

## Staying Power

*Like cities, academic medical centers appear destined to last.*

Many academic medical centers post their mission, vision and values online. These statements reveal some remarkable similarities, including a consistent sense of optimism. One word shows up with frequency: "transform." There's an unshakable view that constructive change is possible and that academic medical centers will be drivers of that change.

When academic medical center leaders look backward, they see a legacy of accomplishment that brings to mind the words of English historian Thomas Babington Macauley in 1830: "On what principle is it that when we see nothing but improvement behind us, we are to expect nothing but deterioration before us. "Despite the significant challenges facing academic medical centers, they have good reasons to be optimistic and confident about their future.

### Inherent Sustainability

Something always gets lost in the talk about organizations that are built to last — organizations that have really lasted, like churches and universities. Both have been around for centuries. A clarity of purpose, surrounded by an unequivocal set of values, has given them their staying power. It is no small thing that today's academic medical centers trace their family trees back to churches and universities.

The modern academic medical center also resembles another of mankind's oldest organizations — a city. As futurist Stewart Brand once emphasized, "Cities are humanity's longest-lived organizations (Jericho dates back 10,500 years), but also the most constantly changing." Cities and academic medical centers are humming amalgamations of expertise and ambition, assembled in close proximity and interacting to generate differentiated value. Like cities, academic medical centers are simultaneously planned and unplanned. And they are big. On average, they operate at a scale much larger than the nation's community hospitals, with hospital bed complements often reaching more than 1,000 on a single campus.

The scale and concentration that academic medical centers have achieved likely generates unexpected efficiencies that reflect those that researchers have identified in cities. Geoffrey B. West applies Kleiber's Law to cities. It demonstrates that living organisms show a clearly consistent scalability. If you plot the metabolic rate in animals against mass from mouse to elephant, each increase in size requires a proportional increase in energy to maintain it. The relationship plots an absolutely straight line, but the proportion is not linear. "Quadrupling in size does not require a quadrupling in energy use. Only a tripling in energy use is needed. It's sublinear; the ratio is 3-to-4 instead of 4-to-4."

In the September 2011 issue of *Scientific American*, West and Luis M.A. Bettencourt, both theoretical physicists at the Santa Fe Institute and Los Alamos National Laboratory, observed that, rather than "unnatural human conglomerations blighted by pathologies[,] ... cities do more with less ... because they concentrate, accelerate and diversify social and economic activity."

Bettencourt and West's research indicates that while a city may double in size, its infrastructure — roads, sewer lines, retail — does not. In fact, the bigger the city, the more efficiently it uses resources.

But more than physical infrastructure, the key to "virtuous cycles of innovation and the creation of wealth" are "a spirit of local entrepreneurship, a reputation for cutting-edge novelty and a culture of excellence and competitiveness. ... [I]ncreased population promotes more intense and frequent social interactions, occurrences that correlate with higher rates of productivity and innovation as well as pressures that weed out inefficiencies."

Like cities, academic medical centers appear scaled to last.

## Strong Market Positions

Although community hospitals may threaten the referral base of academic medical centers and usually outscore them on patient satisfaction, that's not what gets the competitive juices flowing within most academic medical centers. What stirs their blood is other academic medical centers. The scorecards that have come to mean the most are *U.S. News & World Report's* list of top hospitals and the National Institutes of Health listing of research grants. These two lists, more than any other points of comparison, define the playing field.

There is plenty of grumbling about the efficacy of *U.S. News & World Report's* rankings. It hardly matters; the academic medical centers that have the most credibility have endorsed the rankings as the de facto indicators of their standing. Most visitors to Johns Hopkins will walk down a hallway with covers of *U.S. News & World Report* reproduced on the walls from floor to ceiling — one for each of the 21 years that Hopkins has been named the number one hospital in America. If *U.S. News & World Report* is good enough for Hopkins, then by association it's good enough for the rest of America's academic medical centers.

You have to move a long way down *U.S. News & World Report's* list of America's top hospitals before you find an institution that is not an academic medical center. The rankings evaluate 4,825 hospitals. Of those, only 140 performed well enough to be nationally ranked in even one specialty. And of those, 17 earned a position on the publication's honor roll. All 17 are academic medical centers. Academic medical centers also dominate the rankings on a single specialty basis. For example, all of the top 50 hospitals for cancer are academic medical centers.

The unshakable nature of an institution's position in the *U.S. News & World Report* rankings is quite remarkable. Despite highly publicized tragedies resulting from mistakes in care at both Hopkins and Duke, neither institution fell out of position in the rankings.

The resilience seen in the reputations of the academic medical centers can perhaps best be explained by what marketing experts describe as "positioning." Al Ries and Jack Trout, proponents of the concept, suggested that consumers are overloaded with information regarding competing products and services. The way they deal with this overload is by sorting the information. Ries and Trout used the rungs of a ladder to illustrate their point. For any definable market, a product or service that isn't on one of the top three rungs is in jeopardy of being out of the game. But once clearly positioned on one of those rungs, particularly the top one, the product or service is very difficult to dislodge. This seems to be true for hospitals as well.

