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# Preparing for the New Paradigm: How Academic Health Centers are adapting to the forces of transformation

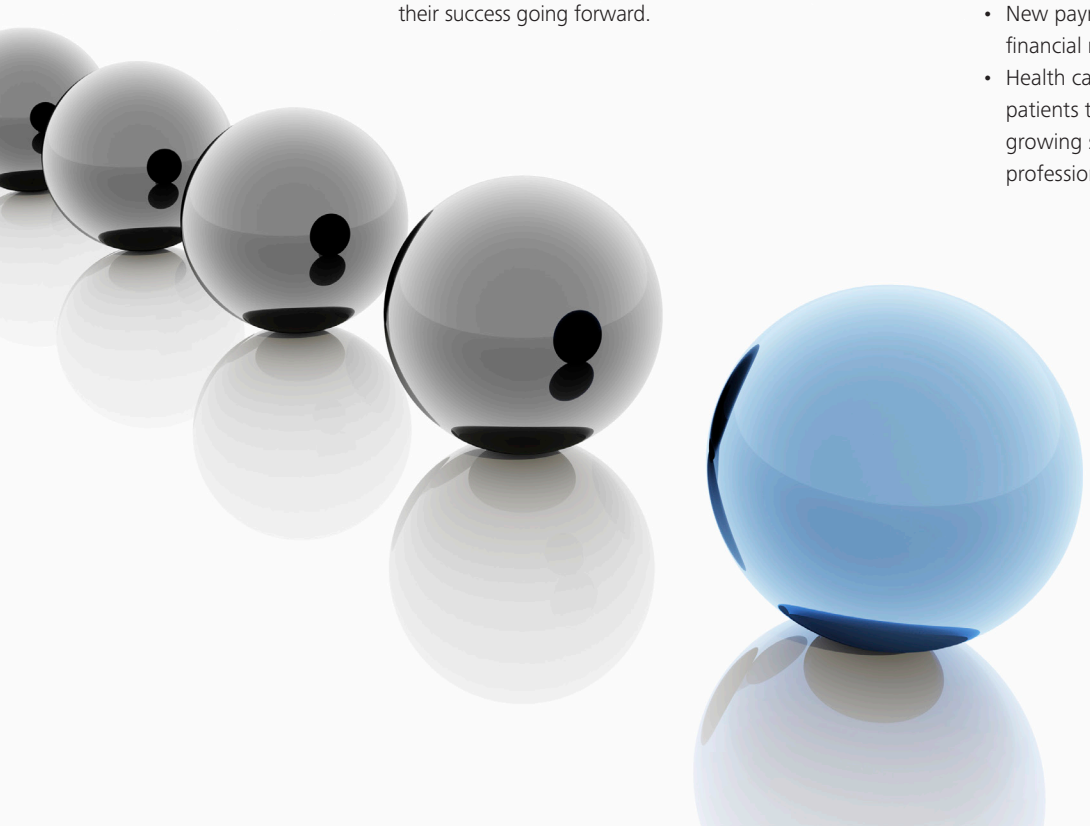
## Executive summary

Academic Health Centers (AHCs) are particularly vulnerable to the pressures resulting from health care reform. In an effort to understand how AHCs are adjusting to the realities associated with the emergence of a new paradigm for their organizations, we conducted a study surveying all Association of Academic Health Centers (AAHC) members and interviewing a representative sample of AHC leaders. This analysis sheds light on the top issues facing AHCs today as they adapt to the New Paradigm. We describe four organizing principles that AHCs are pursuing to improve their success going forward.

## Understanding the New Paradigm

Today, we are approaching a New Paradigm for AHCs, which are profoundly impacted by forces that are fundamentally reshaping the broader U.S. health care system, including:

- Continued escalation of health care costs, which may affect the nation's long-term fiscal soundness
- Federal and state budgetary issues potentially limiting government funding for educational institutions, vital biomedical research, and care for the elderly and economically disadvantaged
- New payment models under which providers assume financial risk for health care costs
- Health care reform potentially adding millions of new patients to a health care system that currently faces a growing shortage of physicians and other health care professionals



It is against this backdrop of unprecedented change that leaders of AHCs seek to adapt their organizations to sustain their academic, research, and patient care missions. While the complex organizational environment of AHCs may create resistance to change, leaders of AHCs should consider transforming their business model to meet the demands of the environment.

