

Market-focused management: a model for US academic health centers

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Keywords *Health care, Schools, Marketing, Management, Roles, USA*

Abstract *This paper describes managed care, competition and high health care costs and reductions in funding as the major market forces that affect US academic health centers. As academic health centers continue to preserve their missions of providing patient care, educating and training health professionals and conducting research, they are negatively impacted by these market changes, thus, resulting in increased expenses and lowered revenue. A key component to surviving in difficult times is market-focused management. This paper develops a model to show the path of senior level management teams in their decision making. Through the performance of essential managerial roles, senior level managers are responsible for strategies that result in the long-term viability and growth of academic health centers.*

Introduction

As the current US health care market continues to encounter complex and rapid changes to reduce health care costs, organizations are forced to anticipate and focus their response to the needs of the market. A key component to being market-focused is the development of solid management structure that is capable of timely and precise decision making. In the case of academic health centers (AHCs), challenges in the market, such as competition, reductions in government funding, and the growth of managed care, pose considerable threats. The Association of Academic Health Centers defines an academic health center as an allopathic or osteopathic medical school with at least one or more other health professional schools and an associated teaching clinical enterprise. In other words, an AHC refers to a medical teaching institution affiliated with a primary hospital. AHCs are considered the core of the USA's health care, health professionals' education and research enterprise (Association of Academic Health Centers, 1997). The goals of these institutions are threefold: to provide medical and health education and training; to conduct research and technological innovations; and to provide patient care, especially to populations who are unable to pay. While AHCs are recognized as the epitome of US medicine, their missions are threatened by forces in the market as a major paradigm shift changes the traditional fee-for-service form of health care delivery system to managed care (Goldman, 1995; Gottlieb, 1997; Rabkin, 1998).

Although changes in the market affect all health care organizations, they especially undermine AHCs' missions. In particular, their missions of educating

health care professionals and caring for special populations are very costly. Thus, they are more sensitive to reductions in federal and state funding. For example, reductions in Medicare and Medicaid funding decreased AHCs' revenue and increased uncompensated care (Guo, 2002).

Furthermore, the growth of managed care has affected AHCs in several ways. First, managed care has initiated cost containment strategies by seeking to contract with health care organizations that offer lower fees. Thus, they are more likely to contract with non-teaching hospitals that charge less for patient care than AHCs. In addition, more for-profit health care organizations are entering the market and integrating to drive out competitors, these trends paint a dismal picture for AHCs as they scramble for solutions to survive. As a result, AHCs are looking to their senior level managers to derive innovative solutions to stay ahead of the competition. Managers are being held accountable for their increased roles and responsibilities. Unlike other organizations, AHCs exhibit much more complex, multifaceted management patterns, since their organizational arrangement is made up of complicated relationships between the hospital and medical university, thus, decision making in these settings is often difficult and requires managerial finesse. Senior level managers must change their behaviors to enable organizational survival and growth.

The goal of this paper is to investigate changes in the market affecting academic health centers, which result in additional roles and activities of senior level managers. The roles of these managers are particularly important, since their perceptions of changes in the market influence overall organizational performance. If senior level managers do not alter their roles according to the needs of the market, then they lack information to make strategic decisions (Shortell *et al.*, 1990). Thus, an examination of the crucial roles of managers not only benefits the managers themselves, but also the entire organization. As roles become more defined, this leads to less role ambiguity and translates to better performance (Burke, 1989). Specifically, the paper will examine the effects of market forces on AHCs and senior level managers. Next, the paper will develop a model that can be used to predict appropriate senior level managerial behavior, which is vital to the success of AHCs.

AHCs and market changes

The major force in the health care market is the growth of managed care. Managed care is the integration of financing with the delivery of health care services. Managed care is no longer considered an alternative delivery system. It dominates the health care system. About 30 percent of the population is enrolled in HMOs and 34 percent in PPOs, with only 14 percent remaining in traditional fee-for-service plans (Fox, 2001). Managed care aims at reducing health care spending and managing care. So far, it has been responsible for slowing down the rate of growth. In 1999, health care spending was 13.1 percent and only increased to 13.2 percent in 2000 (Pauly *et al.*, 2002). In order

for managed care to curb escalating costs, two other mechanisms have been in effect. First, government legislations have been responsible for curtailing Medicare and Medicaid growth. These resulted in dire situations for all health care organizations as they seek alternatives to increase revenue sources. Second and not surprisingly, market competition has intensified as these organizations sought to drive out slow, high-priced and non-competitive organizations.

