

## **Strategic Ventures in Academic Health Centers: Trends Affecting System Integration**

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*Competition within the acute care sector as well as increased penetration by managed care organizations has influenced the nature and type of strategic ventures in academic health care centers. The market factors confronting academic health care centers are not dissimilar from conditions that confront other organizations competing in mature industries characterized by declining profitability and intense rivalry for market share. When confronted with intense competition or adverse external events, organizations in other industries have responded to potential threats by forming alliances, developing joint ventures or merging with another organization. This analysis of 19 academic health centers describes the types of strategic ventures used by executives of academic health centers between 2000-2006, and compares these ventures with strategies adopted by executives of academic health centers during the nineties. These findings indicate a decline in merger activity in the industry as well as continued reliance upon quasi organizational structures to manage resource dependence.*

### **INDUSTRY TRENDS AFFECTING ACADEMIC HEALTH CENTERS**

While external trends have influenced the organizational structure of most academic health centers, their primary mission of patient care, teaching and research remains steadfast despite increased competition (Blumenthal, Campbell, and Weissman, 1997; De Angelis, 2000). Academic Health Centers have been in the vanguard in the provision of complex medical care as well as the delivery of care to underserved populations. Innovative procedures as well as leading specialists provide a continuum of care for the uninsured as well as patients with chronic conditions. Pardes (2000) notes that teaching hospitals provide “approximately 50% of the care to patients with complex pathology” which affirms the role of the academic health center in providing more advanced treatment.

Moreover, academic health centers often serve as the entry point for those without a primary care physician or those without health insurance. These patients include the working poor with limited health coverage as well as indigent patients who do not qualify for state or federal plans.

Due to higher levels of uncompensated care as well as costs associated with more complex care, costs at academic health centers have typically exceeded those of non teaching hospitals by more than 30 percent (Guo, 2005). While academic health centers have defined the standards for patient care, their treatment modalities are under increased scrutiny from managed care organizations. Concerns about medical loss ratios, or the number of dollars spent on medical services, continue to dominate contract negotiations. Incentives to monitor practice patterns and control excess utilization of ancillary services continue to challenge existing clinical protocols and conventional delivery systems (Gallen and Smits, 1997; Kuttner, 1999).

These financial incentives also impact resident education and teaching within the Academic Health Center. Managed Care organizations as well as employers are less willing to “cross-subsidize” activities that do not involve direct patient care (Fein, 2005). Efficiency is a critical component of this new clinical paradigm allowing less time for teaching faculty to spend with both residents and patients. Pressure to generate income from faculty practice plans has decreased the amount of time that academic faculty can allocate to teaching while concomitantly reducing the time available for patient assessment.

## **DIMENSIONS OF STRATEGIC VENTURES**

As executives of academic health centers confront decreased patient revenues, strategies to increase margins via new products or markets are expanding in the industry. Topping, Hyde and Barker (1994) describe an array of market and product development strategies used by academic health centers to enter new markets and enhance existing services during the nineties while Szabat and Walsh (2002) describe strategic ventures in academic health centers during the same time period.

Internal strategies such as subsidiaries, diversification, and internal development may initially be used by an academic health centers to gain competitive advantage. These strategies not only promote organizational autonomy, they also guarantee ownership of proprietary products and technologies developed by the organization. Internal ventures may be financed via internal operational funds or through external funds acquired from financial markets; however, their organizational structure may vary based upon financial or legal statutes imposed by various governmental entities. In some cases, an academic health center will develop a separate subsidiary to manage profitable products or emerging technologies, or simply rely upon an existing department to launch a new product line. Academic Health Centers that use internal ventures typically have one or more core competencies that they can easily exploit to gain a competitive advantage in the market.

In contrast, pre-affiliation ventures such as limited partnerships, joint ventures, or shared services may be developed by organizations that need key resources to compete within the industry. These pre-affiliation ventures are designed to exploit existing synergies that potentially exist between the respective organizations, and offer an opportunity to mesh complementary resources. While pre-affiliation ventures, by their very nature are limited in scope and duration, their objectives may vary. Some ventures may be limited to a specific strategic objective such as expanding a physician network, or pre affiliation ventures may include multiple collaborative functions related to the operation of key strategic business units. Pre-affiliation ventures offer an opportunity to explore issues of cultural compatibility; however, the transaction costs associated with their implementation may be expensive particularly during the implementation phase.

