

Reinventing the Academic Health Center

Darrell G. Kirch, MD, R. Kevin Grigsby, DSW, Wayne W. Zolko, CPA, Jay Moskowitz, PhD, David S. Hefner, MPA, Wiley W. Souba, MD, ScD, MBA, Josephine M. Carubia, PhD, and Steven D. Baron, MHA

Abstract

Academic health centers have faced well-documented internal and external challenges over the last decade, putting pressure on organizational leaders to develop new strategies to improve performance while simultaneously addressing employee morale, patient satisfaction, educational outcomes, and research growth. In the aftermath of a failed merger, new leaders of The Pennsylvania State University College of Medicine and Milton S. Hershey Medical Center encountered a climate of readiness for a transformational change. In a case study of this process, nine

critical success factors are described that contributed to significant performance improvement: performing a campus-wide cultural assessment and acting decisively on the results; making values explicit and active in everyday decisions; aligning corporate structure and governance to unify the academic enterprise and health system; aligning the next tier of administrative structure and function; fostering collaboration and accountability—the creation of unified campus teams; articulating a succinct, highly focused, and compelling vision and strategic plan; using the tools of

mission-based management to realign resources; focusing leadership recruitment on organizational fit; and “growing your own” through broad-based leadership development. Outcomes assessment data for academic, research, and clinical performance showed significant gains between 2000 and 2004. Organizational transformation as a result of the nine factors is possible in other institutional settings and can facilitate a focus on crucial quality initiatives.

Acad Med. 2005; 80:980–989.

Over the last decade, numerous observers have expressed concern regarding the plight of academic health centers (AHCs).^{1–8} Combined forces, ranging from altered reimbursement for health care services to decreasing state support for higher education, have threatened the viability of the medical schools and the partnering teaching hospitals that form the essential core of the AHC, while demoralizing the faculty and staff whose efforts actually carry out its missions.

The AHCs have responded to these challenges in various ways with mixed results. Some schools have experienced instability, seeing rapid turnover in their leadership as a volatile environment has challenged even the most experienced medical school deans and clinical system leaders. In some cases, new governance models have been instituted for the medical school as a component of the university and/or for the health system and faculty clinical practice, an acknowledgment that they are business

enterprises in need of exceptional strategic and operational flexibility.^{9,10} Unprecedented attention has been paid to financial issues, with heroic attempts to align complex revenue streams with even more complex portfolios of effort for individual faculty members.¹¹

Despite much innovative thinking, the literature contains little in the way of case studies describing successful transformational initiatives that have allowed an AHC to surmount decisively these formidable internal and external challenges.^{4,12} Indeed, one of the most frequently espoused strategies for success, that of creating a stronger clinical enterprise via expansion or merger with another health system, has been marked by more conspicuous failures than successes. One such failure has been analyzed and reported upon in some depth—the now dismantled merger between the clinical enterprises of The Pennsylvania State University (Penn State) and the Geisinger Health System.¹³ The following is a case study of the events that followed this failed merger and the resultant de-merger. We describe the sweeping transformation in an AHC and analyze the critical success factors that allowed this transformation to occur. In this case, the “near death experience” of a failed health system merger created a platform for organizational reinvention,

in turn providing a model for the transformational efforts of other AHCs.

Historical Context: A Merger and Its Failure

Penn State, founded in 1855, is one of the oldest land-grant institutions of higher education in the United States. Today it stands as one of the major research universities in the nation, ranking 12th in total research expenditures. The Penn State College of Medicine and the Milton S. Hershey Medical Center, however, were not created until the 1960s. At that point, the university’s desire to have a medical school and teaching hospital was matched with a philanthropic gift from the Milton S. Hershey Foundation, which provided the initial capital for Penn State to establish an AHC. The school, teaching hospital, and clinics were built on a newly created campus in Hershey, Pennsylvania, near the state capital of Harrisburg, on land separated from the main university campus by approximately 100 miles. The first medical school class graduated in 1971, and the Hershey campus, including both the college of medicine and medical center clinical enterprise, thrived over the next 20 years. Medical school class size, research funding, and clinical activity grew steadily.

