

Strong Leadership and Teamwork Drive Culture and Performance Change: Ohio State University Medical Center 2000–2006

Fred Sanfilippo, MD, PhD, Neeli Bendapudi, PhD, Anthony Rucci, PhD, and Leonard Schlesinger, DBA

Abstract

Several characteristics of academic health centers have the potential to create high levels of internal conflict and misalignment that can pose significant leadership challenges.

In September 2000, the positions of Ohio State University (OSU) senior vice president for health sciences, dean of the medical school, and the newly created position of chief executive officer of the OSU Medical Center (OSUMC) were combined under a single leader to oversee the OSUMC. This mandate from the president and trustees was modeled after top institutions with similar structures. The leader who assumed the role was tasked with improving

OSUMC's academic, clinical, and financial performance.

To achieve this goal, the senior vice president and his team employed the service value chain model of improving performance, based on the premise that leadership behavior/culture drives employee engagement/satisfaction, leading to customer satisfaction and improved organizational performance. Implementing this approach was a seven-step process: (1) selecting the right leadership team, (2) assessing the challenges and opportunities, (3) setting expectations for performance and leadership behavior, (4) aligning structures

and functions, (5) engaging constituents, (6) developing leadership skills, and (7) defining strategies and tracking goals.

The OSUMC setting during this period provides an observational case study to examine how these stepwise changes, instituted by strong leadership and teamwork, were able to make and implement sound decisions that drove substantial and measurable improvements in the engagement and satisfaction of faculty and staff; the satisfaction of students and patients; and academic, clinical, and financial performance.

Acad Med. 2008; 83:845–854.

This report examines a successful attempt to improve performance at OSUMC by changing organizational culture. With the addition of a strong new leader, OSUMC saw a measurable difference in its organizational structure, function, and expectations. This difference resulted in improved performance according to a number of important measures, including patient, student, and employee satisfaction; external and objective reputational survey rankings; and financial performance (Table 1).

The Challenges

Challenges in academic health centers

Academic health centers (AHCs) are complex and challenging organizations, especially with regard to leadership, management, and performance. Several factors, including AHCs' organizational structure, mission diversity, and highly specialized professional and service workforces, have the potential to create

high levels of internal conflict and misalignment of missions and resources that can pose significant leadership challenges.

AHCs have a complex—and often internally competitive—organizational structure. Each spans a medical school, hospital(s), and faculty practice plan(s) and, respectively, the academic, business, and professional service cultures of each. The relationship among these components frequently changes, and new leadership of any component usually causes a shift in power and authority alignments across the entire organization.

The components of the AHC perform a range of diverse activities, including education, research, patient care, and community service. Competition for resources and priority are often as difficult to resolve among programs across missions (e.g., cancer research versus cardiovascular surgery) as programs within any one mission area (e.g., cancer research versus cardiovascular research). It is difficult to compare costs with benefits when benefits are so dependent on academic value judgments of impact and recognition rather than just the business values of financial return and market position. The relative association of academic programs and

values with the medical school versus clinical programs and business values with the hospital and faculty practices exacerbates these cross-mission program conflicts with additional cross-organizational and cross-cultural ones.

A final factor making AHCs difficult to lead is the “free agent” nature of the highly specialized faculty who provide education, research, and patient-care services in disciplinary and interdisciplinary units of departments and centers. Similarly, nonfaculty staff providing professional (e.g., nursing, pharmacy), technical (e.g., laboratory, imaging), and administrative (e.g., marketing, operations) services are in increasingly short supply relative to demand. Overseeing a highly skilled professional and service workforce that is mobile and that requires substantial infrastructural support is a significant challenge for leaders with responsibility overseeing the units (e.g., departments, centers, schools, hospitals) and programs (e.g., education, research, clinical) that comprise the functional components of AHCs.

Challenges of service organizations

“Customers” of AHCs, especially students and patients, receive services

Please see the end of this article for information about the authors.

Correspondence should be addressed to Dr. Sanfilippo, 1440 Clifton Road NE, Suite 400, Atlanta, GA 30322; e-mail: (fred.sanfilippo@emory.edu).

Table 1
Changes in Leadership Culture, Employee Satisfaction, Customer Satisfaction,
and Performance at Ohio State University Medical Center, 2000–2006*

	2000–2001	2005–2006
Leadership culture (behavior norms; percentile)		
<i>Types</i>		
Constructive	29%	62%
Passive–defensive	66%	52%
<i>Styles</i>		
Avoidance	91%	61%†
Achievement	28%	74%†
Affiliative	20%	44%‡
Self-actualizing	23%	59%†
Humanistic–encouraging	44%	71%‡
Employee satisfaction		
<i>Staff</i>		
High satisfaction	66%	76%†
<i>Residents</i>		
High satisfaction	46%	57%
Customer satisfaction		
<i>Patients</i>		
High satisfaction (9–10 rating)	65.8%	77.1%
Occupancy rate (average/year)	637	805
Total patient admissions	40,423	54,314
Local market share	22.7%	26.4%
<i>Students</i>		
Satisfaction (% favorable)	90.5%	98.1%
Applicants (% total national pool)	8.9%	10.9%
Acceptance rate	13.3%	9.3%
Matriculation rate: in state	62%	67%
Matriculation rate: out of state	31%	45%
Entering class average MCAT score	30.8	32.8
<i>Community</i>		
Employment	7,608	11,350
Performance		
<i>Academic</i>		
U.S. News & World Report (USN&WR) medical school rank: overall	44	32
USN&WR medical school rank: objective	42	23
USN&WR medical school rank: reputation	44	30
Sponsored research effectiveness (total funding/sf research space)	\$253/sf	\$371/sf
Total research funding	\$80.6 million	\$184.4 million
Total research funding rank	46	25
<i>Clinical</i>		
USN&WR hospital rank	35	20
USN&WR number of top programs	6	10
UHC ranking	NA	5
<i>Financial</i>		
Revenue	\$548 million	\$1,215 million
Operating margin	–\$10.5%	6.4%
Operating cash	(–\$53 million)	\$25 million
Cash reserves	\$45 million	\$124 million

* Leadership culture, employee satisfaction, and customer satisfaction data are based on OCI surveys conducted in 2001, 2003, 2004, and 2006; similar external surveys of faculty and staff conducted in 2002 and in 2005; and an ongoing Press Ganey Associates survey of patient satisfaction. See text for details.

