Academic Medical Centers and Community Hospitals Integration: Trends and Strategies

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Abstract

Academic medical centers are widely recognized as vital components of the American health care system, generally differentiated from their community hospital peers by their tripartite mission of clinical care, education, and research. Community hospitals fill a critical and complementary role, serving as the primary sites for health care in most communities. Health care reform initiatives and economic pressures have created incentives for hospitals and health systems to integrate, resulting in a nationwide trend toward consolidation with academic medical centers leveraging their substantial assets to merge, acquire, or establish partnerships with their community peers. As these alliances accelerate, they have and will continue to affect the radiology groups providing services at these institutions. A deeper understanding of these new marketplace dynamics, changing relationships and potential strategies will help both academic and private practice radiologists adapt to this ongoing change.

Key Words: Academic medical centers, community hospitals, consolidation, mergers

J Am Coll Radiol 2017;14:45-51. Copyright © 2016 Published by Elsevier Inc. on behalf of American College of Radiology

INTRODUCTION

Historically, academic medical centers (AMCs) have served critical roles in the US health care system. Along with providing clinical care, they encourage innovation, research, and product development; identify and validate emerging care pathways; and provide education and training for the next generation of providers. They also serve as safety net hospitals for at-risk populations. Community hospitals fill a critical and complementary role, accounting for approximately 80% of all hospital admissions each year and serving as the primary sites for health care in most communities [1].

Recent health care reform initiatives are incentivizing higher levels of care coordination and system integration. As hospitals and health systems embark down these new care pathways, mergers, acquisitions, and new partnerships are being aggressively pursued. Many new models focus on better alignment of general community and subspecialty academic facilities. Radiology practices already have and will continue to be disrupted by these changes.

DELIVERY SYSTEM CONSOLIDATION

In response to recent legislative, economic, and regulatory pressures, nearly all sectors of the health care industry are rapidly consolidating. Between 2009 and 2013, hospital merger and acquisition volume increased by 14% annually [2]. More than $143.3 billion in health care mergers and acquisitions took place in 2012. The percentage of system-affiliated community hospitals grew from 53.6% in 2003 to 63.2% in 2013 [1,2]. Approximately 36% of AMC hospital CEOs responding to a recent survey

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The authors have no conflicts of interest related to the material discussed in this article.

1546-1440/16/$36.00 ■ http://dx.doi.org/10.1016/j.jacr.2016.07.006

asking what best described their organization's approaches to funding and revenue challenges chose merger and acquisition activity. Only 13% are sustaining strategies to maintain institutional independence [3].

A subset of the health system delivery consolidation trend has been the development of partnerships or mergers between AMCs and community hospitals. As AMCs seek these new relationships, radiology departments become engaged almost by necessity to effectively meet the needs of the new parent enterprise. The expansion of AMC radiology departments into the community was discussed nearly a decade ago [4], but the broader health care delivery landscape has changed dramatically in the interval. Academic practices are rapidly adapting to provide services to the community settings, whereas smaller private groups often do not have the resources required to satisfy the subspecialty referrals. Despite legacy loyalties to established radiology practices, consolidation has forced at least some private groups to affiliate with, assimilate into, or be displaced by larger academic departments.

AMC mergers have not been uniform. The diversity of models is a direct result of regional political, financial, and/or microeconomic factors. Some institutions have chosen not to change their strategy. Others have had massive expansions well beyond their regional territories [5]. And in some cases, AMCs have considered mergers or partnerships with other AMCs [6]. On the flip side, AMCs have infrequently been the target of acquisitions themselves [7].

AMCs: WHAT MAKES THEM UNIQUE

An AMC traditionally includes a hospital, a medical school or substantial faculty and teaching enterprise, and research or laboratory facilities [5]. Although the number of teaching hospitals is much greater, just over 130 institutions across the nation are considered AMCs. As a result, their overall geographic footprints are limited. But because these institutions collectively graduate nearly 17,000 physicians each year and conduct the vast majority of basic, clinical, and health services research, their overall impact on the health care system more broadly is quite substantial [1].

AMCs have traditionally differentiated themselves from most community hospitals in their tripartite mission of clinical care, education, and research. The missions are closely interwoven within most AMC governance, management, and financial structures, resulting in highly complex matrixed organizations. Similarly, because most AMCs have established themselves as centers of education and innovation, many have historically been resolute not to dilute their well-established brands. AMCs also tend to care for higher complexity and riskier patients, serving as referral centers for many community hospitals and providing important safety net services.

AMC MARKETPLACE DRIVERS AND HEALTH CARE REFORM

AMCs have been disproportionately targeted by health care reform initiatives [6]. Recent projections indicate that up to 10% of AMCs' funding may be at risk in the near future, creating substantial challenges for AMCs given that operating margins currently average only 5% [1,5,7].

