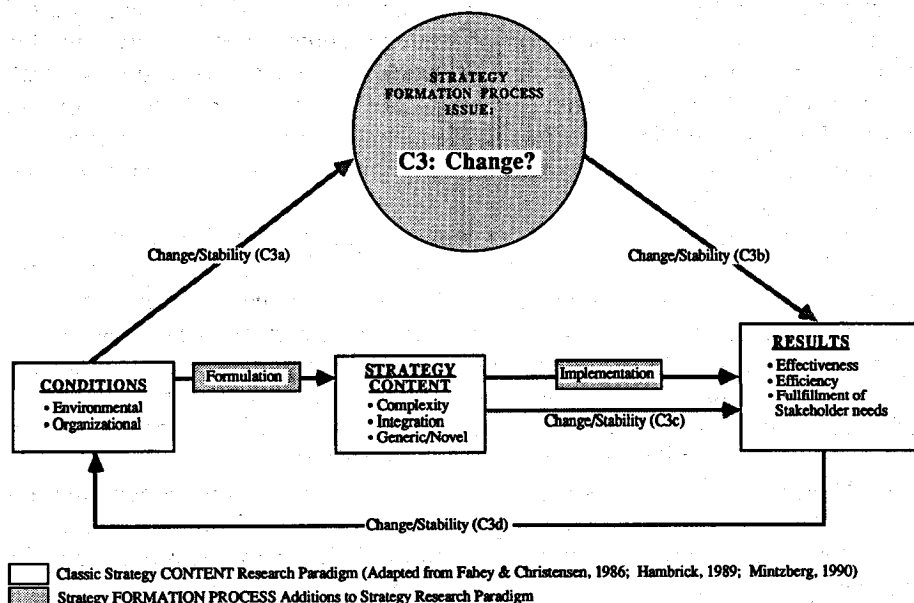
The change issue in health care strategy formation appears in several key research questions that are indicated in Figure 4:

- How do changing environmental and/or organizational conditions affect the strategy formation processes? (*See arrow C3a*)
- What is the impact of strategy *process* on change or stability in organizational results? (*See arrow C3b*)
- What is the impact of strategy *content* on change or stability in organizational results? (*See arrow C3c*)
- What feedback effects do the results (of implemented strategy content) have on change or stability in environmental or organizational conditions? (*See arrow C3d*)

Reviewing the Literature Focusing on Change Issues in Health Care Strategy Formation

Change recognizes the issue of conflicting forces and the dynamic nature of the environment resulting from this conflict. How managers recognize, reconcile, and meld these forces for the benefit of the health care organization is a concern reflected in several of the articles focusing on change.

Figure 4
Identifying Specific CHANGE Research Issues in Strategy Formation Processes



How changing internal/external conditions affect the strategy formation process itself (C3a) was investigated in two of the reviewed articles. Brown and McCool (1987) offer a prescription for the "ideal" leader given the projected dynamic health care environment of the 1990s, whereas Arnould and DeBrook (1986) point out how changes in competition without subsequent changes in strategy process formation have led to market failure in the hospital industry per industrial organization economists.

The articles by Simon and Cohen (1989); McFall, Shortell, and Manhiem (1988); and Gillock, Smith, and Pilond (1986) each used case studies to determine the impact of strategic process *and* content on change (C3b, C3c). They looked at diversification, acquisition, and merger strategies, respectively, and all agreed that strategy process must be comprehensive and strategy content must be clearly defined if such approaches were to succeed. Thus, the limited literature available focused on two research issues simultaneously.

Only one article discussed the feedback effects of implemented strategy on change/stability in organizations (C3d). Luke, Ozcan, and Begun (1990) examined patterns of growth in small multihospital systems and found that systems following a market growth model tended after the second acquisition to choose new hospitals with characteristics that would contribute significantly to overall organizational stability.

Although much of the health care literature reflected change issues, considering the turbulent and rapidly changing health services environment of the last 5 years, it is surprising that only six articles were found that dealt explicitly with this important topic. Our understanding of health care strategic management

Table 5
Articles Focusing on Change (C3) in Health Care Strategy Formation

Authors	Primary Research/ Managerial Issue Addressed	Strategy Formation Focus or Foci	Article Intent	Method
Amould & DeBrock, 1986	What is behind the market failure of hospitals	C3a, C3d, C4d	Theory application	Discussion
Gillock, Smith, & Piland, 1986	Is it beneficial for a non-profit to merge with an investor-owned system	C3b/c, C4a, Ta	Description/prescription	Case study/survey
Brown & McCool, 1987	What are the attributes of good managers	C3a, C2a	Prescription	Interview
McFall, Shortell, & Manheim, 1988	How will physicians be affected/respond to acquisitions	C3b/c, C2a, C2d	Description/prescription	Case study/interview
Simon & Cohen, 1989	How do you implement a reorganization/diversification strategy	C3b/c, C2a, C1b, C1c	Theory testing	Case study
Luke, Ozcan, & Begun, 1990	Effects of birth order in small multihospital systems	C3d, C1a	Theory testing	Quantitative Data

would certainly benefit from further study of change and its multiple relationships with strategy formation. As we did with earlier process issues, in Table 5 we provide the coded overview of the health care management articles focusing on change.