† $P < .001$.

‡ $P < .01$.

rather than acquire tangible assets. This leads to a different set of management imperatives when dealing with employees than one might expect in a traditional, consumer-driven model centered around a manufactured product.¹

First, AHC leadership must motivate faculty and staff to present a positive face of the organization to students, patients, volunteers, the public, and others they serve. A customer who enjoys a particular product may find it relatively easy to assess the quality of the product independently of quality perceptions about a surly clerk who makes the sale; this is more difficult to do when assessing the quality of a lecture provided by an uninspired teacher or of the care provided by an inattentive physician. This is because the intangible benefits accrued by the student or patient who receives services at an AHC are often personified by the individual who provides them.

Second, AHC leadership must reduce real or perceived inconsistencies in the quality of services delivered by different providers. When a product rolls off a production line, management is usually able to set up strict quality controls to reduce the variance of important attributes. In an academic or clinical setting, it is much more difficult to ensure that every faculty and staff member is uniformly engaged and capable.

Third, AHC leadership must ensure that faculty and staff possess interpersonal as well as technical skills. Employees who manufacture products can be hired for their technical skill with less regard to their personality and behavior. In providing academic and clinical services, however, leaders must emphasize the interpersonal skills of faculty and staff, because most students and patients will use this as a proxy for the technical skills that they are unable to judge.²

Finally, AHC leadership must manage the demand for and supply of their highly talented workforce. Unsold products can be discounted in an effort to get rid of inventory, but the unused time of a service provider is gone forever. Because the ability to manage the time and number of tenured faculty is especially difficult, program planning and forecasting become critical.

Leadership challenges in professional services

Professional services like academic medicine involve certification by external bodies of professional staff (e.g., physicians, nurses, technologists) and their delivery organizations (e.g., medical schools, hospitals) to be eligible to serve customers such as students and patients. Leaders in professional service settings, such as department chairs, center directors, deans, and vice presidents (VPs), work with a talented labor force quite distinct from the frontline employees generally associated with the nonprofessional services setting.

For example, professional service leaders must accept the dual loyalties most AHC faculty and many service staff have to their careers as well as to their employer. Although they depend on their employer to provide the leadership and support to which they are entitled as employees of an AHC, professionals tend to identify with their own career and to be loyal to the standards and mores set by their professional bodies.³ Thus, faculty or staff members may be active in their national professional associations or specialty societies and find these affiliations more important to their identity than the responsibilities conferred by their department or service unit. This dichotomy is intensified by the significant time commitment involved in getting and maintaining professional certification, which may be required by an employer but obtained through a specialty society.

AHC leaders also must accept that faculty and professional staff are usually the final arbiters of their own daily activities. In many professional services, the employee usually has the knowledge and expertise to respond directly to the needs of the customer. This is particularly true in academic medicine, where the specific knowledge and skill of the educator, researcher, and care provider often determine the course of action in real time at the point of service. Moreover, the lead professional sets the tone and guides a team that operates under her or his orders (e.g., the course leader for the lecturers, the research lab director for the students in the lab, the surgeon for the operating room team, or the department chair for the faculty). The leader must, therefore, carefully navigate egos and expectations and lead by influence rather than edict.

Finally, leaders must manage the inherent performance ambiguity of professional services that, in fact, are really “credence” services.⁴ This is because it is difficult to determine whether the service provided was the best among all possible options, even after the service is performed (e.g., could the educator have given a better lecture, or could the clinician have provided a more effective treatment?). Academic and clinical leaders must accept that, realistically, they can neither completely control the input (i.e., define exactly what the faculty/staff member should do in a specific situation) nor comprehensively evaluate the output (i.e., did the faculty and/or staff member provide the best service possible?).

The complexity of AHCs as professional service organizations provides a significant set of management and performance challenges. When a need for change is identified in such an organization, executing this change becomes all the more challenging. One approach to drive performance change in such a setting is to create a set of leadership behavioral expectations and norms (i.e., organizational culture) that is constructive and that stresses high performance. It is equally important that leaders recognize and deal with any attitudes and behaviors that impede the overall mission of the organization.

Culture, Structure, and Performance Changes at OSUMC: 2000–2006

Background

OSUMC is one of the largest AHCs in the country, with more than 13,000 faculty,

staff, and students; about one million patient visits per year; and more than \$1.6 billion in revenue. It includes the college of medicine, two general and four specialty hospitals, and a clinical practice plan of more than 700 faculty.

In September 2000, a new leader began serving as the OSUMC senior VP, a new position that combined the previous positions of senior VP for health sciences and dean of the Ohio State University (OSU) College of Medicine with a new position of chief executive officer (CEO) of the OSUMC. This position was developed by the president and trustees during the previous two years to better align the components of the OSUMC and to provide a single point of leadership. This was in response to declines in medical school rankings and hospital financial performance, and to a mandate from the president and trustees to improve OSUMC’s academic, clinical, and financial performance.

The service profit chain^{5,6,7} (Figure 2) posits that leadership behavior drives employee engagement, which, in turn, impacts customer satisfaction and results in improved performance and outcomes. This model of interdependence guided OSUMC’s approach to the institutional changes that were required. The period from September 2000 to August 2007 at OSUMC provides an observational case study to examine how a purposeful series of seven steps (List 1) to change leadership culture, as well as organizational structure, function, and expectations, was able to improve (1) the engagement and satisfaction of faculty and staff, (2) the satisfaction of students, patients, and

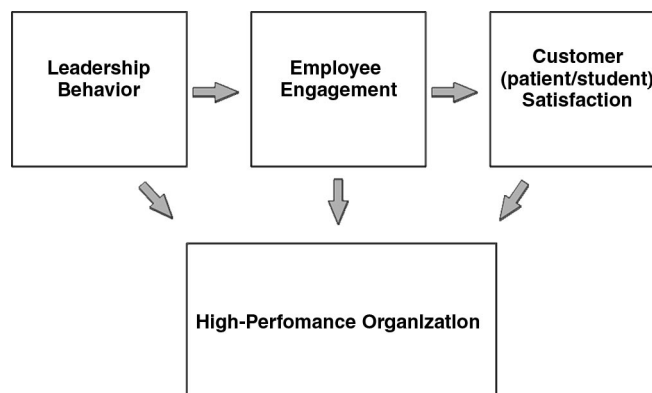


Figure 1 The service value chain illustrates that leadership behavior influences employee engagement/satisfaction, which, in turn, affects customer satisfaction and organizational performance. Source: Adapted from Heskett JL, Sasser WE, Schlesinger LA. *The Service Profit Chain: How Leading Companies Link Profit and Growth to Loyalty, Satisfaction, and Value*. New York, NY: Simon & Schuster; 1997.

employees, and (3) academic, clinical, and financial performance.