Clinical Revenue

Clinical care constitutes an average of 85% of available revenue for AMCs [1]. Currently, AMCs have greater percentages of patients in Medicare and Medicaid compared with most community hospitals [8]. Even though many AMCs will benefit from previously uninsured patients being covered by Medicaid as a result of the Patient Protection and Affordable Care Act, this increase in low-margin business will be offset by a relative decrease in high-margin commercially insured patients who have greater access to alternative hospital systems [1]. AMCs in states that have not expanded their Medicaid programs or are experiencing budgetary pressures to reduce health care spending will also experience a negative financial impact.

Costs of Care

AMC costs are 10% to 20% higher on a case-mix-adjusted basis as a result of added staffing costs, faculty compensation plans, and clinical program mix [5]. AMCs also provide a disproportionate share of care for the uninsured: although AMCs account for only 20% of all hospital admissions, they are estimated to provide at least 40% of all uncompensated care [1].

Higher costs for care at AMCs have traditionally been offset by premium pricing for privately insured patients, a practice referred to as price discrimination [8]. Yet recent health care trends (eg, consolidation of private insurers, improving price transparency, and increasing health care cost sharing by patients and employers) are placing substantial pressure on AMCs to become more competitive in their pricing, particularly in markets in

which services are widely available in the community setting [9]. In a 2009 survey, 78% of consumers indicated that they would not pay a higher premium to access an AMC, and of the 22% who indicated that they would pay a higher premium, 67% said that they would be willing to pay only up to 10% more [1]. Employer groups are reducing costs by creating narrow or "tiered" networks, which typically exclude higher cost providers such as AMCs [1,10]. Shared savings programs are incentivizing local independent hospitals or networks not to refer patients to nonaffiliated AMCs with higher costs. One of the drivers of mergers and acquisitions between AMCs and community hospitals is the need to address these pricing and underlying cost issues. These same issues, however, create substantial financial disincentives for profitable community hospitals to align with AMCs.

Value-Based Care

The transition from volume- to value-based health care in the United States will increasingly link reimbursement to quality, outcomes, satisfaction, and the use of alternative payment models. Capitated payment models include both bundled payments for discrete, disease-specific episodes of care and global, population-based payments [11,12]. Through a variety of federal and private insurer programs such as the Merit-Based Incentive Payment System and the Hospital Value-Based Purchasing Program, providers and hospitals will be increasingly subject to financial penalties for not meeting certain thresholds for quality, efficiency, and meaningful use of electronic health records [12,13]. This transition will have a more significant negative impact on AMCs because few are currently among the 405 hospitals ranked as top-quality performers [1]. Moreover, any sustainable bundled payment model will require standardization of prices across hospitals. But prices and payments currently vary as much as 200% among AMC-affiliated hospitals [1]. Radiologists will likely be significantly affected, as capitated payment models may further accelerate shifting radiology departments from profit centers to cost centers, with any shared savings being divided up among all providers and departments [11].

Educational Funding

Medicare provides financial support for training programs and case complexity. Much of this support has gone to AMCs. In 2010, total payments for these programs was $9.6 billion [14]. However, a variety of thought leaders and policy advisers, including the influential Medicare Payment Advisory Commission, have asserted that such funding subsidizes inefficient care. A recent Medicare Payment Advisory Commission analysis indicated that only 40% to 45% of current indirect medical education payments are justified and suggested cuts in payments of up to 60% [15,16]. In addition, these critics have asserted that the current system is inappropriately geared toward training specialists in hospitals rather than primary care physicians in community settings and is thus not aligned with broader societal needs. Thus, ongoing support of AMCs through Medicare is now at risk [17].

Research Support

On average, 12% of AMCs' revenue comes from research funding. The federal government provides the largest source, with industry second, and nonprofit foundations third [18]. On the basis of a 2013 survey of 46 institutions, there is broad variation of medical research funding across AMCs, ranging anywhere from $26 million to $751 million [19]. As competition for federal and foundation grants increases and available funds decrease, many AMCs are aligning with industry (eg, pharmaceutical and device) partners. Major research universities have established technology transfer offices to generate revenue from commercialization of their faculty discoveries [20]. The reliance on subsidies from clinical revenue to support research along with complex industrial and intellectual property issues all create additional challenges for AMCs potentially integrating with nonresearch institutions.