C4: Choice Issues in Strategy Formation

Choice is often framed in terms of an either/or situation. Either there is the pure environmental determinism of the population ecologist (Hannan & Freeman, 1977) or the pure freedom of strategic choice (Child, 1972) proponents. For Mintzberg (1990), it is not a question of either/or but of degree.

Hrebiniak and Joyce (1985) attempt to resolve this debate by suggesting that environmental determinism and strategic choice do not constitute a zero-sum situation. Rather, they suggest the two dimensions are orthogonal. Thus, environmental determinism can be high or low, and strategic choice can be high or low. Where choice is high and determinism low, leaders have maximum choice and therefore should have maximum effects. In the case where both choice and determinism are high, they suggest leaders' choices are constrained. Following Miles and Snow (1978), they suggest that the first condition suggests a prospector strategy, whereas the second suggests an analyzer strategy. However, under conditions of maximum choice, one would think that all generic strategies would be potentially profitable (cf., Lawless & Finch, 1989). In the case where determinism is high and choice low, leaders have minimum choice. They either adapt or they are selected out. A defender strategy would be appropriate. Finally where choice and determinism are both low, chance or luck takes over. Here no real coherent strategy would emerge—much like Miles' and Snow's reactors.

Hambrick and Finkelstein (1987;1990) have sought to resolve the choice/determinism debate in a second way by focusing on the issue of managerial discretion. Discretion is defined as the latitude of managerial action. The amount of discretion afforded a CEO is a function of three forces: task environment, internal organization, and the leader's characteristics. Some of these forces act to increase discretion (e.g., demand instability), some to decrease it (e.g., culture). Success and failure, they argue, are as much a function of wise or unwise decisions as it is because of constraints imposed on strategic choices by the environment.

Both choice and determinism are likely to explain some performance variance. The relative amount and consistency of effects over time need further study. Hansen and Wernerfelt (1989) found that administrative practices (choice) explained twice as much variance in performance as did economic factors (determinism). Eisenhardt and Schoonhoven (1990) find evidence for both environmental determinism and strategic choice. However, the review of Capon, Farley, and Hoenig (1990) suggests that certain economic variables (industry concentration, growth) have consistent positive effects on performance. By definition, many *choice* variables are likely to have inconsistent and/or possibly negative effects on performance (cf. Murray, 1989).

A third way the choice/determinism debate is raised is to focus on the effects of leadership on organizational performance, as is done in leadership succession research, or to focus on how the leader's personality and values affect strategic con-

tent (c.f. Hambrick, 1989). Leader characteristics are related to both the degree to which they rationalize and formalize the strategy-making process (Miller, Droge, & Toulouse, 1988).

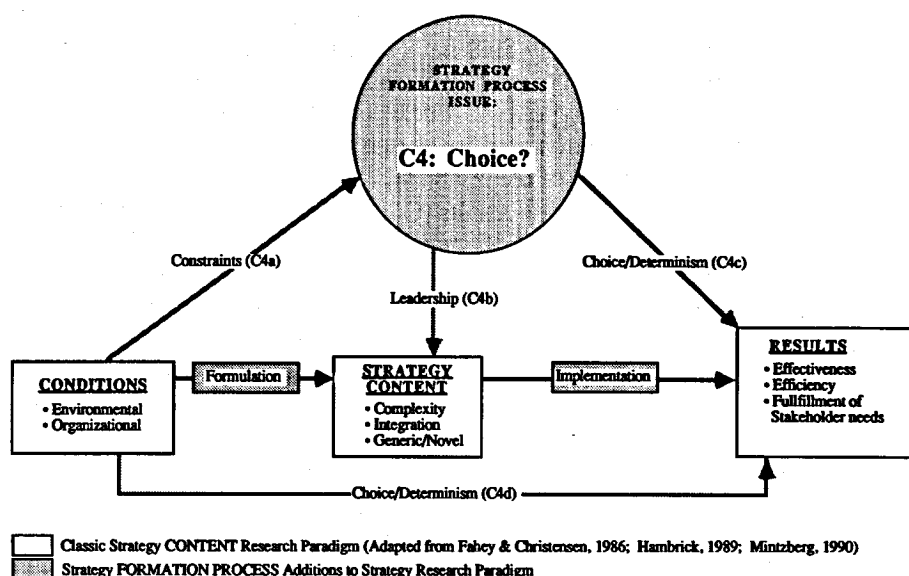
A fourth approach, analogous to the question of leadership effectiveness, would be the question of whether the process of planning makes any difference. Some have likened the process to rain dancing, where it does not make a difference beyond making the dancers (planners) feel good. However, as we noted earlier, Pearce, Robbins, and Robinson (1987) found a consistent positive effect, whereas Fredrickson and Iaquinto (1989) found that it makes a difference in stable but not turbulent environments. Boschken (1990) found that planning structures/systems allowed organizations to cope with significant changes in their environment (i.e., transition points). Boal and Bryson (1987) found that specific subprocesses (e.g., goal setting) associated with planning had a greater impact on results than did resources (conditions).