Intermediate ventures such as alliances and consortiums also provide synergistic benefits to member firms, and may also be used to forge relationships with prestigious organizations in the region. Although tangible resources may provide the impetus for exploring these types of strategic ventures, the intangible benefits of brand name association are inextricable factors in these quasi organizational relationships. Since these ventures are structured to be more exclusive in nature, participation in certain alliances may bestow an element of legitimacy and power to member organizations. Alliances and consortiums can be a formidable force in negotiations with third parties, and can also be used to leverage contracts with external vendors. Internecine conflicts between member organizations may still emerge in these ventures, and result in prolonged decision making and subversion of strategic objectives. Zuckerman, Kaluzny, and Ricketts (1995) also observe that most alliances encounter interdependence issues in various phases of the implementation process, and suggest that these transitional barriers must be resolved for the alliance to succeed.

Partnerships and mergers offer the least flexibility for most academic health centers ultimately influencing both strategic and operational goals. These strategic ventures may initially reduce duplication of services via consolidation of service, but higher costs have been associated with system integration during the early phase of implementation (Andreopoulos, 1997). Scale economies typically associated with these strategies have been difficult to achieve due to competition among various organizational members as well as a cultural clashes related to system objectives (Becker, 2006; Steinhauer, 2001). In contrast, mergers do positively influence contract negotiations with managed care companies. Many consolidated systems, due to their enhanced market power, can successfully bargain with managed care companies and negotiate higher rates. In markets with low competition, price increases in excess of 40% have been observed with many competitors also profiting from price adjustments due to the prevailing market conditions (Becker, 2006). Increased surveillance of proposed mergers is anticipated with the Federal Trade Commission taking a more active role in preserving a competitive pricing structure within regional health networks.

## **METHODS**

Data from the Association of Academic Health Centers e-mail directory was used to identify the executives from the 94 academic health centers who are current members of this association. This database was also used in the 1990-1997 study conducted by the authors, and in an initial 1980-1987 study of academic health centers. Due to the limited size of this population, a self-administered questionnaire was mailed to all Chief Executive Officers listed in the 2005 e-mail directory of Academic Health Centers. Respondents were asked to reply within a one-month period and follow up letters and questionnaires were sent to non-respondents after a 30-day period. Although the respondents were assured of complete confidentiality via a personal letter, only two responses were returned after the first mailing. A second mailing resulted in 13 responses, and the authors initiated a third e-mail mailing to those who had previously participated in the 1990-1997 study. Only four additional responses were returned via this third electronic mailing.

In order to assess the nature and evolution of the quasi-organizational relationships pursued by academic health centers, a group of distinctive strategies was identified. The strategies, which were selected, are currently classified in the Guide to Hospital Words, Terms, and Phrases (Snook, 1987), and more extensive definitions of these strategies appear in Strategic

Management of Health Care Organizations (Ginter, Swayne, and Duncan, 2006). Strategic ventures may vary according to their governance structure, level of financing or transaction costs; and discrete definitions for specific strategies were sent to executives involved in the study (Oliver, 1990; Longest, 1992; Ring and Van de Van, 1994).

Strategies that involved internal development, subsidiaries, and diversification were classified as internal strategic ventures. These ventures are often designed to expand products or services within the existing corporate structure, and are usually designed to preserve the prevailing governance structure of the organization. Internal ventures are typically financed via endowments, external grants or internal funds generated through operations. Internal Ventures typically do not require resources from another organization, and allow the academic health center to operate on an autonomous basis.

Strategic ventures such as affiliations, joint ventures, limited partnerships, shared services, venture capital, and venture nurturing were classified as pre-affiliation ventures. These quasi organizational relationships usually involve some level of shared financial risk; however, legal liability is limited to the terms of the particular pre affiliation agreement. Transaction costs can be expensive and require a substantial investment of capital and personnel in the early phase of implementation. Opportunities to explore potential synergies as well as cultural compatibility may compensate for the initial costs associated with pre affiliation relationships.