Please see the end of the report for information about the authors.

Correspondence should be addressed to Dr. Kirch, Pennsylvania State University College of Medicine and Milton S. Hershey Medical Center, 500 University Drive, H162, Hershey, PA 17033; telephone: (717) 531-8323; fax: (717) 531-5351; email: <dkirch@psu.edu>.

The health care market forces that arose in the 1990s, as well as their national impact on the clinical enterprise of the AHC, have been documented well.^{14–18} Changes in clinical reimbursement combined with intense market competition and heightened regulatory pressure to severely limit the margins of operational profitability generated by the AHC. These same margins had been critical for Penn State, as for most AHCs, as a source of financial support for internal cross-subsidization of the academic and research missions. Responding to these pressures, most AHCs developed new financial strategies, many of which were essentially expansionist. The driving assumption was that the best reaction to a decreasing financial margin was to create a larger health system in which the same decreased margin percentage yielded a larger absolute amount of funds to cross-subsidize academic and research efforts.¹⁹

This was the strategy that led to the merger between the health systems of Penn State and Geisinger. Mallon has provided an extensive description of the process that resulted in the creation of this new merged system.¹³ In addition, he analyzed the reasons for its failure. Key factors cited include a lack of engagement of the organizational rank and file in creating the new venture; conflicts in the newly established governance, administrative, and operational structures; and inadequate attention to the very different organizational cultures that were asked to become one. This led to a mutual decision, made less than three years after inception of the new entity, to dissolve the merger. The “postmortem” analysis by Mallon describes the forces causing the demise of the merged organization. Here we describe the subsequent reinvention of the Penn State AHC after the de-merger, which took effect on July 1, 2000.

Setting the Stage: The Penn State Organization at De-merger

Key decisions regarding governance and organization were required to extract the clinical enterprise of Penn State from the merged entity, and an important initial decision involved the corporate structure of the AHC when it returned to Penn State. Prior to the merger, the medical center and its clinical faculty and staff

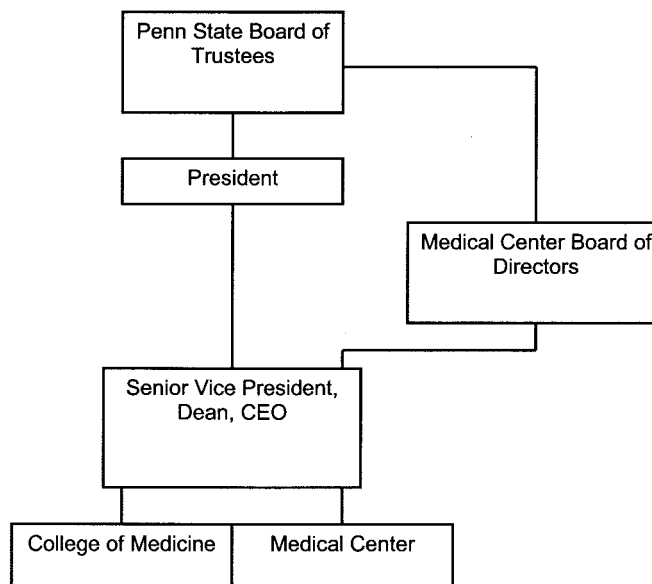


Figure 1 The organizational structure of The Pennsylvania State University (Penn State) College of Medicine and Milton S. Hershey Medical Center, Hershey, Pennsylvania.