Key Research Questions Focusing on Choice Issues

The change issue in health care strategy formation appears in several key research questions that are indicated in Figure 5:

- How much is strategic choice constrained by environmental or organizational conditions? (See arrow C4a)
- What is the effect of leadership (in the strategy formation process) on strategy content? (See arrow C4b)
- Does strategic process make any difference (i.e., significantly affect results)? (See arrow C4c)

Figure 5
Identifying Specific CHOICE Research Issues in Strategy Formation Processes



- To what extent are results a function of environmental or organizational determinism rather than strategy content or process? (See arrow C4d)

Reviewing the Literature Focusing on Choice Issues in Health Care Strategy Formation

Researchers appear quite interested in the concept of choice as evidenced by the 14 articles presented in this review. In a dynamic, ever-changing environment the question foremost in managerial minds is not necessarily "What can I do?" but "What will the external/internal environment allow me to do?" or "Who should choose what we do or will our choosing really make any difference?"

The extent to which strategic choice is constrained by environmental or organizational conditions (C4a) is the thrust of three articles. Shortell, Morrissey, and Conrad (1985) did a study to determine the effects of environmental controls (regulation) on hospital behavior regarding medical staff composition. It was found that this external control source had less impact on subsequent behavior of the health care organization than did internal characteristics such as case mix, size, location, and degree of teaching involvement. Profit versus public welfare goals were compared for investor-owned and not-for-profit hospitals by Kralewski, Gifford, and Porter (1988). It was hypothesized that ownership type would differentiate hospitals with respect to the relative emphasis placed on patient/community welfare versus financial performance goals. Surprisingly, the findings did not support the hypothesis. Environment and/or orientation of competition appears to override ownership to determine goals selection. Carter (1990), in looking at small firm adoption choices, found that as regulatory and competitive uncertainty increased, small firms (physician organizations) tended to initiate adaptive responses relative to the cost of such responses.

Three articles addressed CEO's influence on strategic choice (C4b). Thomas and McDaniel (1990) found that how CEO's interpret a strategic situation will affect what actions an organization will ultimately take. Interviews with CEOs from multihospital systems conducted by Sussman (1985) pointed to the development and recruitment of managers by the multisystems for their abilities to move hospital management to a corporate type form. Zuckerman (1989) also saw the role of the CEO in the strategic formation process as one that manipulates strategy content to maintain the basic values of the organization.

The impact of strategic process on results (C4c) is addressed in three articles by critiquing hospital/physician integration strategies. Gillord Meighan (1988; Morrissey, Alexander, and Ohsfeldt (1990); and Blair, Slaton, and Savage (1990) all found that a comprehensive strategic process (i.e., involving key stakeholders) led to increased success with physician/hospital strategic ventures.

Finally, to what extent are results a function of environmental or organizational determinism rather than strategy content or process (C4d)? Alexander and Amburgery (1987) offer an interesting view of health care organizations from a population ecology perspective. Although population ecology, with its lack of managerial choice, is found to be somewhat applicable, the authors admit that the hospital industry is unique in situational characteristics that may buffer some hospitals from differential selection. Ginn (1990) examined changes in acute care hospital's

strategy in response to the turbulent health care environment of the 1980s. Ginn found that hospitals did change strategy type depending on uncertainty in environment, but that hospital characteristics such as number of beds and ownership type did not predict change. Only prior strategy choices appeared to predict strategy change. Conrad, Mick, Modden, and Hoare (1988) found that "market" forces of cost and demand drive the strategies adopted by individual health care organizations, as did Ginsberg and Buckholtz (1990), though Ginsberg and Buckholtz also point to institutional forces that also influence responsiveness and response time. Jones, DuVal, and Lespaire (1987) hypothesize that voluntary (not-for-profit) hospitals may not survive the new market-driven health care system of today and the future simply because of limited skills in strategic formulation.

The four choice-type questions were fairly evenly covered in the literature, though more study of the effects of leadership on strategy content would certainly be useful to health care organizations and to managers themselves. This set of issues appears to be the most carefully examined one in our review and includes the best balance of theory and empirical research. In Table 6 we provide the systematically coded overview of the health care management articles that addressed one or more specific issues relating to choice.

T: *Thinking* Issues in Strategy Formation

Mintzberg (1990) labeled the last process issue *thinking*. How much thinking do we want anyway? How do we balance the need for analysis with the need to act? Peters and Waterman (1982) argued against being overcome by analysis paralysis in favor of a bias for action. Nutt's (1984) research suggests that both formulation and strategic content are solution driven, not problem driven, and that much thinking resembles Weick's (1979) notions of retrospective sense making. As Wildavsky (1969) pointed out, managers do not know what to ask for until they see what they can get. However, Daft, Sormunen, and Parks (1988) found that CEOs in successful organizations scan their environments more broadly and frequently than do CEOs of less successful organizations. In addition, they maintain greater flexibility in their procedures, which allows them to cope with uncertainty. In fact, the study by Marcus (1988) of the nuclear industry suggests that rule-bound behavior (i.e., non-thinking) is associated with poor performance. In support, Eisenhardt (1989) found that effective executive teams appear to do more thinking than less successful executive teams in dynamic environments that are punctuated or overlaid with sharp and discontinuous change. They use more information, develop more alternatives, and make more rapid decisions. But they do the latter by employing a process different from traditional sequential phase models. They process multiple alternatives simultaneously and use a two-tiered advice process.