Unfortunately, AHCs are considered as those non-competitive and high-priced organizations unable to compete and operate efficiently in the managed care market. Specifically, managed care has severely negatively impacted AHCs. AHCs have always charged 30-40 percent more than non-teaching hospitals to offset their mission of caring for the poor and uninsured (Gottlieb, 1997); however, they cannot afford to do so under managed care. Reuter (1997) points out that "HMOs and other managed care organizations try to control their costs ... by purchasing services for their members at the best possible price. Thus, [they] tend to contract with the lower-cost hospitals that offer the same or similar services to AHCs". In fact, managed care plans only account for 14.2 percent of AHC patient revenues (Reuter, 1997). As a result, AHCs are faced with declines in revenue in high managed care markets (Lofland and Nash, 2001).

As with managed care, competition has also been unfavorable to AHCs. AHCs can no longer maintain their unique positions of providing specialty services. In the competitive market, they cannot rely on their reputations to sustain their viability. Instead, they must compete with non-teaching hospitals for market share. However, Reuter (1997) found that non-teaching hospitals are more readily attracting large shares of the HMO market. Competition has resulted in higher AHC costs and lowered revenues. Higher expenses are due to the fact that AHCs must serve patients with sicker and more complex needs, which non-teaching hospitals are not equipped to accept. Lowered revenues are due to AHCs' inability to compete with non-teaching hospitals to secure managed care contracts.

Further reductions in revenue and revenue sources are also associated with the growth of managed care. First, government legislations have called for reductions in funding to hospitals as a method for lowering health care costs. This is extremely detrimental to AHCs, since they rely heavily on government funding to support their missions. A large source funding for patient care comes from federal, state and local government. Thus, reductions in these sources adversely affect AHCs' mission of providing care to the poor and uninsured people (Alexander *et al.*, 1997). Caring for these patients is costly and contributes to the rising uncompensated care of AHCS. AHCs have the highest levels of uncompensated care, providing 37 percent of the uncompensated care in 1994 (Reuter, 1997), and this proportion is high since 44 percent of all AHCs are public institutions. Therefore, government funding for this mission helps to

reduce AHC expenses. Medicare and Medicaid represent 50 percent of all AHC revenue. A total of 31.2 percent of total Medicaid payments made to hospitals is given to AHCs, with 34 percent to public AHCs and 13.7 percent to private. Medicare makes adjustments to treat a disproportionate share of low-income patients. Of the \$3.8 billion in Medicare's disproportionate share payments in 1994, 19.3 percent was given to AHCs (Reuter, 1997).

Reductions also affect AHCs' training and education mission. Of the 125 AHCs, they hold 67,000 undergraduate medical students, train about 30 percent of all residents and employ more than 70,000 physicians (Reuter, 1997). Programs in graduate medical education (GME) have more than doubled from 1970 to 1994. The largest payer of GME is Medicare. In 1994, of the \$1.8 billion in Medicare payments for the direct costs of GME, 39 percent were given to AHCs, and of the \$3.9 billion in Medicare's total indirect medical education payments, 42 percent went to AHCs (Reuter, 1997). The Balanced Budget Act of 1997, intended to prolong Medicare's solvency by reducing its spending growth to 1.5 percent in 1999 (Levit *et al.*, 2002), drastically reduced subsidies to AHCs and left them in an even more precarious situation. Since education and training is costly, AHCs are especially vulnerable to government legislations that call for reductions in funding to Medicare and Medicaid.

Funding AHC missions have resulted in high expenses. Their expenses are higher than non-teaching hospitals due to the necessity of treating complex cases, the inefficiencies of medical students and residents and the concentration of AHCs in high cost urban areas. Total expenses in AHCs have grown at an average annual rate of 8.1 percent, while inpatient admissions have decreased by an average annual rate of 0.5 percent (Reuter, 1997). The majority of expenses come from teaching (26 percent), clinical services (24 percent) and research (22 percent) activities (Reuter, 1997).

In attempts to compete with HMOs and better their financial situation, AHCs have engaged in cost-shifting their expenses and revenues from one area to another. AHCs have always depended on conducting their missions as sources of funding. Patient services account for the majority of AHC revenues, derived from Medicare, Medicaid, private insurance and self-pay patients. As indicated above, these funding sources are decreasing in the managed care market. Previously, conducting research has been an additional source of support for AHCs from both government and industries. Prior to 1980, most industry-sponsored research was conducted in AHCs. However, the use of AHCs for research fell from 82 percent in 1982 to 68 percent in 1993 (Lofland and Nash, 2001). Industries are conducting more research and development. In 1988, the pharmaceutical industry spent 40 percent more in expenditures for research than the National Institutes of Health. Unfortunately for AHCs, the majority of these research studies were conducted outside of AHCs. The primary reason for this shift occurred with the emergence of for-profit contract research organizations (Lofland and Nash, 2001).