had functioned, respectively, as simple business units within and as employees of the university. A number of factors (not the least of which involved maintaining a competitive salary and benefits structure and the need to contain institutional liability) led to a decision at the de-merger that the clinical facilities, staff, and physician faculty members should become part of a new not-for-profit corporate entity called The Penn State Milton S. Hershey Medical Center. Another key decision, however, prevented the problem of creating a clinical enterprise wholly uncoupled from the university and its medical school. This was the decision to form this new “post-de-merger” corporation as a full subsidiary of the university, to have it governed by a board of directors that was accountable directly to the board of trustees of the university, and to have the chief executive officer (CEO) of the medical center also serve as senior vice president of the university and dean of the college of medicine. Thus, despite a semiautonomous corporate structure for the health system (see Figure 1), a model of governance and administrative leadership was established that set the stage for a confluence—rather than a conflict—of interests between the medical school and the clinical enterprise. The details of governance structure—and the impact of different structures—may vary among universities that have uncoupled from, yet retain control over, their clinical enterprises,

but this organizational structure is not unique. Similar situations exist at the University of North Carolina, the University of Pennsylvania, and Stanford University.

The structure described above was defined prior to the effective date of the de-merger, and it was decided to recruit a new individual to serve in the position of senior vice president, dean, and CEO. In addition, prior to the official de-merger, other critically important work was done to separate the business and financial systems of the merged entity. These efforts were both expensive and preoccupying, allowing little time for an overextended faculty and staff to attend to other issues regarding how the newly realigned Penn State College of Medicine and the clinical system of the medical center would interact.

In fact, a “near death experience” would seem an apt metaphor for the organizational response to the de-merger. Enormous energy was devoted to issues of simple organizational survival and, while the decision to separate from Geisinger was well received, the shaken people within the organization had much resentment regarding their recent difficult experience and great trepidation regarding their future prospects. The organization stood at a crossroads with a number of decisions to make.

Critical Success Factors for Reinventing the AHC

More than five years have passed since the de-merger and the creation of a realigned Penn State College of Medicine and Milton S. Hershey Medical Center on July 1, 2000. There is a widespread belief within Penn State Hershey that a fundamental organizational transformation has occurred. To paraphrase one participant, the experience was “as close as you can get to building a new academic health center, without starting from scratch.” In addition, it is clear that this transformation has fueled very positive organizational results, as will be summarized below.

Reinvention on this scale is a complex, multidimensional process.^{20–24} It is possible, however, to discern key critical success factors for the transformation. Nine factors stand out as major contributors to the reinvention that has occurred at Penn State (see List 1). Following we summarize the role of each factor in a sequence to suggest building capacities upon one another, but each factor has a reinforcing effect upon all the others. We will argue that focused attention to these factors can yield a dramatic positive improvement in the culture and performance of any AHC.

List 1

Nine Critical Success Factors for Organizational Transformation of the Academic Health Center

Performing a campus-wide cultural assessment and acting decisively on the results

Making values explicit and active in everyday decisions

Aligning corporate structure and governance to unify the academic enterprise and health system

Aligning the next tier of administrative structure and function

Fostering collaboration and accountability—the creation of unified campus teams

Articulating a succinct, highly focused, and compelling vision and strategic plan

Using the tools of mission-based management to realign resources

Focusing leadership recruitment on organizational fit

“Growing your own” through broad-based leadership development

Performing a campus-wide cultural assessment and acting decisively on the results

As previously noted, one apparent contributor to the failed merger was inattention to the differences between the Penn State and Geisinger cultures. After the de-merger, the work of the organization could not stop while the culture was reassessed. In fact, many of the steps described below already were accomplished or underway before a realistic cultural assessment could be completed.

The problem in diagnosing organizational culture is that often it is done impressionistically from a limited number of perspectives. Few AHCs make a periodic rigorous assessment of the beliefs and attitudes of all those who work on the campus. Such an effort is labor intensive, and academicians often dismiss the idea of doing such a study as meaningless because of the challenges of reliability and validity. In this area, as in so many others, other types of organizations are ahead of the typical AHC. A number of established tools exist to facilitate an in-depth organizational cultural assessment. In the fall of 2000, shortly after the de-merger, the college of medicine and medical center jointly engaged the services of Spurduto, Inc., a national firm with extensive benchmark data, to conduct a campus-wide survey of employee attitudes. All faculty and staff (including residents) were asked to participate, and for this type of survey, a relatively high percentage overall responded (69%). In addition to the formal instrument, anonymous written narrative comments were solicited. These comments were transcribed and filled approximately 540 typed single-spaced pages.