Lord and Maher (1990) suggest there are four basic models of information processing (thinking). They are the rational, limited capacity, expert, and cybernetic. Traditional strategic management paradigms are based on the rational model. At the individual level of analysis, these models are not very descriptive. However, as noted earlier, rational models at the organizational level appear to work well for

Table 6
Articles Focusing on Choice (C4) in Health Care Strategy Formation

Authors	Primary Research/ Managerial Issue Addressed	Strategy Formation Focus or Foci	Article Intent	Method
Shortell, Morrissey, & Conrad, 1985	The effect of regulation and hospital behavior on the medical staff	C4a, C3a	Theory Building	Survey
Sussman, 1985	How have environmental changes affected the behavior of CEO's	C4b, C3a	Description/prescription	Interview
Alexander & Amburgery, 1987	The effects of an open system/environment on change	C4d, C4a, C3a	Theory application	Secondary data
Jones, DuVal, & Lesparre, 1987	Mixed mission dilemmas of volunteer hospitals: To compete or not to compete	C4D, Ta, C3c	Prescription	Discussion
Conrad, Mick, Madden, & Hoare, 1988	What forces underlie the structural change in HCO's	C4d, C1d, C3d	Theory Building	Discussion
Gill & Meighan, 1988	Barriers to CEO, board & physician partnerships	C4c, C2a, C2b, Ta	Prescription	Qualitative/Quantitative data from seminar
Kralewski, Gifford, & Porter, 1988	Are investor owned hospitals merely profit oriented	C4a, C2c, Ta	Description	Survey
Zuckerman, 1989	What should be the role of the CEO in the future	C4b, C2a, Ta, Tb, C1c	Prescription	Discussion
Blair, Slaton, & Savage, 1990	Success strategies for hospital-physician joint ventures	C4c, C1b, C2a, C2b	Prescription	Illustrative, Discussion
Carter, 1990	Small firms' adaptation responses to uncertainty	C4a, C2a, C1a	Theory Building	Survey
Ginn, 1990	Strategic responses by acute care hospitals in the 1980s	C4d, C4a, C3a, C3d	Theory Building	Survey, Logistic regression
Ginsberg & Buchholtz, 1990	Conversion of HMOs to for-profit status	C4d, C4a, C3a	Theory Testing	Secondary Data/Event-Time Analysis
Morrissey, Alexander, & Onsfeldt, 1990	Do physician integration strategies affect hospital output: Urban vs. rural hospitals	C4c, C4d, C3a	Theory Building	Survey, Quantitative Data
Thomas & McDaniel, 1990	How CEOs of different organizations interpret strategic issues	C4b, C4d, C1b	Theory Testing	Questionnaire, Archival Data

problems that can be defined, structured, and solved through obtaining and or developing additional information and applying the appropriate analytic techniques, what Rittel and Webber (1973) label "tame" problems. Whether rationally based models are able to cope with "wicked" problems is not clear. According to Rittel and Webber, wicked problems are indeterminate and cannot be definitively formulated. Hence, no agreed upon criteria can be developed to ascertain if or when a solution has been found. Many of the problems facing health care organizations seem to us to be "wicked" in nature.

But if traditional rational models are not adequately descriptive, what then? One alternative is the limited capacity model. These models focus on how individuals simplify information processing through the use of both heuristics (Hogarth, 1981; Tversky & Kahneman, 1974) and implicit theories and schema (Gioia, 1986; Nisbett & Ross, 1980). These models further look at how individuals limit the decision-making task by using sub-optimal decision rules (e.g., Simon's 1955 satisficing model). Concepts similar to these in the strategic management literature are the notions of industry recipes (Spender, 1983), negotiated belief structures (Welsh & Fahey, 1986) or dominant logics (Prahalad & Bettis, 1986). Little is known about the dominant logics used in the health care sector or other industrial/service sectors for that matter. Even how to assess them is still an open question (Grant, 1988). Because of the transformations occurring in health care, health care organizations seem an ideal place to study how and if dominant logics change. Learning new and unlearning old schemas is thought to be a necessary requirement if organizations are to avoid crises in turbulent environments (Nystrom & Starbuck, 1984).

Another alternative to the rational model is the expert model of information processing. Experts differ from novices both in the use of more elaborate schema (Chi, Glasser, & Rees, 1982) that are derived from their knowledge of the subject matter (Glasser, 1984), and in how they process information. Experts are, however, not superior in a general sense, but only within their domain of expertise (Lord & Maher, 1990). Chi, Glaser, and Farr (1988) suggest that the superior performance of experts is a function of the interaction between knowledge structures and the processes of reasoning and problem solving. This may explain why top executives are not successful when they transfer across companies (Shetty & Peery, 1976) and why firm performance is influenced by the employment history, functional experience, and educational training of its top management teams (Norburn & Birley, 1988).