Strategic ventures such as alliances and consortiums were classified as intermediate strategic ventures. These ventures usually have common by laws or policies that govern the various entities involved these quasi firms. Although the nature of an intermediate relationship requires more interdependence, these ventures may offer substantially more leverage in third party contracting due to their size and ability to control specific market segments.

Partnerships and mergers were classified as formal strategic ventures. In some cases, mergers may represent the progression of an intermediate or pre affiliation agreement while other mergers reflect economic distress and inability to operate as an independent organization in the industry. Formal ventures may diminish organizational autonomy for one or more organizations, and typically result in a consolidated governance structure.

Since previous studies have noted the significance of monitoring strategic ventures over a longitudinal period, executives were asked to identify specific strategies that were used by their academic health center between 2000-2006. Survey responses were coded and analyzed via SPSS. The highest level specific strategy selected by the executive of an academic health center was used for classification within a strategic venture category: internal, pre-affiliation, intermediate, or formal venture. The 2000-2006 venture categories were compared to strategic venture categories selected by executives during the nineties using percentage analysis.

## **FINDINGS**

Nineteen executives from 94 academic health centers completed the survey resulting in a response rate of 20%. The majority of academic health centers are classified as non-profit organizations with 52.6% sponsored as non-profit organizations while another 31.6% were sponsored via state governments. Almost 48% of the AHC's managed acute care hospitals with more than 400 beds while another 10.5% managed more than 300 acute care beds. Over 60% of the academic health centers owned some type of ambulatory care organization; close to 60% owned primary care practices; 21% of the organizations owned some type of skilled nursing facilities, and 21% owned assisted living centers. (Table 1).

**TABLE 1:  
CHARACTERISTICS OF AHC RESPONDENTS**

	<b>Frequency</b>	<b>Percent</b>	
<b>Organizational Classification</b>			
University NFP	8	42.1	
University	2	10.5	
Regional Non-profit Teaching Hospital	1	5.3	
State University Health System	3	15.8	
Other	5	26.3	
<b>Ownership/Sponsorship of Organization</b>			
Government	6	31.6	
Religious	1	5.3	
Nonprofit	10	52.6	
Other	2	10.5	
<b>Number of Acute Beds</b>			
Less than 101	3	15.8	
101-200	2	10.5	
201-300	0	0.0	
301-400	2	10.5	
More than 400	9	47.4	
Missing	3	15.8	
<b>Organization Owned:</b>			
Ambulatory Health Centers	12	63.2	
Assisted Living Agencies	4	21.1	
Home Health Agencies	3	15.8	
Medical Equipment Pharmacies	4	21.1	
Primary Care Practices	11	57.9	
Skilled Nursing Facilities	4	21.1	
Managed Care Organization	0	0.0	
Preferred Provider Organization	4	21.1	
Medicare or Medicaid Risk Plans	0	0.0	
Indemnity Plans	0	0.0	
Medical Services Organizations	0	0.0	
	<b>Mean</b>	<b>Median</b>	<b>Range</b>
Full-time Primary Care Physicians <sup>1</sup>	55.5	39	2-250
Full-time Specialists <sup>2</sup>	367.8	215	0-1100

<sup>1</sup> Based on n=16 non-missing responses.

<sup>2</sup> Based on n=16 non-missing responses.

Since most respondents pursued multiple strategies, the highest level specific strategy selected by the executive was used to classify the type of strategic ventures used by the academic health center between 2000-2006. Strategic venture categories included internal, pre-affiliation, intermediate, or formal ventures. Venture categories from 2000-2006 were compared to strategic venture categories selected by executives during the nineties (1990-1997) using percentage analysis. (Table 2).