These changes in the market have led to increased expenses and declines in funding and revenue. AHCs are seeking new ways to preserve and enhance their missions. Rather than becoming victims in the market of rapid changes, academic leaders must focus on understanding market mechanisms and strategic positioning of their AHCs (Guo, 2002; Lofland and Nash, 2001; Reinhardt, 2000).

Roles of managers in AHCs

Given that the market is depicted by competition, funding cuts and managed care, senior level managers in AHCS must exercise decision-making power to overcome these challenges. Studies have shown that managers are responding to the market of AHCs by forming market-oriented strategies (Blumenthal and Meyer, 1995). The purpose of these strategies is to understand market and government changes that affect AHCs so that managers are able to respond appropriately. The roles of managers most often occur in two forms. First, in response to the market competition and managed care, managerial strategies include building networks and contacts. Evidence shows that managerial work is changing to include strategic and collaborative roles (Kanter, 1989) as AHCs react to forces in the market. These roles are created based on the formation of integrated systems to combine resources to gain more market share and lessen competition. Zuckerman *et al.* (1995) suggest that health care alliances are formed to build cooperation among organizations, which enable them to be more flexible and responsive to the new market. Moreover, these alliances allow managers to collaborate while they make vital decisions in times of uncertainty.

Second, in response to government regulations that have lead to decreased funding, managerial strategies include taking risks to enhance resources. Managers must possess the ability, knowledge and information in their role performance while making decisions to anticipate organizational needs and market changes.

These market-focused strategies of managers can be analyzed using Mintzberg's (1973) classification of the ten work roles of the manager. Mintzberg developed a comprehensive framework of behavioral roles: the figurehead, leader, liaison, monitor, disseminator, spokesman, entrepreneur, disturbance handler, resource allocator and negotiator. In the figurehead role, the manager is responsible for a variety of social and ceremonial activities. As a leader, a manager gives the organization direction and purpose. In the liaison role, the manager builds networks of contacts with individuals and groups who are in positions to provide information to enhance the nature of the organization. In the monitor role, the manager gathers information and seeks to identify problem areas, makes sure that operations run smoothly and develops plans to improve the organization. This role is important since it allows the manager to understand what takes place in the organization in

relation to his or her environment. As the disseminator, the manager brings external information into the organization and passes information on to his or her subordinates. Contrary to the disseminator role, the spokesman role passes information out to the organization's environment. As an entrepreneur, the manager acts as an initiator and designer of change in the organization; in other words, the manager is the agent of change. As the disturbance handler, the manager resolves disturbances and restores stability to the organization. As the resource allocator, the manager establishes and maintains priorities in the organization by allocating time, money, material, equipment, manpower and reputation to certain functions. At the same time, the manager is responsible for authorizing all major decisions. The final role is that of a negotiator where the manager participates in various negotiation activities.

Other researchers have supported Mintzberg's typology and conclude that these ten roles indeed describe the activities of managers (Allan, 1981; Carroll and Gillen, 1987; Kurke and Aldrich, 1983; Shapira and Dunbar, 1980; Snyder and Wheelen, 1981).

Researchers also note that some of Mintzberg's roles are more emphasized than other, depending on one's position in the organization (Shapira and Dunbar, 1980; Guo, 2002). For instance, the most commonly identified roles of senior level hospital executives include the figurehead, leader, entrepreneur, monitor and liaison (Snyder and Wheelen, 1981). Furthermore, in markets of scarce resources (Lau *et al.*, 1980) and financial pressures (Allan, 1981), managers are more likely to perform the resource allocator role to seek additional resources.

Similarly for AHCs, current market conditions signal the emphasis of several Mintzberg's roles of managers. Zuckerman and Dowling (1997) point out that managers are taking on new roles due to market forces. Health care managers must focus their attention on external forces and their relation to the organization. To do so, managers must play the leader role to transform the organization by "ensuring that members of the organization know, understand and accept the core values of the organization" (Zuckerman and Dowling, 1997). Locander *et al.* (2002) created a model of leaders for market-focused organizations and shows that internal individual skills must first be developed and followed by building the external market-focused culture.