Cybernetic models, unlike the other models, are temporal rather than atemporal, dynamic rather than static. Rather than using sophisticated processes (i.e., comprehensive synoptic planning models) to achieve optimization, feedback plays a key role in altering behavior, learning, and cognitive processes. Optimization occurs through learning and adaptation. Emergent processes best correspond to this model. Little is known about how organizations learn, though Feldman (1986) emphasizes the importance of the amount and immediacy of feedback as well as the use of techniques (e.g., "devil's advocacy" to promote learning. The research by Earley et al. (1990) on outcome and process feedback, and the research on devil's advocacy and dialectical inquiry (Schwenk, 1989) support these

suggestions. Thus, thinking does occur, but it is not the thinking of the rational model. Rather, it is a blend of various information processing models.

Key Research Questions Focusing on Thinking Issues

The thinking issue in health care strategy formation appears in several key research questions that are indicated in Figure 6.

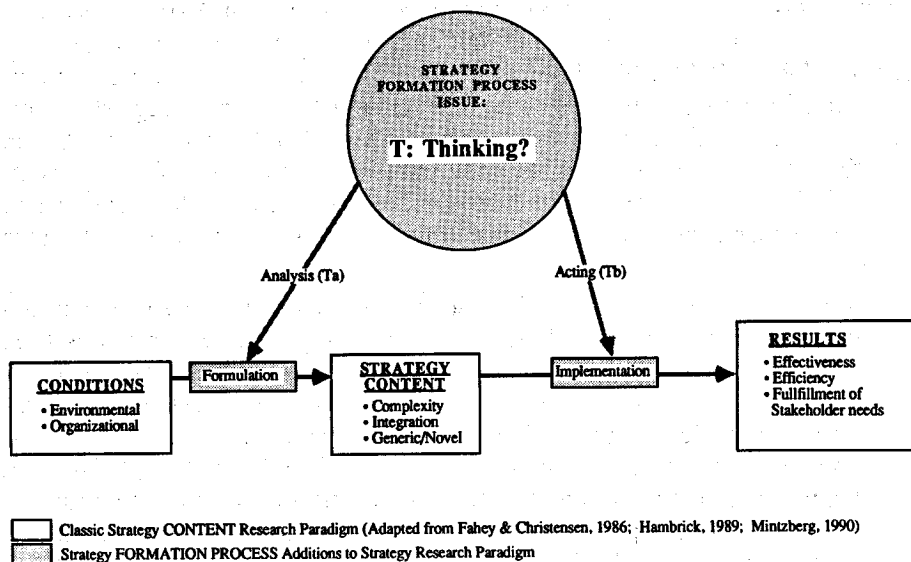
- To what extent is strategy formulation a function of detailed analyses of environmental and organizational conditions (e.g., SWOT-type analysis)? (See arrow *Ta*)
- To what extent does strategy formation process focus on action rather than analysis, (i.e., on implementing rather than formulating)? (See arrow *Tb*)

Reviewing the Literature Focusing on Thinking Issues in Health Care Strategy Formation

A somewhat more abstract concept than the four that have preceded it, *thinking* considers the question "How much of it do we want anyway?" (*Ta*). Analysis versus action issues (*Tb*) relative to strategic formation and implementation can be broad and diverse. Coding articles into this category was difficult, but 12 articles were eventually chosen.

Market share analysis is the predominant issue considered by researchers within the thinking context. Gourley and Moore (1988) look at marketing and planning within multihospital systems and find a general lack of understanding in three major areas: what marketing entails, what planning entails, and where (and if) marketing and planning functions were performed in the system. The authors

Figure 6
Identifying Specific THINKING Research Issues in Strategy Formation Processes



feel that multihospital systems need to become more aware of the significant benefits of conducting marketing and planning functions at the corporate level. Market segment assessment is found by MacStravic (1989) to be a useful addition to product portfolio analysis because the market segment approach appears to be more useful in planning and evaluating mission-related activities. Concerns of just what is the relevant market for analysis of health service organizations and how to correctly analyze said market is the focus of Garnick, Luft, Robinson, and Tetreault (1987); White and Chirikos (1988); and Luft et al. (1986). The essence of their findings is that accurate, unbiased definitions of "market" are needed but not readily found in health care organizations. Erickson and Finkler (1989) investigated the role of hospital's characteristics in predicting market share and found that affiliation level has a positive and significant relationship with an individual hospital's market share but accreditation status, ownership type, and Blue Cross status had no effect. Pointer (1990) discusses alternative offering-level strategies that can be employed by health service organizations to gain competitive advantage in markets and market segments.

Autrey and Thomas (1986); Cleverly (1987); and Desai and Margenthaler (1987) offered various frameworks and models to assist health care organizations with strategic analysis: Porter's Competitive Model, a Strategic Financial Planning model, and a Basic Framework for Strategic Analysis, Formulation and Implementation, respectively.

Sapienza (1987) studied imagery and language usage of top managers in two medium-sized teaching hospitals to see how organizational culture influence manager's cognition. She found that organizational culture influences manager's cognition by influencing what they pay attention to, how they perceive the stimuli to which they have paid attention, and what significance is attached to those perceptions.

Lastly, Wheeler, Porter-O'Grady, and Barrell (1985) suggest that technological assessment should be an integral part of a hospital's strategic planning process because technology is an important driver of change in the health care industry. The authors offer the Institutional Planning Model as a process to assess technology.