IMPACT OF CONSOLIDATION ON RADIOLOGY PRACTICES

Academic and private radiology groups offer distinct value propositions. Academic radiologists engage in research and teaching as part of their overall professional responsibilities. They are often at the cutting edge of technology and patient care, actively developing tomorrow's techniques, applications, and clinical care pathways. AMC environments require not only accurate imaging interpretations but often supersubspecialized expertise covering a broader range of complex and rare conditions, often integrated with specific service lines. Academic radiologists may also practice solely within the scope of their own subspecialties. These unique features of academic radiologists may create challenges for them practicing in a more typical community environment, which usually values multispecialty interpretation capabilities

(eg, the "generalist"), higher volumes, and faster turnaround times.

Private radiologists providing services for community hospitals often prioritize clinical productivity and efficiency. Although many offer subspecialists, most private groups feature radiologists who interpret examinations outside of their fellowship expertise. Larger private practice groups are increasingly becoming more subspecialized. However, when highly subspecialized care becomes required at the community level, smaller private groups struggle to provide the same level of expertise as AMC radiologists.

Models have been recently described characterizing the expansion of academic institutions and their radiology practices into the community [21]. Regardless of the model considered or chosen, a number of issues must be considered relating to practice governance, culture, operations, finances, productivity, and compensation. These key issues are addressed in the following discussion.

Practice Governance

Effective practice governance is necessary to manage issues related to alignment, culture, stakeholder needs, business practices, finances, and operations. A radiology group's governance structure is commonly cited as one of the most important factors determining the practice's success. It can also be an important driver of organizational and cultural dysfunction, leading to inconsistent patient care, inadequate responses to marketplace challenges, and disregard for customers and strategic partners [22]. Moreover, the inability to unify existing leadership between organizations has been described as a critical cause for the failure of mergers, including those between separate radiology departments [23].

Various models of practice integration can be successful. Importantly, the specific type of integration (eg, loose association between two essentially independent radiology practices versus complete integration of both physicians and leadership) does not seem to be a significant predictor of success or failure [23]. The most important predictor is the presence of an effective and accountable governance structure with a clear process for decision making that ensures the availability of adequate knowledge and minimization of individual biases that might otherwise unduly influence decisions [22]. The consensus-based model with operational silos currently in place at many AMCs creates friction between stakeholders that can act counter to the system-based model needed for high-level integration of AMCs and community hospitals [9,22,24]. Accountability between the medical center, departments, and school of medicine in AMCs can be poorly understood, uneven, or sometimes completely absent. This sometimes results in delays or wavering commitments to major new initiatives requiring complicated and protracted negotiations with a number of different stakeholders [9].

Enterprise Approach

Addressing barriers to organizational changes after a merger requires a commitment to an enterprise approach with decision-making processes aligned across the hospitals, physician practice groups, departments, and school of medicine. The enterprise approach is critical for several reasons:

- The finances of AMCs depend on cross-subsidies and interinstitution transfers that can complicate integration.
- Lack of alignment around clinical revenue creates tension and silos among departments and operating units.
- Significant corporate structure restraints can inhibit system building and joint-venture or shared governance relationships between academic and nonacademic radiology groups.
- The traditional AMC operating model is believed to create an unsustainable competitive disadvantage given the economic and financial pressures facing AMCs in the current health care climate [9].

This enterprise approach can be problematic for both academic and private practice radiology groups, especially around issues of autonomy and income. More important, a key feature of organizational alignment is agreement among leaders on strategic and operational goals and a commitment to work together to achieve them, which may subsume the needs and goals of the merged radiology practice. Radiologists in this environment are likely to experience downstream effects that affect departmental strategic initiatives, capital purchases, hiring and recruiting, compensation, and teaching and research opportunities. Radiology leaders will need to anticipate and respond to challenges related to asset management, standardization of protocols and processes, and IT within the merged radiology department [25].

Culture

Cultural incompatibility can be a dominant reason for merger failure, particularly when merging academic and

private practice radiology groups [23,25]. Potential exists for both vertical conflict (individual physician versus new merged group culture and business model) and horizontal peer-to-peer conflict (academic versus private practice radiologists), both ultimately producing inconsistent and ineffective business practices [24]. Reconciling cultural differences between academic and private practices is important because in a merged system the goal is often to leverage the strengths of each group to create value through high-quality, cost-effective care that maintains a sufficient margin to invest in the umbrella organization's education and research missions. The importance of understanding and managing cultural change is frequently underestimated. This results in poor communication, reduced productivity, impaired teamwork, power struggles, reduced commitment to goals, and departures from the organization [26].