Faced with this evolving landscape, AAHC engaged Monitor Deloitte to better understand how its members are preparing to address the challenges of the New Paradigm. From July through September 2012, Monitor Deloitte undertook a two-pronged approach to collecting input and perspectives from organizations associated with AAHC. First, a 21-question survey was administered online to organizations associated with the AAHC, with responses submitted anonymously. Full responses were received from 38 AHCs and partial responses were received from 62 AHCs. In conjunction with the survey, a series of interviews was conducted with a representative group of 25 AAHC executives.

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The AHCs participating in our study represent a diverse range of institutions, with differing organizational structures, contrasting degrees of integration with practice plans and/or outpatient clinics, and varying degrees of research support from outside sources (e.g. NIH, industry, foundations), to name a few notable characteristics. Of the AHCs responding to our survey, 66 percent (27 institutions) were public institutions and 34 percent (14 institutions) were private. This proportion is representative of the AAHC membership as a whole. They varied dramatically in financial resources, with a maximum overall budget of $5 billion to a minimum of $50 million. The size of their student population also showed broad differences, with a range of 5,000 to 500 students taught annually. The AHCs also included anywhere from two up to 25 owned or affiliated hospitals. This significant demographic diversity has enabled us to examine both challenges and potential solutions with a wide lens.

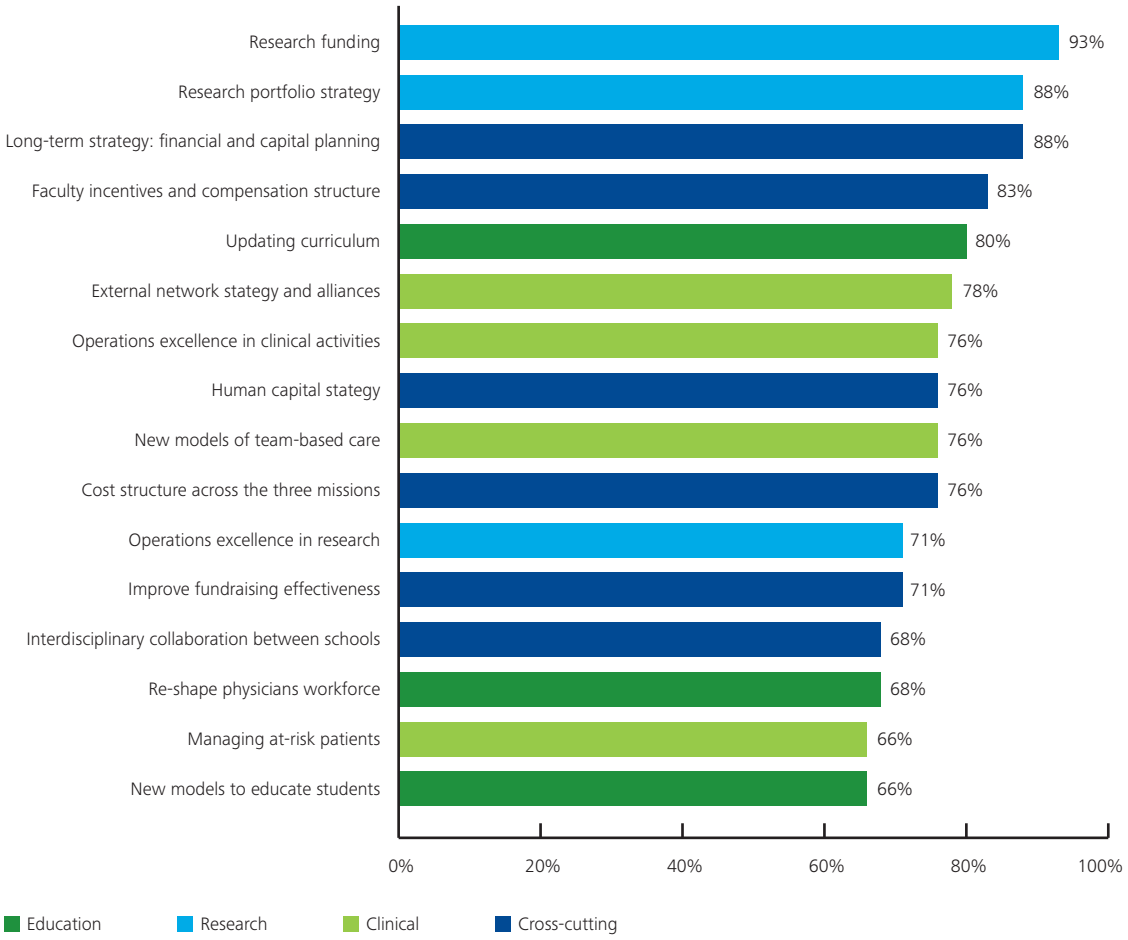
This paper seeks to shed light on the top issues facing AHCs today and to offer a perspective on how AHCs might reimagine strategies for confronting these challenges. We have structured our recommendations by examining the ways in which AHCs in our study have begun to address their top priorities, and by organizing these approaches according to four organizing principles. After examining these preliminary adaptive strategies, we seek to suggest ways in which AHCs can develop solutions that will enable them to pursue a pioneering role in health care education, research, and delivery.