As alluded to earlier, deciding what constitutes an optimal amount of "thinking" is difficult and sometimes even impossible. Judging by the number and diversity of articles in this review, the *thinking* category will probably not suffer from a shortage of entrants in the future. However, these articles all reflect a highly rational model of strategy formulation and implementation. There appears to be no clear attempt to choose between analysis and action. Indeed, the underlying assumption is that proper analysis will lead to effective action. In Table 7 we provide our last detailed overview of the articles that concentrated particularly on thinking issues.

Process and Content Issues in Strategy Formation: An Integrative Framework

This concludes our review of the strategic formation process—both in context-free and context-specific literatures. Although strategy content models were not the focus of this review, we will very briefly touch on the three issues identified

Table 7
Articles Focusing on Thinking (T) in Health Care Strategy Formation

Authors	Primary Research/ Managerial Issue Addressed	Strategy Formation Focus or Foci	Article Intent	Method
Erickson & Finkler, 1985	How to determine market share for each hospital	Ta, Tb, C1b	Theory application	Secondary data
Wheeler, Porter-O'Grady, & Barrell, 1985	The strategic effect of technology on health care systems	Tb, Ta, C4d	Prescription	Discussion
Autrey & Thomas, 1986	How to do a Porter industry analysis	Ta, C3a	Theory application	Discussion
Luft, Robinson, Garnick, Hughes, Mcphee, Hunt, & Showstack, 1986	Hospital behavior related to local market position	Ta, C4d, C3a	Prescription	Discussion
Cleverly, 1987	How to do strategic financial planning	Ta, C1b, C2a, C4a	Prescription	Discussion
Desai & Margenthaler, 1987	How to do a strategic analysis	Ta, Tb, C1b	Prescription	Discussion
Garnick, Luft, Robinson, & Tetreaut, 1987	What is the appropriate market definition for hospitals to correctly identify effects of competition	Ta, C1b, C4a	Prescription	Secondary data Analysis-regression
Sapienza, 1987	What is the effect of language/imagery on decision making	Ta, C2a, C4b	Theory building	Ethnography
Gourtley & Moore, 1988	What is the effect of system involvement on marketing and planning for profit, non-profit, and church-owned systems	Tb, C2a	Description	Interviews and survey
White & Chirikos, 1988	To what extent are hospital market structures endogenous to the models that represent them	Ta, C4d	Theory Building	Secondary data Analysis-regression
MacStravic, 1989	Adding market segment assessment to product portfolio analysis	Ta, C2b	Description	Discussion
Pointer, 1990	Alternative offering-level strategies to gain competitive advantage	Ta, C3a, C4c	Prescription	Discussion, Illustrative

by Mintzberg (1990) as they relate to strategy formation issues. The three issues are labeled complexity, integration, and generic.

As noted earlier, complexity relates to the question of how complex should a good strategy be. Ashby's (1956) law of requisite variety suggests that the internal complexity of a system should match the external complexity of its environment. This law is juxtaposed against the KISS principle advocated by Peters and Waterman (1982). Framed in this way, the issue focuses on the substance of the plan. From a process view, it ignores the role of the human agent. Complexity can either be located in the system or in the actors. Some theorists argue for the need of matching the complexity of the environment with the cognitive complexity of the leader (e.g., Jacobs & Jacques, 1987) or the top management team (Ginsberg, 1990), ignoring systemic properties altogether. Others have stressed the importance of matching the manager with the strategy, either through selection or development (Govindarajan, 1989; Kerr & Jackofosky, 1989). Alternatively, Murray (1989) focuses on the composition of the top management team and argues that when competition is intense, a more homogeneous group is to be preferred; but under conditions of turbulence, a heterogeneous team is preferable. Hurst, Rush, and White (1989) argue, as a general rule, that because a variety of behaviors are needed at the strategic apex, each of which is associated with a different cognitive style, top management teams should be heterogeneous with respect to the cognitive styles of their members. As Bonoma (1984) has pointed out, even bad strategies (content) can be rescued by good implementation.

The second content issue is labeled integration. It concerns the question of how tightly integrated a good strategy should be. Should strategy be viewed as a portfolio of loosely coupled initiatives, or must the initiatives be tightly woven forming a coherent picture? Internal consistency is one of two meta-themes underlying both Porter's (1980) generic strategies and Miles and Snow's (1978) typology (Seger, 1989). The related concept of "fit" appears to be universal in the management literature (Venkatraman, 1989). Within the strategic management literature, it is generally argued that organizational performance is a function of the fit between strategy and industry structure (Porter, 1980; 1985). However, evidence for this widely held assumption is equivocal (Venkatraman & Prescott, 1990). Variations on the "fit" theme are too ubiquitous to mention (but see Miller, 1987, for a general discussion).