Step one: Selecting a leadership team

One of the earliest and most important steps the senior VP took to address the issues and opportunities facing OSUMC was to appoint a small executive leadership team to provide input and oversee strategic and tactical decision making across all aspects of the center. Six of the eight positions on this team were newly created and were intended to align the center's mission and administrative activities. The six new positions were associate VPs (AVPs) (also with responsibility as vice deans) for the mission areas of education, research, and patient care, as well as a chief communications officer, chief planning officer, and chief operating/financial officer (COO/CFO). The CEO of the OSU Health System and director of the OSU Comprehensive Cancer Center were also appointed as members.

The AVPs charged with overseeing each of the mission areas were selected on the basis of their demonstrated leadership and stature; each was a sitting chair of a major department, which provided these new positions an instant level of credibility and influence. To assist in their new part-time responsibilities as AVPs, each worked with several part-time associate and assistant deans to help them perform the range of activities under their oversight. These included associate deans of basic, translational, and clinical research; surgical, medical, hospital-based, and primary care services; and each of several education programs. Two of the administrative leaders (communications, planning) also were well established and were recognized as effective sitting directors in the OSU Health System.

The value of this new leadership team was significant, especially because seven of the members were already highly trusted, respected members of the OSUMC community. Their counsel provided the senior VP an excellent means to learn and understand issues, challenges, and opportunities and helped him communicate more effectively with faculty and staff. The eighth member (the COO/CFO) was a highly respected community business leader and the sitting chair of the board of the affiliated Columbus Children's Hospital. This appointment helped the leadership team

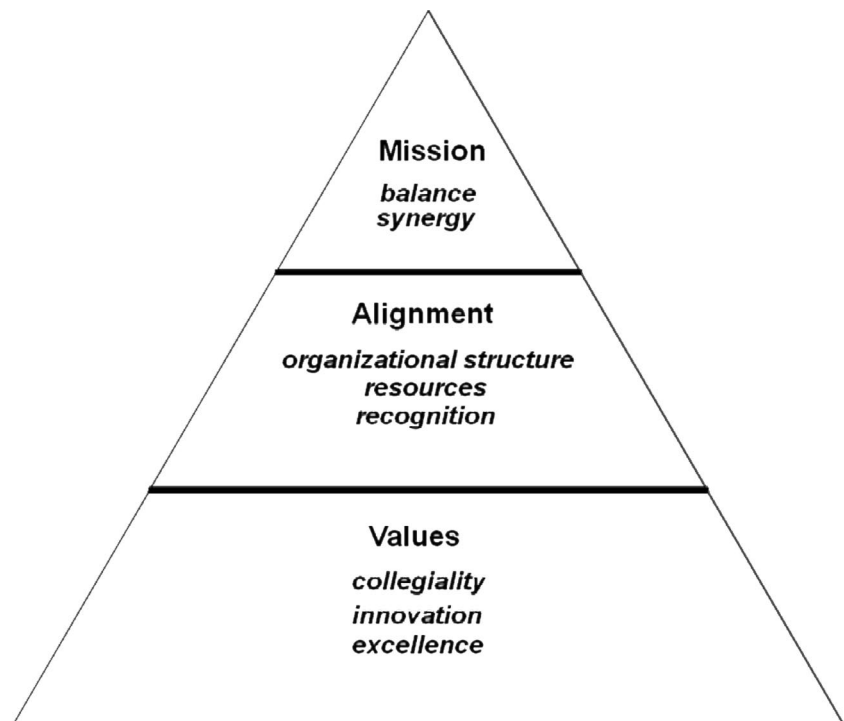


Figure 2 Ohio State University Medical Center (OSUMC) vision for the future. This graphic was first introduced by the OSUMC senior vice president in his January 2001 State of the Medical Center address and was used subsequently in the next five annual addresses to articulate clear expectations for OSUMC. The important association of mission, vision, and values with organizational performance has been well examined.

List 1

Seven Steps in the Culture/Performance Transformation of Ohio State University Medical Center, 2000–2006

1. Select a leadership team.
 - Appoint a small executive leadership team to provide input and oversee strategic and tactical decision-making.
 - Appoint members from both functional (academic, clinical) units and support (administrative) units.
2. Assess the challenges and opportunities.
 - Objectively evaluate organizational culture.
 - Solicit formal and informal input to gauge organizational structure, function, and performance.
3. Set expectations.
 - Establish and clearly communicate a shared vision.
 - Expect a high degree of collaboration within and among units.
4. Align structures and functions.
 - Align medical school, practice plans, and hospital functional units.
 - Align education, research, and clinical service missions.
 - Align support services across the center.
5. Engage constituents.
 - Make faculty and staff feel like part of the center at large—not just their own units.
 - Engage external constituents in driving culture and performance change.
6. Develop leadership.
 - Offer leadership retreats and educational programs around specific leadership themes.
 - Implement “360” leadership scorecards and mentoring to evaluate and enhance performance.
7. Define strategy and track goals.
 - Create a workplace of choice by encouraging a high-performance culture.
 - Establish objective criteria and standards for measuring successful performance.

understand and communicate with other community leaders. Although this newly formed executive leadership team was expanded in 2003, and the roles and responsibilities of some of the team members changed during this period, all six members in newly appointed positions on the original team were still members through the period of this report (2007).

Step two: Assessing the challenges and opportunities

Evaluating the current situation and potential directions for improvement was a critical early step in the process of improving culture and performance. Although the most visible issues were in academic, clinical, and fiscal performance, the concerns of many leaders and the senior VP's initial observations suggested that there were two root causes underlying these manifestations: the organizational culture and its structure.

Organizational culture. To take a more objective view of the organizational culture, the senior VP commissioned a survey to collect quantitative data of the organization's leadership culture. The purpose of the survey was threefold: (1) to determine the "current" leadership culture relative to benchmarks of high-performance organizations, (2) to identify the differences with the "ideal" behavioral norm desired by the leadership team, and (3) to provide a baseline assessment to assess progress.