## New Paradigm priorities and readiness to address them

Given the speed of change rippling through the industry and the broad set of challenges confronting AHCs, it is not surprising that leaders of many AHCs do not feel their institutions are well positioned to respond to the New Paradigm. Our survey found that more than two-thirds of AHCs felt they were not well prepared to address many of the most important challenges associated with their research and clinical mandates as well as those that cut across multiple missions.

Despite the diversity of size, focus, and organizational structures, many of the challenges AHCs face are widespread. In our survey, 16 distinct challenges were rated as a high priority by over two thirds of respondents (Figure 1). In particular, more than 80 percent cited the following two research-related strategic issues as highly important: aligning research funding strategy to changing landscape, and setting strategy for the research portfolio. These sentiments are unsurprising given the decrease in NIH budgets since 2010, and collectively they highlight the mounting need to revisit approaches for shaping and funding biomedical research.[1]

**Figure 1. Important issues cited most frequently by AHC leaders**

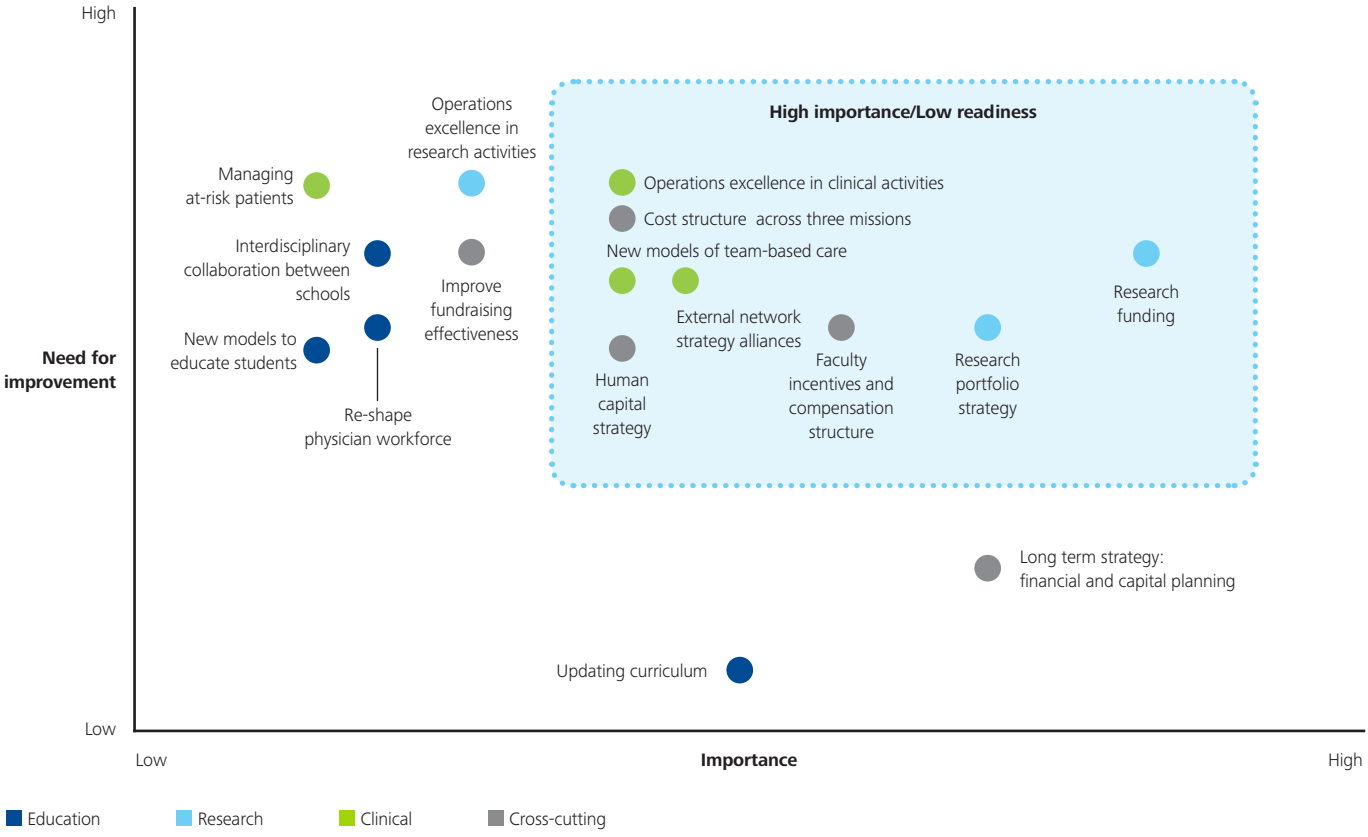



Source: AAHC Member Survey and Monitor Deloitte analysis

Note: Percentage of respondents (N=38) rating issue as "Highly Important" (1) on a scale of 1 ("high") to 3 ("low")

On a more fundamental level, the survey results may demonstrate that AHCs are facing a number of challenges to adapt their business model to the New Paradigm. Given the set of interconnected issues that drive performance in AHCs, cross-cutting issues that impact several major aspects of the tripartite mission, such as strategy and financial planning and faculty incentives, were cited by more than 80 percent of respondents as highly important. Yet, when asked how prepared they were to address those cross-cultural issues, AHC leaders gave the lowest scores to these same cross-cultural topics of their agenda. In fact, more than a third of the issues with the largest "gap" between importance and readiness are cross-cultural issues that require collaboration and strategic foresight across multiple levels of the organization, including faculty incentives, cost structure, and human capital strategy. Meanwhile, the "gap" across all research categories was not as prevalent as for cross-cutting issues, but two discreet areas did exhibit significant gaps: re-aligning funding strategy and setting a new research strategy portfolio (Figure 2).