Specifically in AHCs, leaders must value people and be willing to communicate that value throughout the organization. Leaders need to be able to organize, motivate and inspire, especially when the market is in such upheaval. They need to see "the big picture and not flinch from change". They must "guide people through the transition that accompanies change" (Kohler *et al.*, 1994). Another critical characteristic of a manager in the role of leader is "risk taking" (Kohler *et al.*, 1994). It is very important for the leader to have a

high tolerance for uncertainty and be able to make decisions without having all the information. Being able to take risks is a strategy for AHC survival.

Other researchers suggest that senior level managers in AHCs need to act as innovators, agents of change and designers of change in decision-making roles (Iglehart, 1998; Zuckerman and Dowling, 1997). These are characteristics of the Mintzberg's entrepreneur role. That is, in the entrepreneur role, managers exhibit "risk-oriented behavior", in which managers are willing to take risks to preserve AMC missions and initiate new strategies (Everts, 1995). With the advent of managed care, managers in organizations are recognizing that they must share risk and develop mechanisms to adapt to market forces (Zuckerman and Dowling, 1997).

Another role that managers perform is that of the Mintzberg's resource allocator role. Resource allocator managers must decide what, when and how much to allocate for each project. They must seek innovative ways to disseminate their limited amount of resources. The role of the manager as a resource allocator includes directing strategic, financial and clinical planning, developing and managing a financial reporting system and information system and participating in the budgetary and strategic planning of operating units (Ross, 1995). Gee (1995) describes the realities of AHCs as extreme financial constraints. Even with very limited resources, competition for federal and state funds is fierce. Consequently, managers must perform the role of resource allocator in order to maintain these resources by analyzing their budgets to reduce expenses and seek ways to increase revenue.

In addition, AHCs have built networks through partnerships, mergers and joint ventures, allowing their managers to increase their contacts in and outside of the AHC. In doing so, managers perform the roles of monitor and liaison (Forrester *et al.*, 1977). According to Everts (1995), managers must have "the ability to understand and follow the market/environment". Zuckerman and Dowling (1997) suggest that "managers will expand their field of vision to put health care in a larger context", they must "observe and assess" their market and "maintain a continuing outward look to identify and evaluate developments that affect the organization" (Zuckerman and Dowling, 1997). "Signals from the environment must be monitored and analyzed, giving careful attention to the potential implications to the organization and its stakeholders" (Zuckerman and Dowling, 1997). These activities of the manager involve the performance of Mintzberg's monitor for assessing market forces and liaison role for networking to identify new opportunities.

Of the ten Mintzberg roles of the manager, Guo (2002) found four to be especially relevant to AHCs under current market conditions. Using six case studies of AHCs to study the importance of administrative decision making, Guo's study identified four crucial roles of senior level managers in AHCs as:

- (1) liaison role to build networks of contacts to enhance the organization;
- (2) the monitor role to identify problems in the market;

- (3) the entrepreneur role to initiate changes and innovate new strategies; and
- (4) the resource allocator role to manage and allocate priorities in the organization.

Guo (2002) concluded that management education and training must be emphasized to support decision making and foster organizational growth.

In summary, AHCs are faced with market conditions depicted by managed care, competition and decreased resources. To manage under these circumstances, senior level managers in AHCs are developing strategies to increase their role performance. In particular, five of the ten Mintzberg work roles are suggested as more frequently conducted than others due to current market conditions. The most commonly identified roles in the literature and described above, include the roles of leader, entrepreneur, liaison, monitor and resource allocator. These five work roles serve as the focal point of the study and will be used to develop a model of senior level behavior in response to market forces.

A model of market-focused managerial roles in AHCs

Based on the literature described above, a model of managerial roles in AHCs has been developed and discussed as follows. On the far left side of the model, market conditions that affect AHCs are shown (see Figure 1). These changes in the market have threatened the ability of AHCs to continue to finance their missions using traditional methods of cross subsidies (Reuter, 1997). Changes in the market include the growth of managed care, which has increased competition and reduced government funding. These changes cause declines in revenue and revenue sources. Revenue generated from patient care, teaching and research activities decreased, while revenue sources declined from