While it is beyond the scope of this article to detail the survey results, certain facts stood out. Only 44% of the respondents in the organization showed a “positive morale score” (a factor derived from several key items in the survey related to satisfaction) in the initial 2000 survey. This percentage was disconcertingly low by comparison with other health care organizations nationally. Written comments indicated that the organization was perceived as having violated the trust of its members in the ill-fated merger, and there was much unhappiness about the use of separate

employment (i.e., salary and benefits) systems in the college versus the medical center after the de-merger. Seemingly minor events that occurred years earlier, such as instituting a parking charge for employees when historically there had been none, or turning off the outside lights illuminating the distinctive main “Crescent” building to cut expenses, clearly festered among faculty and staff. In short, the cultural assessment revealed broad issues of mistrust and the feeling of a divided, rather than unified, campus. As even the most effective leader cannot mandate a culture change, it was clear that any shift in these employee attitudes would need to come from tangible actions on a broad range of issues.

Many faculty and staff viewed simply conducting the campus-wide assessment as a positive step, but visible actions were even more important. When the attitude survey results were received, small, localized action groups were convened to review the data and the anonymous comments from each employment area and to formulate an action plan to address problems that had been brought to light. On a campus-wide level, the values of respect and trust were demonstrated by inviting all employees to participate in quarterly employee meetings, which continue to date. In these quarterly meetings, the senior vice president/dean/CEO and the executive director of the medical center meet with as many as 1,000 front-line faculty and staff to share positive and negative performance data, and to openly celebrate achievements and face challenges. Every question submitted on the evaluation forms of these meetings receives a respectful written response distributed at the next quarterly meeting. By demonstrating their accountability to every employee each quarter, the top campus leaders model the behavior and attitudes they expect from others. The quarterly employee meetings are embedded in an overall, trust-building strategy of open and honest communication across all encounters on the campus and with affiliates and partners, from individual faculty and staff performance evaluations to union contract negotiations.

Making values explicit and active in everyday decisions

Organizational values statements have become universal, and both Penn State

and Geisinger (before and during the merger) were not exceptions. Ironically, despite the clearly experienced cultural differences, the values statements of the two organizations prior to the merger were virtually indistinguishable.

A key insight gained from the employee attitudes probed in the cultural assessment was that faculty and staff perceived real organizational actions as being at odds with the written values statement. While some effort was put into a rapid reevaluation of the previously stated core values of the college and medical center, little had to be changed in the written values statement. Much greater impact came from a widely announced commitment, at all levels of the organization, to align actual decisions with those values. As a simple example, within a few weeks of seeing the employee survey data, an analysis of the cost of eliminating parking fees was completed. It was clear that the widespread employee dissatisfaction generated by the fee greatly outweighed the net annual revenue. The rapid announcement that the fee was being eliminated generated a flood of positive e-mail responses, many noting that this event was much more important symbolically than financially. It gave faculty and staff a sense of being heard, and of actions aligning with values like respect and fairness. A simple, visible symbol of the commitment to listen to employees was the decision to once again illuminate the exterior of the Crescent building, an action widely viewed as a statement of campus pride.²⁵ Investments such as these built trust and affirmed a values-based culture, over time yielding a strong "return on investment."