A well-established survey instrument (Organizational Culture Inventory, Human Synergistics, Inc.)⁸ was administered in February 2001 by Human Synergistics through an external process to ensure anonymity to all 113 senior leaders surveyed. The surveyed group included all leaders who oversaw functional units of education, patient care, and research, as well as directors of administrative and support service units across all parts of OSUMC. With a 100% response rate, the survey quantified three types of organizational culture and each of 12 behavioral norms against benchmarks of other organizations. A second, identical survey was administered simultaneously to identify the ideal culture desired by the same leaders and to quantify the differences between their ideal culture and actual behavior norms of OSUMC.

Constructive cultures promote excellence, innovation, and teamwork in achieving

organizational goals. Defensive cultures may be either passive (where employees diminish success through avoidance, conformity, rigidity, and lack of accountability) or aggressive (where employees are highly competitive, to the detriment of the team, and short-term gains are valued over long-term success). The results of the survey showed a challenging picture. Compared with reference organizations, the senior leadership survey of actual behavior norms put OSUMC in the 28th percentile for constructive culture, the 66th percentile for passive/defensive culture, and the 64th percentile for aggressive–defensive culture. Moreover, the behavioral norm was low in excellence, teamwork, and innovation styles (below the 30th percentile in each dimension) and high on avoidance (above the 90th percentile). Fortunately, the ideal culture desired by the same senior leadership group was, in contrast, highly constructive, with scores high (>90th percentile) in excellence, innovation, and teamwork, and low (<10th percentile) in avoidance.

The external assessors noted an extremely dominant, passive–avoidant culture that promoted avoidance of risk, controversy, timely decision making, and accountability. In particular, the emphasis was on process rather than outcome, and authority was diffused throughout the organization in committees and processes that often required unanimous consent. Thus, it was difficult to make any decision at all, let alone in a timely manner, because everyone effectively had a veto. This process reinforced a culture of passive avoidance and weak leadership because it was hard for any individual to make a decision and be held accountable.

The results of the culture inventory were interpreted and messaged as good news, because the desired constructive culture was strongly associated with high performance and "workplace of choice" organizations, and there was so much upside potential in closing the gap between actual and ideal. By eliciting participation through an independent third party with a standardized assessment tool, it was easier to secure engagement of the senior leadership to help change their own culture (behavioral norms) from what it was to what they actually desired.

Organizational structure, function, and performance. The academic, clinical, and administrative leaders throughout the university, as well as external advisors in academic medicine, management, and leadership, offered formal and informal input to assess the organizational structure and function of OSUMC. The consistent observation was that the whole was much less than the sum of the parts of OSUMC, because its multiple organizational units were not structurally aligned (often competing rather than collaborating), and its missions of education, research, and patient care were not functionally aligned with each other, the organizational units, or the faculty and staff.

The units' lack of alignment with each other was most pronounced for the faculty practice plans, which comprised 33 separate independent corporations, of which 29 were for profit. Very few of the practice plans retained earnings for future investment or provided financial support to the research or educational missions of OSUMC. For most, all year-end earnings were distributed in salary. In a few clinical departments, the chair was not the head of the practice plan, and, in some cases, the practices were in direct competition with each other and with hospitals in the OSU Health System. In some cases, there was direct competition among the hospitals themselves. The poor financial status of the OSU Health System in FY00 was felt to have a significant effect on OSUMC's performance and culture problems; an operating loss of \$58M was posted for FY00, and the deficit in operating cash (\$53M) was greater than all cash reserves (\$45M). Technically, OSUMC was insolvent.

Business interaction among the practices, hospitals, and medical school focused on shifting costs and/or revenue rather than on creating value through partnerships. In some cases, transactions by individual practice plans or hospitals would generate revenue for their own unit that was less than what could have been gained by the entire enterprise. Such win–lose scenarios were considered acceptable and a normal part of the competitive environment. In many cases, discretionary resources and even operating funds were allocated on an ad hoc basis, without a plan for their use or benefit, and often with no written agreements to document commitments.

It was apparent that the dominant leadership culture of avoiding risk, controversy, timely decision making, and accountability provided a significant challenge for change. This was coupled with the organizational, structural, and functional issues of an AHC that was a loose affiliation of competitive private practices and community hospitals associated with a medical school—all with leaders who had limited authority.

Step three: Setting expectations

The next step toward addressing organizational performance at OSUMC was to articulate clear expectations for the entire organization and for individual units and their leaders. This was accomplished broadly with the senior VP's first State of the Medical Center address in January 2001, shortly after his arrival. In an opening slide (used repeatedly in his five subsequent annual addresses), he diagrammed the "Vision for OSUMC" as a pyramid with three tiers of expectations (Figure 1). The top tier, "Mission—Balance and synergy," was supported by a middle tier of "Alignment—Organizational structures, resources, recognition" on a base of "Values/Culture—Teamwork, innovation, excellence." The important association of mission, vision, and values with organizational performance has been well examined.^{9,10}

Each tier was described repeatedly in many venues during the succeeding months and years. The goal of "Mission—Balance and synergy" was to increase the priority and amount of research at OSUMC to be in balance with the education and patient-care missions, and to close a major gap in performance and reemerge as a top-tier AHC. The synergies among research, education, and patient care at aspirational peer AHCs were used to demonstrate how each mission could contribute to the excellence of the others and to the overall performance of the organization. The message was that to improve its performance, OSUMC needed to function as a true AHC, rather than as a community-practice type of clinical enterprise that was simply associated with a medical school.

"Alignment" included expectations of a high degree of collaboration among and within each organizational component (medical school, hospitals, practice plans) in contrast to the existing competitive

relationships. Each organizational unit would be expected to demonstrate significant engagement and commitment to each mission area, which was in contrast to the low academic interest of the clinical practice and hospital enterprises and the low clinical orientation of the medical school. A matrix diagram was used repeatedly to describe how each mission area should align with each component of OSUMC.

Units and their leaders were expected to develop win-win relationships and to prioritize those activities that had benefits for the entire organization and across missions, rather than just their own unit or self-interests. Resource allocation would be based on overall mission priorities, and recognition, rewards, and incentives would be based on mission-related achievements.