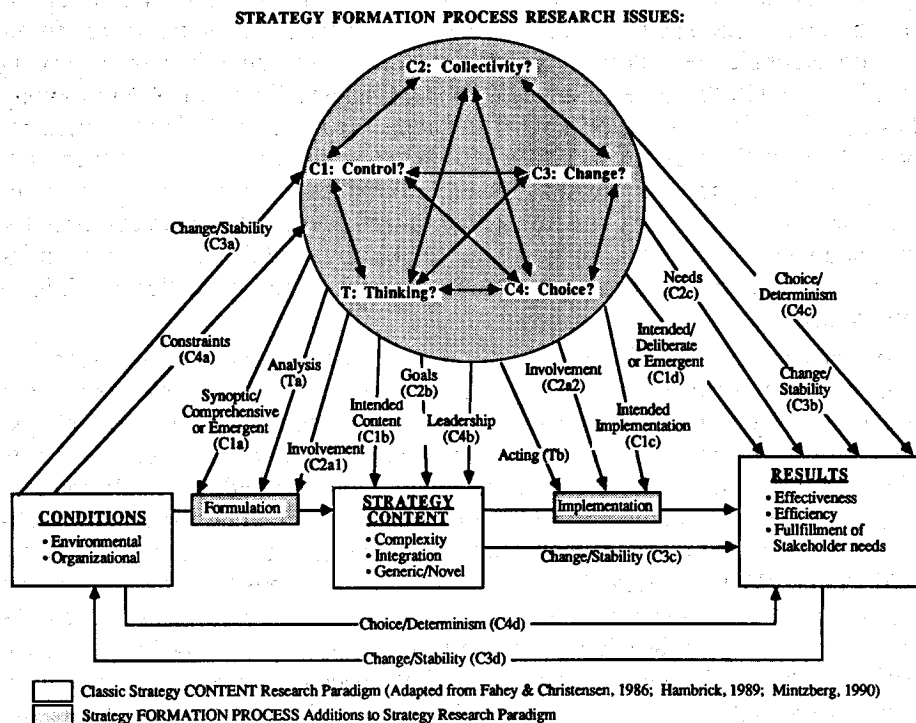
In terms of the issues discussed in this review, integration can also be seen as a process control issue as discussed by Peters and Waterman in terms of loose-tight properties. Where and how do we achieve integration: through formalized, systemic properties or through personal interaction? Simple and stable environments allow for tighter integration. But tighter integration required more information-processing capacities, unless organizational slack is high. Therefore, more mechanisms or ones with greater coordination capacities must be used (Galbraith, 1967; Van de Ven, Delbecq, & Konig, 1976). At the opposite extreme, complex and turbulent environments also require great information-processing capabilities. However, in this case, it is uncertainty and ambiguity (Daft & Lengel, 1986) that create this need. One way of coping with the need to process information is to uncouple the system. Thus strategies could be uncoupled as a coping mechanism.

The above suggests that both strategic process and strategy content can be viewed as alternative mechanisms for adapting to reorganizational information-processing needs.

Mintzberg labels the final concern the generic issue. Should good strategies be unique or novel? Do organizations succeed by following industry recipes (Spender, 1983) or dominant logics (Prahalad & Bettis, 1986) or by breaking the rules? Brady (1987) suggests rules for breaking rules at the individual level. Are there counterparts for strategies? Are there equally viable generic strategies within an industry (Zajac & Shortell, 1989)? The research using Miles and Snow's (1978) typology (e.g., Conant, Mokwa, & Vardarajan, 1990) and the research on strategic groups (e.g., Cool & Schendel, 1987) lead us to believe that the answer is yes, based on the observation that there are no consistent differences in performance either between strategic groups or organizations pursuing different strategies. We note in passing that researchers differ on the ontological status of strategic groups (Barney & Hoskisson, 1990; Cool & Schendel, 1988).

One of our colleagues likes to say "strategy is in its implementation." The above review suggests to us that strategic research needs to pay attention to its "process" as well as its "economic" roots. The challenges for those researchers who seek to, first, integrate these five emergent process issues among themselves and, second, to explore the conceptual linkages to the corresponding emergent content issues in health care strategy formation are indicated in Figure 7. This

Figure 7
Process and Content Issues in Strategy Formation: An Integrative Framework



model represents our best—but still fragmentary—estimate of the most productive questions that should frame the future strategic management research agenda in the field of health care management.

Discussion and Implications

This article has attempted to review the current (1985-1990) literature on the formation of organizational strategy in a very specific way. We have placed a systematic theoretical framework around the context-specific (health care management) literature by extending the context-free (generic management) literature. We have done this conceptual extension and integration through a series of models focusing on five emergent *process issues in strategy formation*: control, collectivity, change, choice and thinking. These issues have further been put in the theoretical context used by those scholars who focus on *strategy content issues*.

The specific health care strategic literature that addressed strategy formation processes was coded along several dimensions: the primary research or managerial issue addressed, the strategy formation focus (as specified by the arrows in our models), the theory building or theory testing or theory application or other intent of the article, and the methods used, if appropriate. Finally, our integrated model attempts to systematically identify the key research issues relevant for understanding and studying strategy formation in organizations—health care or otherwise.