Internal strategies such as diversification and subsidiaries allow an academic health center to remain independent, and executives appear to use these strategies in conjunction with other strategic ventures. None of the executives in the 2000-2006 study or the 1990-1997 study relied exclusively on internal ventures to manage environmental threats. Although internal ventures preserve organizational autonomy, these strategies pose the greatest financial risk for an academic health center. Rather than rely entirely on internal ventures, executives appear to spread their risk and develop collaborative relationships with other organizations. These quasi organizational ventures can help to defer potential financial losses associated with new product development or product diversification. (Table 2)

Pre-Affiliation ventures were used by 31.6 of the academic health centers in the 2000-2006 study and by 34.3% of the academic health centers in the 1990-1997 further suggesting that the management of “financial risk” may play a role in developing collaborative strategies. Strategic ventures such as affiliations, joint ventures and limited partnerships require some level of shared financial risk yet limit organizational liability to a specific endeavor. These types of internal ventures also provide an opportunity exploit potential organizational synergies, and offer an opportunity to expand quasi organizational relationships. (Table 2)

While only 14.3% of academic health centers used intermediate relationships in the 1990-1997 study, 21.1% of the centers were involved in alliances or consortiums in the 2000-2006 study. While it is not clear if this increase represents a transition from a pre-affiliation to an intermediate relationship, it is evident that more enduring structures have emerged during the past decade. Moreover, the nature of these intermediate relationships also shifted during the past decade with consortiums selected as the primary strategy in the 2000-2006 study in contrast to alliances which dominated the 1990-1997 study. Consortiums provide a powerful coalition for executives and are typically less restrictive than the alliance which may limit other types of quasi organizational relationships. Executives may prefer the flexibility of a consortium which can be easily expanded to meet regulatory challenges yet require less investment of organizational resources. (Table 2)

Partnership strategies showed a slight increase in the 2000-2006 study, however, a notable decline was observed in merger activity. While recent studies have shown a slight increase in merger activity after 2003, mergers did substantially decline during the mid nineties (Harrison & Mc Dowell, 2005). Issues associated with system integration have affected the ability of health care centers to achieve either the scope or scale economies commonly associated with a merger. Increased surveillance by the federal government may further limit mergers as regulators attempt to control monopolistic pricing. (Table 2)

**TABLE 2:  
STRATEGIC VENTURES BY HIGHEST LEVEL STRATEGY SELECTED IN 1990-  
1997 STUDY AND 2000-2007 STUDY OF ACADEMIC HEALTH CENTERS**

	<u>1990-1997</u>		<u>2000-2006</u>	
	Frequency	Percent	Frequency	Percent
No Arrangement	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>
Internal Arrangement	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>
Diversification	0	0.0	0	0.0
Internal Development	0	0.0	0	0.0
Subsidiaries	0	0.0	0	0.0
Pre-Affiliation	<b>12</b>	<b>34.3</b>	<b>6</b>	<b>31.6</b>
Affiliation	10	28.6	5	26.3
Joint Venture	0	0.0	1	5.3
Limited Partnership	0	0.0	0	0.0
Shared Services	2	5.7	0	0.0
Venture Capital	0	0.0	0	0.0
Venture Nurturing	0	0.0	0	0.0
Intermediate Arrangement	<b>5</b>	<b>14.3</b>	<b>4</b>	<b>21.1</b>
Alliance	4	11.4	0	0.0
Consortium	1	2.9	4	21.1
Formal Relationship	<b>18</b>	<b>51.5</b>	<b>9</b>	<b>47.4</b>
Partnership	8	22.9	5	26.3
Merger	10	28.6	4	21.0
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	<b>35</b>	<b>100.0</b>	<b>19</b>	<b>100.0</b>

## MANAGERIAL IMPLICATIONS

Pre affiliation strategies continue to be selected by executives of academic health centers with over one-third of the respondents selecting affiliations and joint ventures as their highest level strategy. Most organizations must contend with issues of limited resources, either in the form of labor or capital, and affiliations provide a structure to leverage scarce resources. Affiliations function as “open systems” that are designed to promote resource exchange among members, and provide a process to explore issues of cultural compatibility.

Intermediate strategic ventures also appear to be increasingly used to manage resource dependency with consortiums increasing by 18.2% during the past decade. Unlike alliances which may limit member involvement in other strategic ventures, consortiums tend to provide

flexibility in expanding network relationships. As a result, focal consortium relationships can be used to forge secondary relationships with other key organizations further expanding the scope and influence of the academic health center. Organizations that are embedded within a social network can use these lateral contacts to evaluate prospective partners as well as to raise their profile within the industry. Consortiums not only provide an opportunity for executives to exchange tangible resources but their quasi-organizational structure also expedites the flow of information between network members. Given the turbulent nature of the health care industry, consortiums can be used to quickly channel information to members in the network and provide a rapid forum to respond to pending industry issues.