Expectations were also set to change the organizational "values/culture" from passive-avoidant to constructive by encouraging values of teamwork, innovation, and excellence. Leaders were expected to become proactive rather than passive-avoidant by being actively engaged in issues rather than just showing support for others who were engaged. The senior VP explicitly expected leaders to make occasional, "well-intentioned, well-informed" errors by trying to be innovative and decisive rather than simply avoiding risks or decision making. He proposed to improve culture, service, and financial performance by growing revenue faster than expense through investment in high-performing people and programs, rather than the more common tactic of turning around a financially failing enterprise by cutting expenses and focusing on work process improvement.

Step four: Aligning structures and functions

To promote the desired expectations in organizational culture and performance, substantial changes in structure, function, and relationships were put in place across OSUMC within and among the academic and clinical functional service units and support services.

Functional units. The first and most important organizational alignment involved the faculty practice plans. Within the first month of arrival, the senior VP charged a leadership group of

four department chairs (surgery, internal medicine, pathology, family medicine) to work with the other chairs to align all of the practice plans with each other and with the medical school and health system. Many similar attempts had been made unsuccessfully during the prior 25 years. In this case, however, the clinical chairs and newly appointed COO/CFO succeeded within two years in merging more than 30 independent companies into a newly created, university-affiliated entity, OSU Physicians, Inc. (OSUP), a nonprofit corporation whose service mission was to benefit OSU. This success was largely the result of the trust in the department chairs who led this effort and the expertise of the COO/CFO in corporate mergers. To enhance mission and organizational alignments, each clinical department in the medical school had a corresponding limited liability company (LLC) within OSUP (which was the sole member of each LLC), each department chair was made director of the corresponding practice plan LLC, and malpractice coverage was combined with that of the OSU Health System. The impact of these alignments was substantial and almost immediately reduced overall expenses for OSUMC (especially for malpractice coverage) and increased revenue (especially for provider contracts).

For the medical school, organizational alignment among departments and centers occurred within the first year through a common budgeting process. In addition, a task force of department and center leaders, led by the executive AVP, reviewed and developed the relationships among departments and centers. The task force completed a white paper within a year, outlining the expected structural and functional alignments. The university-owned hospitals were more tightly coordinated as a health system under a single CEO and aligned with the practice plans and medical school to create a more unified OSUMC.

Support services. To align and enhance internal communications throughout the enterprise, and to provide a consistent and coordinated external message, communication was the first administrative function aligned across the entire center. This meant coordinating all the disparate communications offices in the hospitals, college units, and practice plans into one, center-wide support service that was decentralized enough to meet the needs of

each local unit, while at the same time demonstrating a true sense of ownership and responsiveness, creating a centralized level of accountability, and developing a common brand for the organization's disparate entities.

In parallel, the leaders had to facilitate communication and exchange of information among groups. A unified medical center could not become a reality as long as information systems did not allow groups to have one shared view of the customer or to exchange information in a relatively cost-free fashion. Thus, another early process was to align several separate information systems and their management teams across the hospitals, practice plans, and medical school into an OSUMC-wide enterprise, again with central accountability and decentralized services.

To accomplish this, an enterprise informatics advisory board (EIAB) of executive level mission leaders was appointed by the senior VP to oversee all information technology projects spanning research, education, and patient care. Likewise, an academic department of biomedical informatics was created in the School of Medicine in 2001 to house faculty engaged in the development of information systems and technology to enhance quality and performance across the OSUMC enterprise.

Each of the other support services that previously had been distributed, and were often competitive or duplicative, were also brought into aligned, shared-service models; these included operations, fiscal, strategy planning, human resources, facilities, legal, fundraising, and government affairs. Within a year, OSUMC-wide positions were created, including a chief communications officer, COO/CFO, and chief strategy planning officer to align the decentralized services. This was achieved largely by consolidating some of the unit-based leadership positions; in several cases, the OSUMC support service leader also served as the leader of one of the major organizational units. The process was largely one of realignment and reassignment of responsibilities; after five years, an internal report demonstrated essentially no net increase in overall senior administrative positions, even though OSUMC as a whole had doubled in budget.

Step five: Engaging constituents

One of the earliest challenges was engaging internal and external constituents to help drive needed changes in culture, organizational structure, and function. Achieving the desired improvements required active participation from many diverse groups, including OSUMC leadership, faculty and staff employees, and external constituents, such as alumni and community leaders. One key to securing engagement and support across these groups was to develop a clear, coordinated message tailored to their specific perspectives,¹¹ as well as appropriate incentives, expectations, and rewards.

Internal constituents. Leaders needed to feel they were part of OSUMC as a whole (not only their own academic, clinical, or business units) to extend this expectation to faculty and staff in their units. Leaders were asked to assess the organization of their divisions and departments in the context of services provided to students, patients, employees, volunteers, and the community, as well as what needed to be done to improve financial performance. The formal hierarchies and informal pecking orders which had developed among teachers, practitioners, researchers, and administrators had to be surmounted to encourage dialogue and develop collaboration across missions and units. Extensive communication plans were developed and launched throughout the organization to break down walls among the unit-level silos and to create awareness and pride in the organization as a whole and in each of its missions. These included a variety of new print and electronic publications targeted to specific employee groups as well as faculty and staff across OSUMC. In addition, numerous interdisciplinary and interorganizational programs and centers were created to align activities across missions and functional units.

To enhance faculty and staff engagement broadly, it was also necessary for the leadership to be transparent in discussing stated goals and the plans for achieving them. To accomplish this, the senior VP and senior leaders met with individual units and held regular OSUMC-wide retreats, town hall meetings, and an annual State of the Medical Center update.

One of the most significant roles that leaders play is to articulate the vision for

the organization. In expressing their vision, leaders must pay special attention to the language that motivates their people. In an AHC populated by highly trained physicians and scientists, it is important for leaders to use the language and norms of science and to be viewed as genuine and authentic.¹² Thus, the senior VP discussed the challenges facing OSUMC in terms of his own research and clinical background in immunogenetics, pathology, and physics.