Perceptual maps have been used to add a little more definition to the concept of positioning. In health care, such a map might put "advanced clinical capabilities" on one axis and "service excellence" on the other. Various hospitals then can be positioned on the map. Historically, relative to community hospitals, academic medical centers have arrayed on the high end when it comes to advanced clinical capabilities and lower when it comes to service. The aspirations of most academic medical centers, as conveyed in their vision statements and reflected in the allocation of their scarce resources, are to move forcefully up the clinical capabilities axis while simultaneously edging themselves up the service axis.

Academic medical centers shouldn't expect an easy ride as they endeavor to fortify positions of advantage in an increasingly competitive marketplace. The differentiation that has legitimized their reputations for advanced clinical quality may be seriously contested, for two reasons:

First, the proliferation of performance data may indicate that there is an insignificant difference in the quality of the outcomes academic medical centers produce compared with community hospitals. The long-held presumption that teaching and research contribute to quality of care may be tested seriously and, if not validated, may strip away from academic medical centers the pretense of being different in ways that matter. As the availability of competitive data related to the performance of hospitals and physicians increases, it is possible that rankings will get shuffled. Academic medical centers forcefully must demonstrate their advantage.

Second, tertiary-level community hospitals may continue to develop advanced capabilities that once could be found only in academic medical centers. In many markets, the ability of academic medical centers to claim leadership firmly in specialized care and technology has been challenged by tertiary-level community hospitals that have built advanced capabilities in key services, particularly heart and cancer. Such a trend will be reinforced by the rapid diffusion of knowledge and technology as information grows ever more democratized and proprietary barriers erode.

In the suburbs of Chicago, for example, a community hospital with no academic affiliation and limited tertiary capability is in the process of installing a proton accelerator. Academic medical centers must respond to such developments by maintaining their lead in talent and technology.

## **Resilience**

Academic medical centers are what University of Michigan organizational theorist Karl Weick calls "loosely coupled." This can be attributed largely to the high degree of autonomy and, in many instances, resource control vested in their departmental structures. Weick's observations are based on his extensive study of high reliability organizations and their experiences when complexity and uncertainty give rise to breakdowns in safety. The shortcomings of too loose a structure for academic medical centers are obvious enough. Department chairs whose only interest relates to the relatively narrow sphere of their specialty focus are prone to suboptimize the broader goals of the academic enterprise, including those related to communication, coordination and synergies across specialties. For example, in the winter of 2001, 18-month-old Josie King died at Hopkins; she was the victim of a breakdown in communication, one of the most frequent and deadly symptoms of too much looseness.

And yet, in looseness, unique strengths can be found. According to Weick, loose coupling allows organizations to temporarily persist through rapid environmental fluctuations, improves the organization's sensitivity to the environment, allows local adaptation and creative solutions to develop, permits subsystems and subunits to underperform and break down without pulling down the entire organization, and allows more individual self-determination.

Loosely coupled organizations are, Weick suggests, probably cheaper to coordinate, but they are very difficult to change systematically. One attribute of loosely coupled organizations is their inherent stability and sustainability. While they may be difficult to change, academic medical centers have proven remarkably resilient. Because so much of their power and leadership is contained within the departments and because the leadership is emergent rather than delegated, they can take a licking and keep on ticking.

After Josie King's death, Hopkins was awash in self-examination. Like a kid used to getting A's on his report card, Hopkins suddenly found itself staring at D's and F's. Dean and CEO Ed Miller, M.D., began asking those he encountered in the halls of Hopkins what they were doing to improve safety. Hopkins got back to basics.

## **Experienced Employers of Physicians**

To be advantageous, looseness needs to be balanced against tightness. "Loosely coupled" begs the question: "Coupled by what?" For academic medical centers, the answer has been shared purpose, values and collegiality. In the future, effective coupling also will require a resolute adherence to a clearly specified set of minimum specifications focused on quality, safety, cost and access. Such minimum specifications will be nonnegotiable and most appropriately administered out of faculty practice plans.

Faculty practice plans have been the employment and business vehicles for academic physicians since they were first introduced at Duke University in 1931. Faculty practice plans have become the organizational nexus for academic medical centers by providing essential structural and economic frameworks extending across the departmental structure. Already experienced at employing hundreds of physicians, faculty practice plans hold tremendous potential to deliver superior quality, safety, cost and access if they can be unified and led effectively.

One of Ed Miller's first moves when he assumed leadership of Hopkins was to remake its faculty practice plan. It was here that the tripartite mission of teaching, research and patient care pioneered by Hopkins coalesced with the essential economic imperative to produce a margin sufficient to fuel Hopkins's purpose and aspirations.