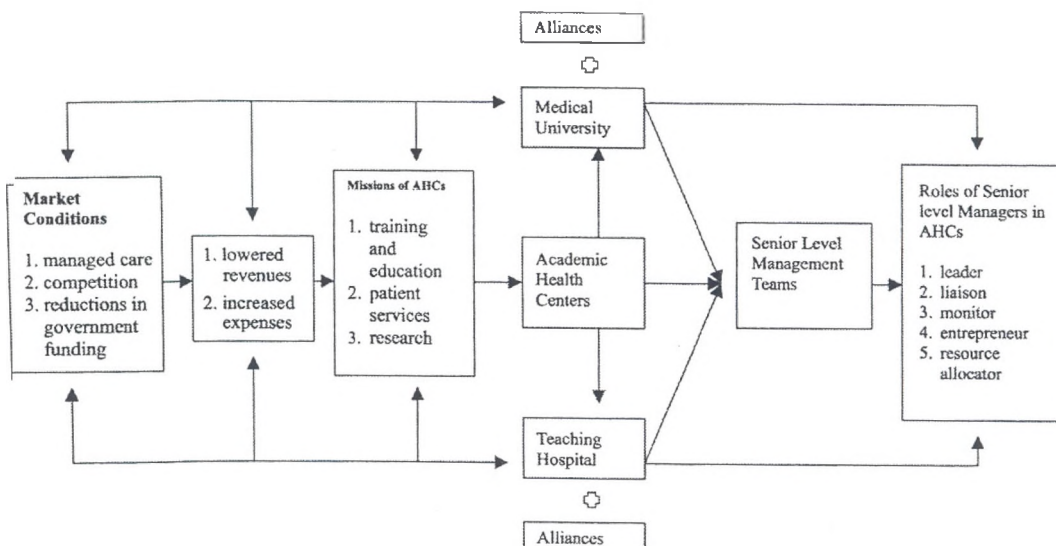


Figure 1.
A model of market-focused managerial roles in AHCs

Medicare and Medicaid funding and lowered third-party reimbursements, especially in capitated contracts and self-payments. Further reductions in revenue are shown by the loss of patients and revenue to lower cost competitors. The model shows the path of current market forces as negatively impacting revenue. The path also depicts increases in expenses while AHCs continue their missions of education and training, patient care and research. For example, operating expenses have been steadily increasing while inpatient admissions have declined. At the same time, care for the poor and uninsured have escalated, causing uncompensated care to rise dramatically. As a result, AHCs costs are higher than other providers. While AHCs cannot cut back their mission-related activities, they must focus on new methods to increase their revenue and decrease expenses.

Next, the model in Figure 1 shows that AHCs are made up of separate medical universities and teaching hospitals. The medical university and teaching hospital, on its own, faces the market conditions that cause lowered revenues and increased expenses. Together, they also face the same market constraints. As a result, they must combine their efforts to preserve their missions. By joining together to derive strategies for survival, senior level managers of universities and hospitals must communicate and coordinate their activities. The next box shows the linkage of the two to form management teams that are capable of new roles and innovative ideas. Management teams are formal groups consisting of senior managers that complete managerial work activities on a daily basis. In AHCs, multidivisional management teams must be formed to achieve long-term organizational goals, provide motivational values and coordinate and facilitate projects. The success of management teams comes from their ability to contribute to organizational performance and effectiveness (Fried and Rundall, 1997). Specifically, they must use communication skills to influence the external market and internal organization. Guo (2002) studied senior level management team in AHCs and found them responsible for all decision making. For instance, to reduce the cumbersome and multiple layers of decision making, AHCs have been known to merge various administrative positions in the medical university with the teaching hospital to “allow for ease of operations and signifies the AHC’s response to the market with rapid decisions” (Guo, 2002). Furthermore, Guo (2002) explains that “direct communication and collaboration among various administrative personnel both in and between the hospital and university... allows administration to receive and request information that will enable them to understand market changes”. In senior level management teams, each team member is responsible for specific decision-making responsibilities. Some are responsible for clinical activities, others are responsible for budgeting and still others for educational and research programs.

The model shows that although senior level management teams work together to maintain AHC missions, each senior level manager plays distinctive

roles. For example, each manager continues to perform the various roles of leader, liaison, monitor, entrepreneur and resource allocator. As leaders, senior level managers must motivate, inspire, guide and support their subordinates while shaping value in their institutions. Leader characteristics include honesty, forward thinking (ability to take risks), competency and inspiration (Kohler *et al.*, 1994). In AHCs, leaders are responsible for influencing organizational strategies and goal attainment. "Interdependence, community pooling of information, and sharing of responsibility" are important aspects of the leader (Kohler *et al.*, 1994).