He repeatedly used the immunogenetics analogy of the relationship between structure and function. Translated to the leadership challenge, it meant that organizational structures needed to be modified to fit the functions that were desired. From pathology, he expressed the importance of leaders not just focusing on the symptoms of a problem but, rather, identifying, understanding, and treating underlying root causes (the basic disease) to achieve a sustained and effective solution. His background in physics informed another metaphor he used to describe two strong and ever-present challenges: inertia and entropy. Inertia, the propensity of a body to resist change of its current state, extends to human behavior as well. People must have a significant reason to change their current state, which is why resistance to change is so high. Entropy is the inevitable and steady dissipation and diffusion of energy, which—as with organizations—requires that energy must be constantly applied in an effective way to retain focus and direction. Senior leaders were asked to change and to focus on building the constructive culture they themselves desired.

Within six months of his arrival, the senior VP held his first medical center leadership retreat with the culture survey participants to discuss how they might overcome inertia by creating organizational structures and processes that would facilitate changes in behavior, communication, and performance. How to maintain a long-term focus on the imperative of culture change driven by the discontent with the organization's culture and performance was the focus of another of the 13 subsequent retreats held during the next five years. These retreats were an important vehicle for engaging leadership right from the start. Each had breakout sessions so that every participant could provide feedback on the

specific discussion topic, and each retreat theme was developed on the basis of input from the participants and followed up on the next steps identified at the previous retreat.

Another key to success was providing incentives for the leadership to act as a team in the best interest of the organization^{13,14} and expanding authority to allow for greater accountability. Motivation required that all leaders, whether academic, clinical, or administrative, be seen expressing the behaviors desired because they were expected to be both role models and change drivers. A wide range of incentives and rewards for achieving desired performance and leadership were developed, including budget, space, personnel, and compensation benefits. Reciprocally, disincentives were instituted for poor performance involving the same resource levers. Budgets were changed, space and personnel were reassigned, and salaries were restructured to allow for incentives and disincentives to be provided more easily.

External constituents. Engaging several external constituents was critical in driving the culture and performance change of OSUMC. Most noteworthy was the creation of an informal Strategic Planning Group (SPG) composed of a small group of experts, university and community leaders invited by the senior VP to advise the executive team. This group met with leadership almost monthly and provided significant insight, expertise, and feedback on strategic, tactical, and technical issues brought before them. Two of the members (A.R., L.S.) led executive team retreats, and most of the members also became engaged in other important activities of great benefit to OSUMC.

An important perspective provided by the SPG was the importance of defining and articulating the value and benefit to the local community and other external constituents if OSUMC reached its goals through culture and performance change. This proved to be very effective in broadening the support and engagement of other external constituents, especially alumni, patients, local leaders, and volunteers.

Step six: Developing leadership

Approaches to developing and improving the leadership and management skills of

senior functional and support unit leaders included regular leadership retreats, a Leadership Academy, internal feedback, and external coaching.

The 15 leadership retreats held between February 2001 and March 2007 focused on specific leadership themes with external speakers. Guest speakers included well-known authors such as Phil Harkins,¹¹ Ian Morrison,¹⁵ and Frank LaFasto^{13,14}; academic business school experts such as Jay Barney,¹⁶ Roy Lewicki,¹⁷ Neeli Bendapudi,^{1,2,18} and David Greenberger¹⁹; business leaders such as Len Schlesinger,^{5,7} Anthony Rucci,⁶ and Robert Walter (CEO, chair, and founder, Cardinal Health); academic clinical practice expert Mark Keroack²⁰; and well-known local experts on teamwork such as Andy Geiger (athletic director) and Jim Tressel (head football coach).

These retreats provided significant education and development of the leadership team on a regular basis by focusing on topics such as change management, organizational culture, service value, competitive advantage, customer service, employee management, strategic priorities, teamwork, innovation, performance excellence, trust, and leadership development.

A second approach to leadership development was the creation of a Leadership Academy with the Fisher College of Business. Developed to specifically address the leadership team needs of OSUMC as assessed by an external review and planning sessions, the Leadership Academy consisted of several modules: strategy, finance, organizational performance/design, leadership, culture/trust, strategic planning, team building, communications, performance management, change, and metrics. Ninety-six OSUMC leaders, including the executive team, went through the Leadership Academy, which was first offered in April 2002. Additional leadership development modules were offered subsequently, using the Health Care Advisory Board (The Advisory Board Co., Washington, DC). The Leadership Academy was held in three successive sections of six months' duration, with one third of the leaders in each session. The most senior leaders (including the executive team) participated in the first session, and the positive response of the first group was an incentive for participation by others in the two subsequent sessions.

The benefits of the Leadership Academy were readily apparent. First, by working as a team, emphasis was placed on the shared identity of leaders as members of OSUMC rather than solely as representatives of their particular academic, clinical service, or administrative unit. Second, the leadership team gained administrative and management knowledge from experts. Third, the participants learned to accept the limits of their professional knowledge and to adopt the role of students rather than teachers. Being in the role of trainee allowed the leadership team to be more comfortable with accepting new ideas and advice.

Another early and effective approach to leadership development was implementing a "360" leadership scorecard to both evaluate and enhance leadership performance. The scorecard was developed to assess (1) values—mapped to the constructive culture styles of teamwork, excellence, innovation, and integrity, (2) administrative competence—communication; use of personnel, space, and funds; strategic thinking; mentoring; and management skills, and (3) change management— involvement in, enthusiasm for, and time commitment to change.

Each senior leader was invited to suggest peers, supervisors, and direct reports as reviewers; those who were ultimately selected remained anonymous to ensure objectivity. Both the individual and aggregate evaluations of leadership performance using this tool helped set expectations in changing culture and performance. In several cases, external coaches mentored and assisted motivated leaders who were having difficulties in meeting performance or behavior expectations. Nevertheless, despite these various efforts, several leadership changes were necessary. In some cases, the leader was supportive of needed changes but not proactively engaged in making them happen; in others, the leader was unable or unwilling to respond to the expectations of performance; and, in others, the leader's desire for control and/or autonomy was to the detriment of the organization. Replacing some ineffective or unresponsive leaders and bringing in new leaders from high-performing organizations both clearly had significant benefits in accelerating the organization's change in culture and performance.

The fundamental challenge of leadership development was to get leaders to think,

feel, and act as members of the same team. Many of the leadership retreats and Leadership Academy sessions focused specifically on developing teamwork and on the importance of “getting the right people in the right seats on the bus” before attempting to reach a destination. Substantial time and effort were spent to educate and help academic, clinical, and administrative leaders make their own units more effective, better-aligned teams and, at the same time, act as effective team players for the overall organization; that is, to be successful both as team leaders and as team players.