Operations and Finances

According to the Association of American Medical Colleges Advisory Panel on Health Care, a true multispecialty group practice is the preferred model for future health services management in highly competitive clinical markets [9]. Operational and fiscal integration may present significant challenges to private practice radiology groups that have traditionally been independent and autonomous in their ownership and business practices. Private groups can often be nimbler than their academic counterparts because of independent ownership and flat governance structures that allow strategic planning, investment in new ventures, and innovative business initiatives without the need to garner support or approval from outsiders, such as leadership in a hospital and school of medicine. Many academic radiology practices, in contrast, operate within a multispecialty physician group framework. They generally cede some autonomy and compensation in exchange for improved contracting with private payers, enhanced hospital resources (eg, equipment and IT), and the opportunity to engage in education and research.

Faculty Radiologists

Universities provide faculty appointments to physicians in recognition of their participation in their medical schools' tripartite missions. Successful mergers between academic and private practice radiologists will likely require more flexible definitions of faculty and physician roles. Several notable academic radiology departments have developed community divisions to staff the specific needs of community health centers that have become associated with their institutions. Although the models vary, they share a consistent vision of merging the ideals of academics with the realities of community practice. In such integrated practices, both traditional faculty and community radiologists need to coordinate a variety of mission-critical endeavors, such as administration and leadership, practice development and service, professionalism and clinical consulting, and quality and safety [27].

Productivity and Compensation

In many cases, comparisons among groups or individual radiologists are difficult because of confounding factors such as hours worked, vacation, nonclinical responsibilities, and changing relative value unit assignments. Moreover, there are a considerable number of nonclinical value-added activities that are becoming increasingly important in the new health care landscape that will define the volume-to-value transition [28,29]. Given that future organizational success will mandate higher quality and lower cost care, creating productivity measurement systems and benchmarks that incorporate both clinical and nonclinical activities aligned with the needs of the health system will be a major challenge for all radiology practices.

Compensation between academic and private practice radiologists can vary dramatically; in a summary of 2013 surveys, average academic radiologist salaries were only 60% of their private practice peers' [24]. There is less literature about hours worked, but in a 2007 survey, although weekly work hours were similar, the number of vacation days varied considerably, with 50 per year for private practice versus 28 for academic radiologists [24]. These differences need to be reconciled in mergers as inequities in salary, benefits, and time off can lead to ongoing conflict.

VALUE PROPOSITION FOR THE INDIVIDUAL RADIOLOGIST

To be a high-performing group in this new environment, radiology practices will need to develop integrated identities, participate in creating an infrastructure for shared success, and attract individual radiologists who are motivated toward enterprise-wide strategic goals. For private practice radiologists, this change may entail decreased autonomy and compensation, an increased focus on quality and outcomes, and an expectation for contributions to the education and research missions. For

academic radiologists, there may be an increased focus on clinical productivity and service-related activities, a narrower focus of research initiatives on translational research aligned with societal needs, and an increasing expectation to develop more cost-effective approaches to education that simultaneously promote both quality and safety. To be successful in the transition to new payment models, radiology leaders will need to become agents of change rather than protectors of the status quo.

CONCLUSIONS

Consolidation of health care systems and organizations has been catalyzed by a variety of recent changes in federal legislation, emerging population health models, and the overall current economic climate. One subset is the acceleration of new mergers, alliances, and partnerships between AMCs and community hospitals. Although the broader health care environment continues to push for integration and efficiencies, legacy financial, cultural, and organizational differences remain challenges for these historically distinct entities to come together and move forward synergistically. As the leaders in such organizations find new and novel ways to combine efforts, there has been and will continue to be significant impact on both academic and private practice radiologists. As radiologists are confronted with potential consolidation, understanding underlying motivational factors will be increasingly vital in managing expectations and successful outcomes, as will fully appreciating multistakeholder perspectives. The transition to merged systems and other forms of integration will rely on successfully navigating issues related to practice governance, culture, operations, finances, productivity, compensation, and radiology's value proposition.

TAKE-HOME POINTS

- The health care delivery system in the United States is rapidly consolidating. A subset of this trend has been the development of partnerships or mergers between AMCs and community hospitals. These affiliations have already significantly affected the radiologists serving these institutions.
- Recent health care trends such as consolidation of private insurers, improving price transparency, and increasing health care cost sharing by patients and employers are placing substantial pressure on AMCs to become more competitive in order to realize their tripartite mission of clinical care, education, and research.
- An effective governance structure with accountability and a clear process for decision making is important for a radiology department after AMC-community hospital integration.
- Cultural incompatibility can be a dominant reason for merger failure, particularly when merging academic and private practice radiology groups with distinct cultures, core values, and business practices.
- Successful mergers between AMCs and community hospitals will likely require integrated radiology practices with coordination for several mission-critical endeavors, including administration and leadership, practice development and service, professionalism and clinical consulting, and quality and safety.

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