Equal emphasis was placed on another leadership challenge, the need to move people out of positions when their performance was lacking or their behavior was at odds with the values-based culture being espoused. To confront this issue (which all too frequently is avoided in academic settings), departmental and institutional leaders were supported in having very difficult conversations with faculty and staff who were not being accountable for performance expectations or who regularly violated the values of the organization. For example, individual investigators with large laboratories, but little or no extramural funding, were

required to reduce their use of space. Clinicians with consistently low productivity were required to relinquish operating room block time. Likewise, faculty and staff members who regularly violated the values of the organization were confronted about their behaviors that were contrary to the organizational values. For example, faculty and staff members who were verbally disrespectful to subordinates were clearly violating the organizational values of "respect for all persons" and "teamwork and collaboration." Performance reviews mandated that these behaviors cease. Cases occurred in which individuals who persistently violated core values and standards of behavior were required to leave their position or the organization, some by choice, others by discharge for cause. If these situations had not been confronted, trust gained by other actions would have dissipated.

Aligning corporate structure and governance to unify the academic enterprise and health system

The new corporate structure shown in Figure 1 was an important organizational decision made prior to the actual de-merger. Key elements, as previously noted, were the establishment of a new Penn State Milton S. Hershey Medical Center health system corporation (as a subsidiary of the university) and the appointment of a single university executive overseeing the entire Hershey campus, both the college of medicine and medical center. With this alignment, the potential for individuals to split the interests of the medical school versus the health system was decreased significantly. However, to achieve solid alignment between the educational and research missions led by the medical school and the clinical imperatives of the medical center, equal attention was required for the administrative structures below the senior vice president/dean/CEO.

Aligning the next tier of administrative structure and function

The organizational structure created at the de-merger involved two administrative systems (e.g., for finance, human resources, procurement), one for the college of medicine using university-based systems and one for the medical center corporation using its own newly created systems. This provided ample opportunity for divergence between these

two components of the campus. It quickly became clear that maximizing campus unity whenever possible was vitally important. Certain conclusions followed. For each key function, a single individual was identified as overseeing all activities on the campus (whether they were being conducted by college employees, by medical center employees, or both). For example, with two employment models, there were separate pay and benefits systems for college and medical center employees. To foster alignment, the position of a single chief human resources officer for the entire campus was established to oversee both employment systems. Similarly, a single individual was assigned responsibility for all campus facilities operations, and a single individual was made responsible for all campus financial matters. Vice deans with campus-wide authority were appointed in three areas: education, research, and faculty affairs. The individual serving as executive director and chief operating officer of the medical center became the person accountable for the clinical enterprise, as well as for ensuring its alignment with educational and research activities. Thus, despite legal corporate separation of college versus medical center, this unifying administrative structure facilitated decisions based on consistency with the values, vision, and strategic plan for the campus as a whole.

Fostering collaboration and accountability—the creation of unified campus teams

It has become conventional wisdom that the problems of the AHC are in large part due to departmental barriers that create disconnected silos or fiefdoms. A common lament is, "We should change, but the departments won't let us." In the case of Penn State, the failed merger cast this issue in a new light. When the merger dissolved, the departments actually were a major source of stability compared with lingering questions about governance and senior leadership of the recently merged system. What was not clear was what type of system could most effectively unite the departments and enable the college and medical center to move forward jointly into a turbulent future. Relying on a traditional system of academic committees on the college side, with hospital, medical staff, and practice plan committees on the medical center side, was unlikely to create unity.