Step seven: Defining strategies and tracking goals

The vision initially presented to address the perceived root causes of underperformance focused on mission, alignment, and values. To counter the ambiguity of performance in professional services, the leadership team quickly determined that it was important to establish objective standards and criteria for success. The goals had to be ambitious enough to require a change in behavior and performance and to create interest and curiosity, but not so high as to be viewed as unachievable. Goals were set through active dialogue among the senior leadership team and the leadership of each specialty area.

The overall organizational objective first identified in the turnaround process was to increase effectiveness rather than efficiency, because growing successful new programs would more likely attract engagement and buy-in, especially by faculty, than an emphasis on efficiency and cost cutting. In particular, the senior VP and the VP for research of the university developed a biomedical research (BMR) plan that was approved by the board of trustees in June 2001 as one of the top three university priorities under a recently completed (October 2000) OSU academic plan. This BMR plan addressed each of the vision priorities: balancing (by growing) research with the missions of education and patient care; promoting alignment among components of the organization; and enhancing values of excellence, teamwork, and innovation.

The initial vision for OSUMC had three general goals of growth, leveraging assets, and changing culture. By June 2003, using the leadership retreats and

Leadership Academy, broad leadership consensus formed around three specific five-year goals: to create a workplace of choice/high-performance culture; to become a top-quartile AHC in research, education, and patient care by explicit metrics; and to financially generate a 5% margin to invest in mission growth. Later that year, the first of four strategic planning retreats was held, resulting in a formal strategic plan that identified six signature programs and an overall priority of personalized health care. As part of this process, a branding initiative was also implemented, resulting in the OSUMC brand adoption of personalized health care and an OSUMC-wide brand launch.

To track progress, balanced scorecards²¹ were established for each mission area: (1) research (e.g., productivity, performance, reputation, rank among peer AHCs, national awards and honors, publications and citations), (2) education (e.g., number and quality of medical school applicants, medical school rankings, residency directors' satisfaction with medical school graduates, career success, and choice by graduates), (3) patient care (e.g., patient satisfaction, referring physician satisfaction, clinical outcome measures, recognition of medical faculty, rankings of clinical programs and hospitals). Scorecards tracked by the Office of Planning also included financial performance measures (e.g., revenue and expense, operating margin and reserves, program investments). Progress was reviewed monthly in each area to ensure tracking of goals, and the first part of each OSUMC retreat provided a summary update of progress toward the goals.

Observing the Outcomes of Change

By all measures tracked, the leadership transformation in culture was successful in improving employee and customer satisfaction, as well as performance (Table 1). The two most notable changes in behavioral norms were in achievement and avoidance. Using benchmark organization data for the OCI surveys, the OSUMC went from the 28th percentile as a constructive culture in 2001 to the 62nd percentile in 2006, with a corresponding change in the constructive culture style of excellence from the 28th percentile to the 74th

percentile. Reciprocally, the dominant passive/defensive culture type of 2001 dropped from the 66th percentile to the 52nd percentile in 2006, with a corresponding drop in the passive style of avoidance behavior from the 91st percentile to the 61st percentile.

The impact on faculty and staff satisfaction also was significant. An external survey (HR Solutions, San Diego, CA) administered confidentially to all medical center employees in 2005 had more than 7,000 faculty and staff respondents and showed that 76% expressed high job satisfaction. This was a significant increase from the 66% satisfaction shown by a similar survey in 2002 and was greater than the survey benchmark of 74% for top-performing (top 10%) AHCs. Moreover, 79% of OSUMC respondents had favorable views of organizational culture and climate, a level that was also greater than that of the AHC top performers (76% favorable) and norm (63% favorable).

In addition to employee satisfaction, significant improvements were also seen in the second part of the service profit chain: customer satisfaction (in this case, the satisfaction of patients and students). An ongoing Press Ganey Associates (South Bend, IN) survey of patient satisfaction showed an increase in those expressing high satisfaction with services from 65.8% to 77.1% between 2000 and 2006. Increases in patient satisfaction correlated with increases in demand as measured by daily inpatient census (which increased from 637 to 805) and local market share (which increased from 22.7% to 26.4%). Total patient admissions increased 34.4% from 40,423 in 2000 to 54,314 in 2006. For medical students, there was a remarkable 38% increase in applicants to OSUMC during a period when the total number of applicants to medical school nationally increased by less than 10%. Virtually this entire increase was from out-of-state applicants (increased by more than 50%), and it moved OSUMC from a regional medical school with 20% out-of-state students to a national one with 46% out-of-state students in just five years. Selectivity also increased significantly to an acceptance rate of less than 9% and a matriculation rate of 57%, with a marked increase in GPA and MCAT scores of matriculants. Finally, a major goal for the local community was new job growth.

Between 2000 and 2006, the OSUMC had the largest increase of all employers in the region, growing from 7,608 in 2000 to 11,350 in 2006.²²

As expected, the changes in culture and employee and customer satisfaction were associated with significant changes in performance. Tracking academic performance, the medical school showed the largest increase in *U.S. News & World Report* and National Science Foundation rankings of any in the country from 2001 to 2006. Overall, the medical school moved from 44th to 32nd, which included improved objective measures of educational and research performance (from 42nd to 23rd) and peer reputation (from 44th to 30th) as reported by *U.S. News & World Report*. External sponsored research also increased dramatically during this period, moving in rank from 46th to 25th (total expenditures from all sources, tracked by NSF). Total research dollars increased significantly, from \$80.6 million in 2000 to \$184.4 million in 2006.

In clinical performance, hospital rankings by number of top programs increased from 35th in 2001 to the top 20 in 2005 and 2006 by *U.S. News & World Report* measures of more than 5,500 hospitals in the United States. More important, the detailed outcome data collected by the University Health Care Consortium showed that among more than 80 AHC-affiliated hospitals, OSUMC increased its rank to a level of fifth overall in 2006.