The liaison and monitor roles are very crucial roles that are often performed together. In the monitor role, managers identify problem areas and opportunities in the organization and out in the market. To stay informed of internal and external activities, managers must perform the liaison role to form contacts that benefit their organizations. These roles increase their chances of forming alliances. Consolidation, integration and alliance formation has been occurring due to the needs for organizations to survive and grow. Shortell *et al.* (1996) expressed the advantages of integrated alliances as access to capital, more efficiency and quality. Thus, forming integrated alliances is recommended as one strategy to deal with the market forces (Shortell *et al.*, 1990; Bailit, 1995; Satinsky, 1998; Zuckerman *et al.*, 1995). This allows AHCs to understand market changes, form partnerships, which in turn increase their access to capital and market share and decrease competition. After all, developing partnerships and linkages lead to significant economic and professional advantages for all parties involved. Thus, managers would be expected to perform the monitor role to seek information from the market and the liaison role to capitalize on these opportunities (Zuckerman and Dowling, 1997).

Literature shows that AHCs have difficulty with acquiring funding sources (Blumenthal and Meyer, 1995; The Commonwealth Fund Task Force on Academic Health Centers, 1997; Shortell *et al.*, 1984). For instance, Blumenthal and Meyer (1995) note that threats facing AHCs primarily exist in the form of decreased financial support. These have led to tremendous economic constraints (Gee, 1995) while AHCs continue to care for vulnerable populations. Moreover, several AHCs lost clinical revenue and face huge capital expenditures (Blumenthal and Meyer, 1996). Therefore, not only do these AHCs face financial difficulties due to competition, but they also face the pressures of managed care and government cut-backs (Korn, 1996).

Recognizing that AHCs are faced with financial crises, managers must seek other ways to increase their funding. While cost shifting is no longer an option, managers are increasing their roles to manage their limited resources through the resource allocator role and using their entrepreneurial efforts to secure additional sources of funding.

First, resource allocation is an obvious managerial role that is increased since managers are facing financial pressures (Allan, 1981). Although

government subsidies and non-government sources of revenue are low, managers must increase their financial health by adjusting to the changing market and making tradeoffs. Since they cannot change government legislation, managers must work on increasing non-government sources of revenue. For instance, Hadley and Gaskin (1995) recommend for AHCs to take measures to preserve their financial viability by enrolling in HMOs and other insurance plans. They believe that HMOs will still contract with AHCs since they value the higher quality offered by AHCs for complex cases. Consequently, managers will spend more time as resource allocators to negotiate higher prices for providing tertiary and quaternary care to managed care organizations.

Next, managers must perform the entrepreneur role to strategize and increase opportunities for their organizations. Entrepreneurial managers are those that practice risk-taking behavior (Gee, 1995; Ross, 1995). Ross (1995) explains that managers in the University of Florida are pursuing strategies to increase market share. One strategy is entrepreneurial by preparing "to accept as much 'risk' as possible" (Ross, 1995). In fact, Evarts (1995) proposes that the culture of AHCs is known as a "risk taking culture" with managers as the critical variable for undertaking substantial risk. Furthermore, risk related activities include investing more capital to develop their primary care services and creating marketing campaigns with expectations of increasing the volume of clinical services (Guo, 2002).

The model depicts the vital roles of each senior level manager in AHCs. Although each manager performs each of the five essential roles, some roles may be more emphasized than other, depending on the expertise of the particular manager. For example, a manager with expertise in financial and clinical management would then be assigned the roles of resource allocator to manage scarce resources. On the other hand, managers with high interpersonal skills would perform the roles of leader and liaison. Furthermore, those managers capable of high risk taking tolerance and abilities would conduct the roles of monitor to analyze situations and then the entrepreneur role to take risks in the development of innovative solutions.

Since each manager performs specific roles, together they form management teams responsible for short and long-term decision making in AHCs. The decisions they make are based on full understanding of the turbulent market forces that have threatened AHC missions and ultimate viability. AHCs, pressured by the growth of managed care, competition and reduced funding, need to rely on their management teams and the roles of their managers to maintain their missions. Without the formation of teams and assigned roles of managers for particular responsibilities, then communication would not be coordinated between the university and hospital. Thus, decision making would be haphazard, leading to individualized organizational struggles. When decision making is linked between the university and hospital, a solid

foundation is created for the AHC to produce synchronized strategies benefiting the entire institution. Ultimately, the key lies at the far end of the model, with the use of senior management teams and roles of managers as the structure that must be maintained for AHC growth.

Conclusions

The paper has created a model showing the importance of senior level managers as they conduct roles and form teams that are essential to the establishment, maintenance and growth of AHCs. Unlike previous studies that have only described current market changes or discussed managerial roles, this particular study makes the linkage between the two through the development of a causal model. In particular, this model shows the structure of market-focused management is vital to the survival and ultimate success of AHCs.