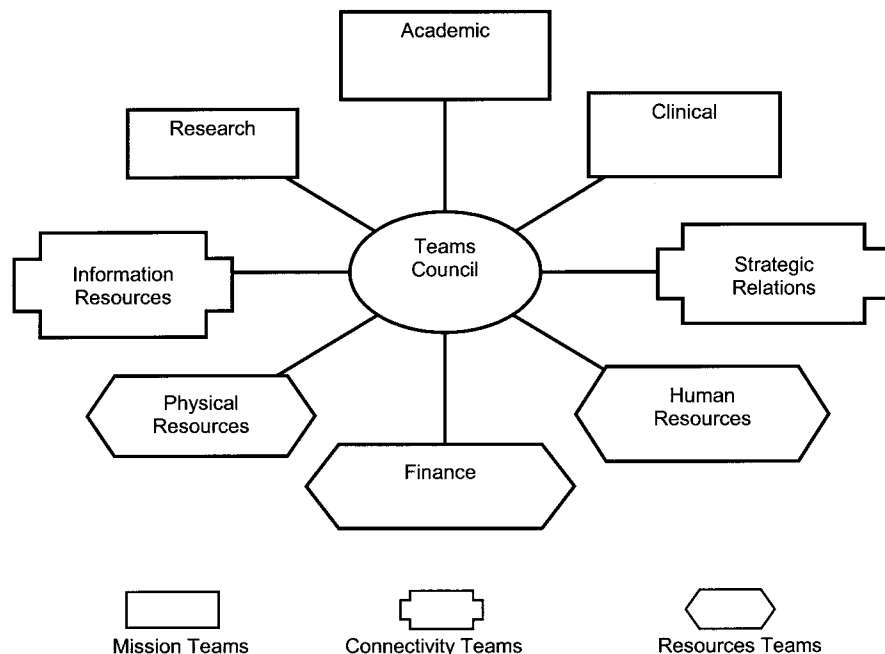


Figure 2 The unified campus teams structure at The Pennsylvania State University (Penn State) College of Medicine and Milton S. Hershey Medical Center, Hershey, Pennsylvania.

Creating dueling committees (e.g., two space committees—one for the college and one for the medical center) was likely to divide rather than unify. In addition, the employee survey revealed that a broad spectrum of faculty and staff, not just chairs, wanted to be involved in moving the campus forward.

Rather than creating new layers of college and health system committees, it was decided that the campus needed unifying, high-performance teams in a small number of key areas. The work of the entire campus was viewed as falling under one of eight areas: the three missions (academic, research, and clinical); the three forms of resources (human, financial, and physical); and two forms of connectivity (information technology and strategic relationships). As illustrated in Figure 2, eight teams were created of ten to 16 members each, drawn from across the functional areas of the campus. Senior administrators and all department chairs were expected to serve on a team, but the teams also included a wide range of individuals from general faculty members to rank-and-file employees drawn from both the college and medical center. The designated leader of each team (a position to be rotated every year or two) joined a small group of senior administrators on a teams council, the key body overseeing the campus. Weekly, simultaneously convened, two-hour

meetings of the teams quickly became the forum where the major strategic and innovative work of the organization occurred. The weekly teams council meeting followed these team meetings to integrate individual team efforts and to keep the entire process focused on key institutional priorities.

Teams are an organizational tool widely used outside academia to attain levels of performance exceeding what is possible with traditional committees or working groups.^{26–28} It is beyond the scope of this article to describe the process of team building that was required, or to outline how team functions were coordinated with the daily operational work of full-time administrators. While these issues presented real challenges, the teams quickly became the energy behind and guiding force for transformational changes ranging from the initial cultural assessment to the development of a campus-wide vision statement and strategic plan. On the teams, over 120 faculty and staff drawn from across the campus were made responsible for institutional success. The teams were instrumental in breaking down the walls that typically separate departments and that divide the clinical system from the college, and they lowered the traditional barriers between employees and management. As more faculty and staff participated in the teams' decision-

making processes, they realized that they were part of the leadership of the organization, and that they were accountable for overall organizational success. Following the example of the senior leadership, the teams and management learned to work together collaboratively to remove barriers and solve problems that in the past would not have been addressed.

An example of sharing leadership and accountability via the use of teams lies in the process of dealing with the frequently contentious issue of space utilization and planning. In the teams structure, the stated charge to the physical resources team is to plan for the effective and efficient utilization of space and physical resources to accomplish the strategic missions of the academic health center. The team developed rigorous performance metrics for space utilization, and now serves as the group that reviews and responds to major (i.e., cross-departmental) requests for new and increased space, as well recapturing space that is underutilized. The process is transparent and conducted in accord with an explicit set of principles.