Mayo Clinic adopted Hopkins's tripartite mission very early in its development and eventually translated it into the three shields that comprise its logo. But Mayo evolved along a different path than Hopkins and most other academic medical centers. It emphasized patient care as its primary consideration, and it put a tight multispecialty group practice at its core rather than basing it on a faculty model characterized by strong, relatively autonomous specialty departments. At Mayo, the clinic came first. At most academic medical centers, the departments came first.

Nevertheless, traditional academic medical centers can learn much from Mayo when it comes to unifying and transforming their faculty practice plans. Mayo embodies a deep respect for the importance of management, as exhibited from its founding in the role administrators have played in decision-making and operations. Mayo is physician-led, but it is led by physicians with talented administrators at their sides. And processes of care have never been accidental at Mayo. One of the clinic's founders, Henry Plummer, M.D., was also an engineer. Plummer designed Mayo's organization, facilities and technology from the onset with an obsessive eye on the patient interest as well as on teamwork and efficiency.

At the Cleveland Clinic, which was built on the Mayo model, Fred Loop, M.D., a renowned cardiothoracic surgeon who led the clinic until his retirement, convened his leadership team of physicians and lay administrators four days a week over lunch to ensure effective unity of leadership and management. Accountability is hardwired into the Cleveland Clinic through several means, most notably its annual performance review, by which employment contracts with clinic physicians are renewed on an annual basis. There is no tenure. Reviews focus on education, research contributions to the literature, leadership of national professional societies and service to the group and, most importantly, on the measured quality of clinical care delivered.

Clinic founder George Criles, M.D., once suggested that "[m]ediocrity, well-organized, is better than brilliancy with strife and discord." The Cleveland Clinic's rise has resulted, in no small degree, from a "meritocracy well-organized."

## **Leaders Well-Matched to a Complex Future**

The leadership style that has delivered success in America's best academic medical centers is very different from that which has been promulgated at most community hospitals. It relies on a "first among equals" distributed approach to leadership rather than the single "CEO on high" model. A future in which hundreds of physicians have entered hospital employment will require leaders able to unify and motivate a highly trained and deeply independent class of individuals.

Because academic medical centers are by their nature complex and loosely coupled, a federated approach to organization and leadership has been a necessity. As the English management expert Charles Handy emphasized, the glue that matters most in a loosely coupled federated model is trust. And those who cannot be trusted need to be shoved out, "ruthlessly if need be." By trust, Handy meant "confidence ... a confidence in someone's competence and in his or her commitment to a goal."

The only substitutes for trust are "systems of control," often experienced as onerous impositions, particularly by highly trained professionals. Systems of control also are prone to breakdown and collapse when confronted with too much complexity and uncertainty. The "system is the problem" school of improvement in health care provides too easy a dodge. Sometimes there is individual or institutional fault involved. Sometimes even the most robust systems cannot overcome the influence of rotting apples in a barrel. Some people just can't be trusted to care enough about what matters most.

Handy tells a great story about the trust and leadership a federated organization of highly specialized professionals requires:

"Trust requires leaders. At their best, the units in good trust-based organizations hardly have to be managed, but they do need a multiplicity of leaders. I once teased an English audience by comparing a team of Englishmen to a rowing crew on the river — eight men going backward as fast as they can without talking to each other, steered by the one person who can't row! I thought it quite witty at the time, but I was corrected after the session by one of the participants, who had once been an Olympic oarsman. 'How do you think we could go backward so fast without communicating, steered by this little fellow in the stern, if we didn't know each other very well, didn't have total confidence to do our jobs and a shared commitment — almost a passion — for the same goal! It is the perfect formula for a team.'

"I had to admit it — he was right. 'But tell me,' I said to him, 'who is the manager of this team?' 'There isn't one,' he replied, after thinking about it. 'Unless that is what you call our part-time administrator back in the office.' Manager, he was reminding me, is a low-status title in organizations of colleagues.

"Well, then, who is the leader?"

"That depends," he said. "When we are racing, it is the little chap who is steering, because he is the only one who can see where we are going. But there is also the stroke, who sets the standard for all of us. He is a leader, too, in a way. But off the river, it's the captain of the crew, who selects us, bonds us together, builds our commitment to our goal and our dedication. Lastly, in training, there is our coach, who is undoubtedly the main influence on our work. So you see," he concluded, "there isn't a simple answer to your question."

"A rowing crew, I realized, has to be based on trust if it is to have any chance of success. And if any member of that crew does not pull his weight, then he does not deserve the confidence of the others and must be asked to leave. Nor can all the leadership requirements be discharged by one person, no matter how great or how good."

In his book *Governance of Teaching Hospitals: Turmoil at Penn and Hopkins*, John Kastor, M.D., concluded, "[W]hether an academic medical center successfully meets its inherent responsibilities to teach, advance medical knowledge and provide exemplary care depends more on the character and ability of its faculty and its leaders than on the structure under which they are governed."

Handy suggested that "[r]acing crews row for the sake of glory. " Academic medical centers row for the same reason. The key to the future, as in the past, will be to attract men and women motivated by glory.