Since affiliations, consortiums and joint ventures provide optimal flexibility in expanding resources as well as the profile of the academic health center, it is not surprising that over one-half of the executives in the study used these strategies to expand resources as well as their market share in the industry. While some of these strategies may have evolved due to regulatory considerations, it appears that these strategic ventures provide the optimal process to manage both financial risk and preserve organizational autonomy within the health care industry.

## **REFERENCES:**

Anderson, G., Steinberg, E., & Heyssel, R. (1994). The Pivotal Role of the Academic Health Center. Health Affairs, 13, (3), 146-158.

Anderson, G. F., Greenberg, G., & Lisk, C. K. (1999). Academic Health Centers: Exploring a Financial Paradox. Health Affairs, 18, (2), 156-168.

Andreopoulos, S. (1997). The Folly of Teaching-Hospital Mergers. The New England Journal of Medicine, 336, (1), 61-65.

Atkinson, S. (1994). University Affiliated Venture Capital Funds. Health Affairs, 13, (2), 159-176.

Becker, C. (2006). Meeting Their Obligations. Modern Healthcare, 36, (35), 32-34.

Becker, C. (2006). Mergers Boost Prices. Modern Healthcare, 36, (10), 8-10.

Blumenthal, D., Campbell, E., & Weissman, J. (1997). The Social Mission of Academic Health Centers. The New England Journal of Medicine, 337, (21), 1550-1554.

DeAngelis, C. D. (2000). The Plight of Academic Health Centers. Journal of the American Medical Association, 283, (18), 2438-2439.

Fein, Rashi. (2000). The Academic Health Center: Some Policy Reflections. Journal of the American Medical Association, 283(18), 2436-2437.

Gallen, J. & Smits, H. (1997). Medical Loss Ratios: Managing the Interface Between Medical Schools, Hospitals, and Clinical Research. Journal of the American Medical Association, 277, 651-654.



- Guo, K. L. (2003). Market Focused Management: A Model for US Academic Health Centers. Journal of Health Organization and Management, 17, (2), 88-102.
- Harrison, J. P. & McDowell, G. M. (2005). A Profile of US Hospital Mergers. Journal of Health Care Finance, 31 (3), 15-25.
- Hill, L. D. (2005). Role of the Urban Academic Medical Center in US Health Care. Journal of the American Medical Association, 294, (17), 2219-2220.
- Kuttner, R. (1999). Managed Care and Medical Education. The New England Journal of Medicine, 341, (14),1092-1097.
- Moses, H., Their, S.O. , & Matheson, D. H. (2005). Why Have Academic Medical Centers Survived? Journal of the American Medical Association, 293, (12), 1495-1500.
- Oliver, C. (1990). Determinants of Interorganizational Relationships and Future Directions. Academy of Management Review, 15, 241-65.
- Pardes, H.(2000). The Perilous State of Academic Medicine. Journal of the American Medical Association, 283, (18), 2427-2429.
- Peters, J. (2006). Attracting and Retaining Physicians in Academic Medical Groups Requires New Sources of Revenue. Physician Executive, Jan/Feb 2006, 32 (1), 28-33.
- Ring, P. S. & Van De Ven, A. H. (1994). Developmental Processes of Cooperative Interorganizational Relationships. Academy of Management Review, 19,190-118.
- Steinhauer, J. (2001). Stumbling as Marriages of Convenience. New York Times, 1.
- Topping, S., Hyde, J., &Woodell, F. (1999). Academic Health Centers in Turbulent Times: Strategies for Survival. Health Care Management Review, 24, (2), 7-19.
- Walsh, A. & Szabat, K. (2002). Sustaining the Edge: Factors Influencing Strategy Selection in Academic Health Centers. Journal of Healthcare Management, 47, (6), 360-375.
- Zerhouni, E. (2006). NIH in the Post-Doubling Era: Realities and Strategies. Science, 314, 1088-1090.
- Zukerman, H. S. , Kaluzny, A. D., & Ricketts, T. C. (1995). Alliances in Health Care: What We Know, What We Think We Know. Health Care Management Review, 20, (1), 54-65.