Team-based leadership has begun to spread through the campus. Several departments have teams accountable for specific department functions, and the clinical chairs and basic science chairs now meet in self-led groups that function essentially as teams. Leadership is understood and practiced increasingly as an organizational capacity generated as people work together to improve the entire institution.

Articulating a succinct, highly focused, and compelling vision and strategic plan

Just as written values statements are ubiquitous, aspirational vision statements and accompanying voluminous strategic plans are equally universal. Another finding of the Penn State Hershey campus cultural assessment was that the faculty and staff were eager to have a picture of the future and a plan to get there. Given the issues of trust and accountability that had arisen during the merger, the challenge was producing something in which they had confidence. A voluminous strategic plan in a large vinyl binder that would reside unread on shelves would not be a compelling force. The solution became the first major task of the newly created unified campus teams.

While almost all such planning exercises use a model of assessing strengths, weaknesses, opportunities, and threats, they can vary widely as to how the plan is created. The process varies from top-down to bottom-up, with varying degrees of consultant assistance (or even control). By giving the task to the eight teams, with coordination by the teams' council, and with a strategy of active campus-wide communication about the content of their discussions, a consensus vision for the future and a plan to put it in place were created within four months. The resulting document was only 18 pages long (including black-and-white photos) and fit in a 5" by 7" format. Having a strategic plan that was such a concise and practical document led one faculty member to refer to it as "our owner's manual," another reflection of a growing sense of commitment and accountability. Within weeks the document had been distributed to every campus faculty and staff member and to key individuals in the community. Even more importantly, it was widely read and discussed. A revision was completed in 2005 reflecting progress to date and the changing environment.

Using the tools of mission-based management to realign resources

As market-driven economic pressures continue unabated, and when aspirations and a plan have been articulated, it becomes more important than ever for the AHC to use its financial resources efficiently and effectively. The basic principles of trying to align limited revenues with strategically desired efforts have been referred to as mission-based management. Descriptions of how effort is measured, how the flow of funds is analyzed, and how realignment is achieved are readily available.^{11,29,30} In the case of Penn State, the principles followed were very much in line with those used in other institutions. The main difference lies in the way the process occurred. The three unified campus teams for missions (academic, research, clinical) took the lead in developing productivity measures; the finance team led a process of funds flow analysis and took responsibility for ongoing oversight of every departmental budget (including that of the dean's office); and all teams and departments participated in a program-by-program evaluation to ensure optimal alignment of resources with strategically important

efforts. Since acceptance by faculty and staff is so important (and so difficult to achieve in these efforts), the strategic relations team mounted a communications campaign to improve the understanding of and mobilize support for this open, collaborative budget process. The net result was not only better alignment of resources, but also better mission balance. In some cases, marginal programs were scaled back or even closed despite the kind of political pressure that typically derails such efforts in an academic environment. Trust in the process increased as it became clear that there were no secret side deals and that all funding allocations were subject to peer review and discussion.

A key element for success was removing the artificial barrier of each department and cost center "resting on its own bottom" with respect to financial profit-and-loss statements. It was acknowledged that the existing financial arrangements included many historical (and often secret) side-deals and anomalies. The decision was made to move to a budgeted margin approach in which each chair and manager now must meet or exceed the promised bottom line. This approach applies equally to a department with a positive bottom line (where the new expectation is to become even more positive) and to the department with a negative bottom line that requires explicit cross-subsidization (where the new expectation is to become less negative). This creates an incentive for all departments to strive toward greater efficiencies, freeing chairs and managers to move or exchange resources without fear of being viewed as nonproductive. Most importantly, it focuses attention on overall organizational performance, rather than reinforcing the old model of departmental competition for resources and profit margins.