**Figure 2. "Gap" between importance and readiness**




Source: AAHC Member Survey and Monitor Deloitte analysis

Note: Percentage of respondents (N=38) rating issue as both "Highly Important" (1) and having "Low Preparedness at their institution" (3) on a scale of 1 ("high") to 3 ("low")

## Organizing principles in the New Paradigm

AHCs seem to be taking several approaches to address the challenges of the New Paradigm, which we have categorized into four broad principles outlined below.

1. **Growing educational mission by shifting to team-based care:** Against the many challenges for the educational mission, some AHCs are taking advantage of the shift towards team-oriented medicine to grow their educational activities.
2. **Adapting the research portfolio to new funding realities:** AHCs appear to be revisiting the strategy for their research portfolio, seeking new collaborations with other institutional and industry partners, and looking for ways to improve the efficiency of their research operations.
3. **Forging new alliances in the health system:** AHCs may be pursuing new alliances with non-academic institutions to protect their clinical margins and unlock new sources of growth.
4. **Cost reduction and optimization:** AHCs seem to be seeking new ways to improve the efficiency of their operations to protect the margin from their institutions clinical operations.

While the challenges of pursuing the tripartite mission place AHCs at the forefront of confronting the challenges of the New Paradigm, this need to respond to the changing landscape also puts AHCs in the position to pioneer industry-leading solutions. The approaches put forth by AHCs in our survey illustrate a gradual break down of historical silos between education, research, and clinical missions. Building on this momentum, we suggest that AHCs can reimagine the approach to delivering on their mission by leveraging opportunities to integrate and scale, tapping into broader health alliances and affiliations to enhance education, research, and clinical care while simultaneously reducing costs.