References

- Allan, P. (1981), "Managers at work: a large-scale study of the managerial job in New York City government", *Academy of Management Journal*, Vol. 24 No. 3, pp. 613-9.
- Alexander, B., Davis, L. and Kohler, P.O. (1997), "Changing structure to improve function: one academic health center's experience", *Academic Medicine*, Vol. 72 No. 4, pp. 259-68.
- Association of Academic Health Centers (1997), *A Year to Build on, 1997 Annual Report of the Association of Academic Health Centers*, Association of Academic Health Centers, Washington, DC.
- Bailit, H.L. (1995), "Market strategies and the growth of managed care", in Korn, D., McLaughlin, C.J. and Osterweis, M. (Eds), *Academic Health Centers in the Managed Care Environment*, Association of Academic Health Centers, Washington, DC, pp. 3-13.
- Blumenthal, D. and Meyer, G. (1995), "The response of academic health centers to health care reform", in Korn, D., McLaughlin, C.J. and Osterweis, M. (Eds), *Academic Health Centers in the Managed Care Environment*, Association of Academic Health Centers, Washington, DC, pp. 173-95.
- Blumenthal, D. and Meyer, G.S. (1996), "Academic health centers in a changing environment", *Health Affairs*, Vol. 15 No. 2, pp. 200-15.
- Burke, G.C. III (1989), "Understanding the dynamic role of the hospital executive: the view is better from the top", *Hospital and Health Services Administration*, Vol. 34 No. 1, pp. 99-112.
- Carroll, S.J. and Gillen, D.J. (1987), "Are the classical management functions useful in describing managerial work?", *Academy of Management Review*, Vol. 12 No. 1, pp. 38-51.
- (The) Commonwealth Fund Task Force on Academic Health Centers (1997), *Leveling the Playing Field: Financing the Missions of Academic Health Centers*, The Commonwealth Fund, New York, NY.
- Evarts, C.M. (1995), "Ownership, governance, organization and leadership of the academic health center", in Rubin, E., Larson, T. and Griffith, J. (Eds), *Academic Health Centers and Universities: Shaping a Common Agenda*, Association of Academic Health Centers, Washington, DC, pp. 64-9.
- Forrester, C.R., Johnson, A.C. and Mosher, J. (1977), "A profile of the health organization chief executive officer", *Academy of Management Proceedings*, pp. 396-400.
- Fox, P.D. (2001), "An overview of managed care", in Kongstvedt, P.R. (Ed.), *The Managed Health Care Handbook*, 4th ed., Aspen, Georgia, MD, pp. 3-16.