Future Research Needs

Montgomery, Wernerfelt, and Balakrishnan (1989), argue that “theory generation, theory refutation, and application develop interdependently...[and] we need a balance among the three components. Too little theory, too much testing, or an overemphasis on immediate application will render the process ineffectual” (191). Our review of the health care literature suggests the process is out of balance. Normative prescriptions or discussions of how to apply specific techniques (e.g., industry analysis) constituted a little over 56% of the articles we reviewed. About 47% of the articles dealt with description or theory building. Only six articles attempted to test theory.

This lack of balance is not the only disturbing trend that we have noted. In one case, the authors went from description to theory building to prescription all in one article, and in four other articles the authors skipped theory building all together. Most of the prescriptive articles were atheoretical in nature. We find this normative nature of the health care literature understandable because researchers are looking at and trying to understand (and improve) the realities facing managers of a very specific type of organization in difficult and confusing times.

However, we also find the normative nature of this literature disturbing for two reasons. First, as Day, Farley, and Wind (1990) point out, “the field of strategy research is still in the early stages of its development” (Introduction). Thus, we do not believe the context-free literature on strategic management, from which writers on health care articles are borrowing, is itself a sufficiently mature body of knowledge from which to be making this leap of faith to application. In fact, Magen, Hemmasi, and Lewis (1987) suggest that the typical effect size in strate-

gic management research is small to medium at best. Second, even if the context-free strategic management literature were itself mature, the nature of its data base, typically Fortune 1000-like, private sector organizations would leave open the question of the external validity of those findings. This issue would be less of a concern to us if the health care literature was itself clearly building up a valid and reliable data base. Unfortunately, this does not appear to be the case.

In this literature, there is still a heavy emphasis on qualitative interview and case study generated data. Even in cases where survey/questionnaire data are reported, they are often of unknown reliability. Further, the vast majority of articles, conceptual or empirical, focus only on one type of health care organization—the hospital. Although this is the most complex organizational form in this context specific literature, generalizability to other health care organizations is unclear. Clearly, more basic descriptive work and theory testing is needed. The systematic application of the context-free literature, which is itself very limited, to the context-specific domain is understandable but premature.

A second observation about the health care literature concerns its segmenting of thought and action. Like the context-free literature, the health care literature can be divided between content and process, and within process, between formulation and implementation. Mintzberg (1990) observes that researchers/writers are divided between splitters and lumpers. Clearly there are far more splitters. We think this is because we tend to study things rather than relationships, as the French statesman Poincaré noted. It seems to us that strategic management—context-free or context-specific—has not done a very good job of identifying the dynamics of the relationships between formulation and implementation, much less examine the complex interactions between content and process.

The framework presented in this review we hope will point a direction for future research. The arrows represent research issues that should stimulate future work. It has often been noted that individuals know more than they can tell. Our general feeling is that we—as context-specific and/or context-free researchers—are telling more than we know. We need to say less and study more.

Implications for Practitioners

With full awareness of the caveats discussed above, we nevertheless will attempt to highlight some key practitioner implications developed by the authors of the health care strategy literature reviewed in this article. Of course, detailed implications and prescriptions are found throughout the literature.

Control:

- Joint physician/hospital enterprises can help achieve future HCO success but such enterprises must have an entrepreneurial focus on the market being served.
- Managers must use data analysis proactively.
- Managers must interact with and “manage” key stakeholders to increase control
- Strategy formation should emerge from the interplay of multiple forces, not drive relationships.

Collectivity:

- The effectiveness of boards, in general, can be enhanced through prescriptions provided in this literature.
- With new governance relationships, the authority and the accountability of the CEO is increasing and medical staff authority is decreasing.
- Physician involvement is a primary key to the successful formulation and implementation of strategy.
- Be aware that full implementation of policies designed to improve fiscal performance may jeopardize access to care and reduce quality of care provided to the community.

Change:

- To effectively manage change, managers must take an entrepreneurial approach, using new ideas and making creative alliances.
- Managers must develop leadership skills, learn to network build and be a people-oriented caregiver to compete in the 1990s.
- To compete in the highly competitive unregulated business world, managers of diversification efforts must have solid general business skills.
- Managers must not wait until they have no choice to consider strategies such as mergers.

Choice:

- External control sources do *not* necessarily impact the behavior of the health care organization as much as its internal structure and case mix.
- Managers must evaluate production and transaction cost changes, management capabilities and environmental management when considering vertical integration.
- Leadership development programs, workshops on group process skills, and team building seminars can remove roadblocks to effective partnerships between hospitals and physicians.
- The role of CEO of health service organizations appears to be evolving. CEOs must learn to be an interior designer, a parameter player, and the leader of the band.

Thinking

- Managers must analyze and clearly define their "real" markets.
- Frameworks provided in the articles reviewed can assist with various aspects of strategic analysis.
- Managers must place emphasis on the importance of assessing technology and its influences in the development of strategy.
- Managers must consider and evaluate images before using one in their own community of speech.
- Managers must investigate physician affiliation as a means to increase market share.

We believe that the strategic management issues formulated in this paper have significant implications for both the actions of practitioners and the development of strategic management theory. Practitioners need better advice to manage their way through this muddled ground of managing their organizations "strategically" if they are to experience the degree of control and choice often attributed to them in the strategy literature. We encourage other researchers to test and to extend the

strategic questions presented in this review through both empirical and conceptual research.

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