### 1: Growing the educational mission by shifting to team-based care

Many leaders of AHCs recognize that the shift to team-based care provides an opportunity for innovation and growth. Collaborative care models, which involve teams of health professionals (i.e., physicians, nurses, pharmacists, allied health professionals, and others) working in close coordination, are starting to replace the sole practitioner. These new team-based care models have the potential to improve both clinical and financial outcomes while simultaneously reducing clinician workloads.[2] Evidence of heightened quality of care arising from team-based care models is increasingly coming to light. Data from Kaiser Permanente showed that "high-functioning care teams" – those whose practice climate featured high levels of collaboration and teamwork – performed 40–90 percent better than low-functioning teams in managing chronic diseases, including diabetes, hypertension, and asthma.[3] However, shifting to the team-based care model poses many challenges, including the process of breaking down cultural barriers within AHCs in order to enable multi-disciplinary teams to form. For those AHCs embracing the new care model, progress is already being made in terms of retraining medical professionals to fulfill these new team roles.

As the primary educators of the health care providers of tomorrow, AHCs can play a central role in leading and supporting the shift towards new models of delivery. Collaborative care models have transformed the existing roles of physicians while increasing the need for a variety of other health professionals. Noted examples include physical therapists supplanting the role of non-surgical orthopedics and nurse practitioners, clinical care coordinators, and health coaches monitoring compliance in diabetic patients instead of an endocrinologist.[4] To support the growth of these roles, new degree programs, such as Doctor of Physical Therapy programs, have emerged and are increasingly gaining traction with accrediting commissions.[5] The adoption of these new roles and educational programs signals an early shift on the part of AHCs to begin accomodating more flexible and adaptive models of care.

While AHCs have begun to embrace the idea of a team-based model, they can do more to accelerate the adoption of these models and leverage their benefits by redesigning education around a team-based model. "Transdisciplinary professionalism," an approach to clinical care that helps confirm multiple health disciplines work in concert to improve health outcomes, has been championed by the Institute of Medicine as a prescribed path forward enabling medicine to improve patient safety and quality of care.[6] AHCs stand to play a pivotal role in the adoption of transdisciplinary professionalism in medicine by emphasizing a team-based approach to care in their curricula. Instead of teaching in line with the silos produced by the distinct schools of medicine, dentistry, pharmacy, and nursing, AHCs should strive to coordinate teaching across these disciplines. One of the greatest challenges in doing this stems from the fact that medical training takes place largely in hospitals, while the most significant opportunities in coordinating care occurs in the outpatient setting.[7] Taking this into account, AHC curricula could evolve to take advantage of partnerships with community hospitals and ambulatory care clinics, leveraging their outpatient settings to serve as teaching grounds broadening the scope of exposure for AHC students and residents.[8]

### 2: Adapting the research portfolio to new funding realities

Sustaining a broad research program with limited funding is a high priority for many AHCs. The cost of research for AHCs today exceeds the "soft money" available to support it – for each dollar of direct federal research support, an additional 30 to 40 cents is needed from institutional resources to supplement the federally negotiated indirect-overhead recovery.[9] While the funding gap is a reality across the board, AHCs are taking different approaches to address and overcome economic challenges. While some institutions are striving to expand industry relationships as an important avenue to sustain and even grow their research mission, others are focusing greater attention on streamlining their research mission and enhancing their research approach. Still others are developing advanced capabilities in-house to monetize existing and new information and intellectual property.

Given recent cutbacks in pharmaceutical R&D budgets, some leaders see potential for mutually beneficial relationships with industry participants. Market pressures have led U.S. biopharmaceutical companies to shrink R&D spend, reflected in the aggregate of $12.9 billion between 2007 and 2012.[10] This provides an opportunity for AHCs focusing on translational research, allowing them to provide research talent to industry partners who in turn enhance AHC funding resources. While many AHCs are seeking opportunities to expand these industry partnerships, there could be a limit to how effective this funding mechanism can be as the model currently exists. One of the large research-oriented AHCs included in our study illustrates the current limitations; while this AHC garners approximately $400 million in funding annually from NIH grants, industry partnerships bring in a maximum $5 million annually. If AHCs are to make industry partnerships a more significant engine for research funding, a new model of collaboration should be considered.