Finally, in financial performance, OSUMC went from operating margin losses of \$58M (−10.5%) and \$35M (−5.9%) in FY00 and FY01, respectively, to gains of \$56M (5.2%) and \$78M (6.4%) in FY05 and FY06, respectively, on an increase in revenue from \$548M to \$1.2B. During the same period, operating cash went from −\$53M to \$25M, reserves grew from \$45M to \$124M, and mission program investments increased from \$6M to \$47M. Self-funded investments in facilities included construction of a \$151M biomedical research tower, an \$88M heart hospital, two offsite facilities for clinical service and research, and numerous other smaller projects, all of which were designed, constructed, and completed on time and on budget.

Summary

The strategy of changing leadership culture to focus on excellence and

engagement clearly had a significant impact within six years on improving faculty and staff satisfaction as well as student, staff, and patient satisfaction. At the same time that these changes in employee and customer satisfaction were occurring, a significant improvement in academic, clinical, and financial performance was evident, supporting the precept of the service value chain (Figure 2)—that leadership behavior influences employee engagement/satisfaction, which, in turn, affects customer satisfaction and organizational performance.

Dr. Sanfilippo is executive vice president for health affairs, Emory University, chief executive officer, Woodruff Health Sciences Center, and chair, Emory Healthcare, Atlanta, Georgia. During the period of this report, he served as senior vice president and executive dean for health sciences, Ohio State University (OSU), and CEO of the OSU Medical Center (OSUMC), Columbus, Ohio.

Dr. Bendapudi is associate professor, Fisher College of Business, Ohio State University, Columbus, Ohio. During the period of this report, she was a consultant to OSUMC and a member of the OSUMC Branding Steering Committee. She is currently on leave with the Huntington Bank as chief customer officer.

Dr. Rucci is professor, Fisher College of Business, Ohio State University, Columbus, Ohio. During the period of this report, he was chief administrative officer for Cardinal Health Inc. and a member of the OSUMC Strategic Planning Group and Branding Steering Committee.

Dr. Schlesinger is president, Babson College, Boston, Massachusetts. During the period of this report, he was vice chairman and chief operating officer of Limited Brands Inc. and a member of the OSUMC Strategic Planning Group.

Acknowledgments

The authors are greatly indebted to the commitment and outstanding effort of so many members of the Ohio State University Medical Center (OSUMC) senior leadership team, especially Dan Sedmak, MD, PhD, Caroline Whitacre, PhD, Christopher Ellison, MD, Michael Caligiuri, MD, Peter Geier, Susan Jablonski, and Gail Marsh. They also appreciate the support of many university leaders, especially Presidents William Kirwin and Karen Holbrook, and Provost Barbara Snyder, as well as a wide range of external volunteers and consultants including Roy Lewicki, Jay Barney, and Frank LaFasto, and members of the OSUMC Strategic Planning Group, especially Dimon McFerson, George Skestos, Robert Duncan, Dan Slane, Karen Hendricks, John Wolfe, David Lauer, Carl Kohrt, Jerry Jurgenson, and Robert Massie. They also appreciate the help of Michelle Boone in manuscript preparation.

References

- 1 Berry LL, Bendapudi N. A fertile field for service research. *J Serv Res*. 2007;2:111–122.

- 2 Bendapudi NM, Berry LL, Frey KA, Parish JT, Rayburn WL. Patients' perspectives on ideal physician behaviours. *Mayo Clin Proc*. 2006; 81:338–344.
- 3 Quader MS. Human resource management issues as growth barriers in professional service firms. *J Serv Res*. 2007;2:115–161.
- 4 Eisingerich AB, Bell SJ. Maintaining customer relationships in high credence services. *J Serv Mark*. 2007;4:253–262.
- 5 Heskett JL, Sasser WE, Schlesinger LA. *The Service Profit Chain: How Leading Companies Link Profit and Growth to Loyalty, Satisfaction, and Value*. New York, NY: Simon & Schuster; 1997.
- 6 Rucci AJ, Kirn SP, Quinn RE. The employee-customer-profit chain at Sears. *Harv Bus Rev*. 1998;76:82–97.
- 7 Heskett JL, Sasser WE, Schlesinger LA. *The Value Profit Chain: Treat Employees Like Customers and Customers Like Employees*. New York, NY: Simon & Schuster; 2003.
- 8 Cooke RA, Szumal JL. *Measuring Normative Beliefs and Shared Behavioral Expectations in Organizations: The Reliability and Validity of the Organizational Culture Inventory*. *Psych Rep*. 1993;72:1299–1330.
- 9 Collins JC, Porras JI. *Built to Last: Successful Habits of Visionary Companies*. New York, NY: HarperBusiness; 1997.
- 10 Collins JC. *Good to Great: Why Some Companies Make the Leap . . . and Others Don't*. New York, NY: HarperBusiness; 2001.
- 11 Harkins P. *Powerful Conversations: How High Impact Leaders Communicate*. New York, NY: McGraw-Hill; 1999.
- 12 Quinn RE. Moments of Greatness: Entering the Fundamental State of Leadership. *Harv Bus Rev*. 2005;83:74–85.
- 13 Larson CE, LaFasto FM. *Teamwork: What Must Go Right/What Can Go Wrong*. Thousand Oaks, Calif: Sage; 1989.
- 14 LaFasto FM, Larson CE. *When Teams Work Best: 6000 Team Members and Leaders Tell What It Takes to Succeed*. Thousand Oaks, Calif: Sage; 2001.
- 15 Morrison I. *Healthcare in the New Millennium: Vision, Values and Leadership*. London, UK: Jossey-Bass; 2000.
- 16 Barney J. *Gaining and Sustaining Competitive Advantage*. 3rd ed. Upper Saddle River, NJ: Prentice Hall; 2006.
- 17 Lewicki RJ, Saunders DM, Barry B. *Essentials of Negotiation*. New York, NY: McGraw-Hill; 2006.
- 18 Berry LL, Bendapudi N. Clueing in customers. *Harv Bus Rev*. 2003;81:100–106.
- 19 Greenberger D. *Human Resource Management in Virtual Organizations*. Charlotte, NC: Information Age Publishing; 2002.
- 20 Keroack MA, Youngberg BJ, Ceresse JL, et al. Organizational factors associated with high performance in quality and safety in academic medical centers. *Acad Med*. 2007; 82:1178–1186.
- 21 Kaplan RS, Norton DP. *The Balanced Scorecard: Translating Strategy Into Action*. Watertown, Mass: Harvard Business School Press; 1996.
- 22 Columbus Chamber of Commerce. 2007 Report. Columbus C.E.O. 2008;6:4.