- Fried, B.J. and Rundall, T.G. (1997), "Managing groups and teams", in Shortell, S.M. and Kaluzny, A.D. (Eds), *Essentials of Health Care Management*, Delmar, Albany, NY, pp. 163-97.
- Gee, E.G. (1995), "Universities and academic health centers: reconciling traditional values with new priorities", in Rubin, E., Larson, T. and Griffith, J. (Eds), *Academic Health Centers and Universities: Shaping a Common Agenda*, Association of Academic Health Centers, Washington, DC, pp. 3-10.
- Goldman, L. (1995), "The academic health care system: preserving the missions as the paradigm shifts", *JAMA*, Vol. 273 No. 19, pp. 1549-52.
- Gottlieb, S. (1997), "Academic medical centers: lean times ahead", *USA Today*, Vol. 125 No. 2624, pp. 64-6.
- Guo, K. (2002), "Roles of managers in academic health centers: strategies for the managed care environment", *Health Care Manager*, Vol. 20 No. 3, pp. 43-58.
- Hadley, J. and Gaskin, D.J. (1995), "HMO market penetration and the missions of academic health center hospitals", in Korn, D., McLaughlin, C.J. and Osterweis, M. (Eds), *Academic Health Centers in the Managed Care Environment*, Association of Academic Health Centers, Washington, DC, pp. 151-71.
- Iglehart, J. (1998), "Forum on the future of academic medicine: session III – getting from here to there", *Academic Medicine*, Vol. 73 No. 2, pp. 146-51.
- Kanter, R.M. (1989), "The new managerial work", *Harvard Business Review*, Vol. 67, pp. 85-92.
- Kohler, P.O., Aschenbrenner, C.A., Barbato, A.L. and Paroo, I.F. (1994), "Missions and leadership in the academic arena", in Howe, J.P. III, Osterweis, M. and Rubin, E.R. (Eds), *Academic Health Centers: Missions, Markets, and Paradigms for the Next Century*, Association of Academic Health Centers, Washington, DC, pp. 24-37.
- Korn, D. (1996), "Reengineering academic medical centers: reengineering academic values?", *Academic Medicine*, Vol. 71 No. 10, pp. 1033-43.
- Kurke, L.B. and Aldrich, H.E. (1983), "Mintzberg was right! A replication and extension of *The Nature of Managerial Work*", *Management Science*, Vol. 29 No. 8, pp. 975-84.
- Lau, A.W., Newman, A.R. and Broedling, L.A. (1980), "The nature of managerial work in the public sector", *Public Management Forum*, Vol. 19, pp. 513-21.
- Levit, K., Smith, C., Cowan, C., Lazenby, H. and Martin, A. (2002), "Inflation spurs health spending in 2000: drug costs once again constitute the fastest growing component of health spending. although hospital spending, although hospital spending accounts for the largest share", *Health Affairs*, pp. 172-81.
- Locander, W.B., Hamilton, F., Ladik, D. and Stuart, J. (2002), "Developing a leadership-rich culture: the missing link to creating a market-focused organization", *Journal of Market-focused Management*, Vol. 5, pp. 149-63.
- Lofland, J.H. and Nash, D.B. (2001), "Academic health centers and managed care", in Kongstvedt, P.R. (Ed.), *The Managed Health Care Handbook*, 4th ed., Aspen, Frederick, MD, pp. 206-27.
- Mintzberg, H. (1973), *The Nature of Managerial Work*, Harper Row, New York, NY.
- Pauly, M.V., Hillman, A.L., Kim, M.S. and Brown, D.R. (2002), "Competitive behavior in the HMO marketplace: HMO do not appear to extract more profits from consumers in markets dominated by for-profit firms than in markets where their share is smaller", *Health Affairs*, Vol. 21 No. 1, pp. 194-202.
- Rabkin, M.T. (1998), "A paradigm shift in academic medicine?", *Academic Medicine*, Vol. 73 No. 2, pp. 127-31.
- Reinhardt, U.E. (2000), "Academic medicine's financial accountability and responsibility", *JAMA*, Vol. 284, p. 1136.

- Reuter, J.A. (1997), *The Financing of Academic Health Centers: A Chart Book*, Institute for Health Care Research and Policy, Georgetown University, Washington DC.
- Ross, W.E. (1995), "Health care reform and organizational change in academic health centers", in Korn, D., McLaughlin, C.J. and Osterweis, M. (Eds), *Academic Health Centers in the Managed Care Environment*, Association of Academic Health Centers, Washington, DC, pp. 15-30.
- Satinsky, M.A. (1998), *The Foundations of Integrated Care: Facing the Challenges of Change*, American Hospital Publishing Company, Chicago, IL.
- Shapira, Z. and Dunbar, R.L.M. (1980), "Testing Mintzberg's managerial roles: classification using an in-basket simulation", *Journal of Applied Psychology*, Vol. 65 No. 1, pp. 87-95.
- Shortell, S.M., Morrison, E.M. and Friedman, B. (1990), *Strategic Choices for America's Hospitals: Managing Change in Turbulent Times*, Jossey-Bass, San Francisco, CA.
- Shortell, S.M., Wickizer, T.M. and Wheeler, J.R.C. (1984), *Hospital-Physician Joint Ventures*, Health Administration Press, Ann Arbor, MI.
- Shortell, S.M., Gillies, R.R., Anderson, D.A., Erickson, K.M. and Mitchell, J.B. (1996), *Remaking Health Care in America: Building Organized Delivery Systems*, Jossey-Bass, San Francisco, CA.
- Snyder, H.H. and Wheelen, T.L. (1981), "Managerial roles: Mintzberg and the management process theorists", *Proceedings: Academy of Management*, pp. 249-253.
- Zuckerman, H.S. and Dowling, W.L. (1997), "The managerial role", in Shortell, S.M. and Kaluzny, A.D. (Eds), *Essentials of Health Care Management*, Delmar Publishers, New York, NY, pp. 34-62.
- Zuckerman, H.S., Kaluzny, A.D. and Ricketts, T.C. III (1995), "Alliances in health care: what we know, what we think we know, and what we should know", *Health Care Management Review*, Vol. 20 No. 1, pp. 54-64.

Further reading

- Burnett, D.A. (1996), "Evolving market will change clinical research", *Health Affairs*, Vol. 15, pp. 90-92.
- Pardes, H. (1997), "The future of medical schools and teaching hospitals in the era of managed care", *Academic Medicine*, Vol. 72 No. 2, pp. 97-102.