Many large institutions, in contrast, seem to be focusing on a short-term strategy of prioritizing research areas and rethinking the research portfolio. AHC leaders are seeking to cut programs that are not producing measurable impact. This process is challenging from the standpoint of retaining faculty, as these cuts pose a threat to inspiring intellectual vitality and innovation – a traditional hallmark of AHC culture. In the current environment, some leaders see basic sciences research as particularly vulnerable, as the focus at the NIH and industry alike centers around translational/clinical science and human health.

Beyond outlining the research plan, all surveyed AHCs seem to recognize the need to apply new management techniques to adapt the research mission to new constraints going forward. Institutions will need to recognize that the New Paradigm will challenge them to take a different approach to their budget process in order to make every dollar go further. AHC leaders are beginning to recognize this changing reality; almost three quarters of survey respondents cited the need to improve the operations excellence of their research activities through better benchmarking, leaner programs, and resource sharing with the clinical delivery system. AHCs may need to evaluate their research proposals with greater rigor than is the standard today. AHC research enterprises should be held to the same standard of rigor as clinical enterprises, which include the creation of well-developed business plans that identify costs and revenue projections.

However, to improve research efficiency, AHC leaders acknowledge the need to develop and apply techniques used elsewhere in the organization to understand cost drivers and analyze areas for improvement. Creating a repository of information specific to the research enterprise enabling greater sharing of benchmark data, leading practices, and policies used across organizations could be instrumental in helping all AHCs to pressure-test the research enterprise to adapt it to the demands of the New Paradigm.

While these strategies could be essential to quickly adapting to the decrease in available research funding, we suggest that AHCs can go further in truly rethinking how they finance their research enterprises. First, AHCs should pursue opportunities to become connectors and warehousers of data by tapping into their expanding health alliance networks. While AHCs offer well-equipped research infrastructures, networks of affiliated hospitals, and centers of care provide a significant patient information system. Not only can this information be valuable as a means to identify patients with specific conditions for research studies and track outcomes over time, but as online health records become more mature, this information can be powerful as an aggregated data set.[11]

There has been significant buzz in recent years over digital health companies tapping into the opportunity of generating revenue from the sale of aggregated (non-personally identifiable) patient data. For example, PatientsLikeMe (Cambridge, MA) is a patient network that encourages people with life-changing conditions to openly share health information in an effort to "crowd source" ways in which they can manage their diseases. PatientsLikeMe's more than 100,000 members share their data, which is then leveraged by third-party companies that use the information to improve or understand conditions, treatments, and products related to the disease. Utilizing a similar business model, Practice Fusion (San Francisco, CA) provides free, web-based EMR systems to physcians, and in turn earns rights to share aggregated patient data. As AHCs begin to extend their health alliance networks, they too have the ability to securely consolidate valuable patient data for use in treatment and product research. By harnessing this resource, AHCs could enhance their revenue streams outside of traditional pathways, possibly easing some of the pressure of a shrinking research funding base.

### 3: Forging new alliances in the health system

As leaders of AHCs seek to position their institutions for success in the new environment, they appear to be turning to new alliances to protect the margin from their clinical operations and uncover new sources of growth. Our survey found that alliances and network management were the highest priority clinical issue, with 75 percent of respondents rating them as a key issue. This illustrates an increasing outward focus, as AHCs seek ways to engage with a wider variety of organizations and form partnerships to enhance care delivery and increase the scale of their reach.

There are several reasons for the increased focus on alliances and network management. The first is a defensive stance: leaders of AHCs are trying to determine that their institutions are well positioned to compete in health care markets that are increasingly consolidating and moving towards at-risk contracting with payers. This competition is driving the need for greater affiliations with non-academic providers to significantly increase primary care capabilities and create tighter linkages with skilled nursing facilities and other post-acute care capabilities. AHCs are increasingly trying to enhance their capabilities along the care continuum, looking for opportunities to expand beyond their expertise in offering speciality care to offering more primary care options through ACOs.

Affiliations also present an opportunity to drive top-line growth of AHC clinical operations. Partnerships enable AHCs to extend brand recognition, targeting specific clinical lines to change referral patterns. One of the AHCs in our study leveraged its regional partnerships to build a cancer network – integrating care across the continuum from routine visits with its regional partners and complex care performed at the main campus.

Pursuing these new affiliations presents a distinct set of cultural challenges. Some AHCs fear they will compromise their tripartite mission, as community hospitals are generally aligned to a different set of goals and incentives. This perceived cultural mis-alignment has been a long-standing challenge for community-academic partnerships, but it becomes even more critical for today's AHCs to overcome given the growing importance of these partnerships.[12]

Recalibrating goals and incentives across a system is the next step as AHCs drive towards an integrated delivery system. Clinical integration is important in transitioning from volume to value and can enable AHCs to achieve the nececssary quality and cost improvements that justify joint contracting and mitigate antitrust litigation risk. This provider network, among other things, could promote selectivity among the physician group and build out the structural and operational elements to significantly increase interaction among participating physicians by improving quality of care delivery and outcomes in the treatment of patients. Assuming AHCs intend to maintain their independence in the near term, clinical integration could serve as a market differentiator, enabling the AHC to drive key brand messages of quality, cost, and network breadth. The clinically-integrated delivery system could enable AHCs to embrace a team-based model and the role as coordinator of clinical information.

### 4: Clinical cost reduction and optimization

Given the economic pressures on AHCs, it should come as no surprise that cost reduction and optimization are top strategic priorities for AHCs. In fact, our survey found that operations excellence was the second highest priority issue in the clinical sphere, the third highest priority for the research mission, and the fourth highest priority impacting the educational mission.

Cost reduction efforts are not new, and leaders of AHCs have implemented a wide variety of approaches and tools to improve the efficiency of their operations. While many AHC leaders interviewed described the focus of current cost efforts as building on a base of foundational initiatives, such as efforts to consolidate back-end operations and to improve purchasing through GPOs, others are beginning to consider more transformational initiatives in driving down costs.

One newer initiative focuses on addressing variations in practice among individual physicians to highlight efficient care practices. Identifying and realizing these previously overlooked savings opportunities requires strong cross-functional collaboration to ensure that clinical decision making is reviewed on cost without losing sight of quality.

A second area AHCs are focusing on is around improving physician incentives.[13] As the New Paradigm shifts away from the fee-for-service model to a pay-for-performance model, incentives must be realigned. While this new model is still being calibrated, incentives may be re-aligned in preparation for greater use of capitated contracts.

We suggest another strategy to reduce costs could center on reaping the benefits of creating a network of health alliances. These cost savings come from consolidating backoffice functions across facilities, but more importantly, by better integrating talent across the health alliance. By engaging in thorough resource planning and embracing a new human capital strategy, AHCs can take a holistic view to move people around in the organization to where they will be most effective – whether that be research, education, or clinical care. Having a wider alliance of affiliated hospitals could allow AHCs to reallocate resources, including service-line rationalization, across the organization based on where they drive the most value. Essential to the successful implementation of this strategy is both an integrated approach to achieving success across the tripartite mission, and a strongly integrated leadership structure to establish that execution against this mission occurs uniformly across the organization.

## Call for innovative leadership: Forging the path forward

Our study found evidence of AHC leaders striving to engineer innovative solutions to the multitude of challenges their organizations are facing. In addition to these numerous focused strategies, we volunteer the idea of a more holistic approach to confronting the sea change presented by the New Paradigm. Investing in the growth of a clinically integrated health-alliance network can provide AHCs with the means to pioneer approaches to both education and care, while simultaneously enabling the opportunities for cost optimization that come from scale. Revitalizing the AHC tripartite mission in the light of this new model might be the most significant challenge and opportunity presented by the New Paradigm.

AHCs are known for their pioneering role in the field of medical research and the provision of clinical care. Leading AHCs could view health care reform not only as an uncertainty, but an opportunity to capitalize the AHC position at the forefront of reinventing medicine under the New Paradigm.

## Endnotes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