Focusing leadership recruitment on organizational fit

As might be imagined, the turmoil of a merger and de-merger, followed by a massive organizational transformation, was more than many campus leaders wanted and were prepared for. The net result was the need to reassess every leadership position while adhering to core values and doing so in as fair and respectful manner as possible. In the years that followed the de-merger, over

two-thirds of the top 50 leadership positions on the campus turned over (including vice deans and associate deans, department chairs, and senior college and medical center administrators). For example, on July 1, 2000, there were 21 academic departments. Since that time, in a process of restructuring, four departments were added and two ceased to exist. Of the 23 department chairs in place in 2005, only five were in that position on July 1, 2000. While our knowledge these turnover data are not tracked in any formal manner nationally, in our experience this degree of leadership change in such a short time frame is rarely seen in an AHC, or any academic setting. At Penn State, it occurred without a sense of organizational turmoil. There was collective urgency regarding the need to have the right individuals in leadership positions in order to accomplish consensus goals, and collective enthusiasm grew as those individuals were recruited from both within and outside the organization. In the process of recruiting new leaders, there was a shift away from the traditional academic emphasis on individual professional accomplishments. While these factors remained important, they no longer were the main determinants.³¹ Decisions and investments related to recruitment, development, and retention turned primarily on leadership skills and attitudes, as well as fit with the new culture being established.^{32,33} The appointment letter for new chairs states explicitly the expectation that they will think and operate from an institutional perspective. When indicated, a professional development plan for the chair is put in place. Senior leaders also make a commitment to mentoring and supporting these new colleagues. It goes without saying that accomplishing this shift required a considerable investment in assisting search committees to adapt to the new model. The process was enhanced by the consistent use of a single search firm, which then was able to develop a deep understanding of the organization. Going beyond the recruitment effort, the explicit organizational emphasis has been on integrating values into all other people-related processes and systems, including training and development, performance appraisal, and promotion.

“Growing your own” through broad-based leadership development

A basic organizational assumption at Penn State Hershey has been that leadership skills can and should be developed, not only among department chairs and other senior leaders, but also among mid- and lower-level managers and even among junior faculty and front-line staff. A corollary assumption is that this leadership development can best be accomplished via an internally driven program, rather than out-sourcing the task. The establishment of and investment in a campus-wide Center for Leadership Development with a discrete internal budget thus became another critical success factor.

While many AHCs have identified the value of intensive leadership development programs for key leaders such as chairs or medical directors,³⁴ the Penn State effort sought both depth and breadth. To date, nearly 1,200 individuals on the campus have participated in one or more of the leadership programs, both as participants and as instructors.

The Penn State Hershey Center for Leadership Development operates on the principle that improving faculty and staff job satisfaction and enhancing personal growth and development will contribute to organizational performance. The Center focuses primarily on leadership development—building human connections that enhance creativity, collaboration, and resource exchange—as opposed to the honing of managerial skills (e.g., budgeting and hiring).

The Center offers programs at three levels for the campus. Leadership Foundations is a series open to all employees. Echelon I targets employees (including faculty members, nurses, and residents) at or above the midlevel manager. Eight one-day modules, covering topics such as effective communication, aligning departmental and institutional vision, and measuring performance, have been designed and are taught largely by in-house leaders. A more advanced curriculum, Echelon II, was launched in early 2004. This program is a more intense 12-session program (four hours, twice a month for six months) that targets senior leaders. Outcomes measures that are being monitored include results of faculty and staff satisfaction surveys, retention, and

succession planning. One result of this commitment to developing leadership as a tangible adaptive capacity of the organization was a gradual, but dramatic, change in the critically important arena of conflict resolution. As in many academic settings, the culture of the organization historically provided little room for negotiation and resolution of conflicts. Many conflicts appeared to take on a life of their own, quickly escalating and demanding adjudication at the top of the administrative hierarchy. Department chairs often avoided accountability and would not engage in difficult conversations with faculty members, instead appealing to the authority of the dean. The leadership development program offered opportunities to learn conflict resolution techniques immediately applicable in daily encounters. Ultimately, chairs and others recognized that conflicts had to be resolved in a collegial manner “at home” and could not be kicked upstairs as they had in the past. Most of this work took place behind the scenes as leaders developed a strong commitment to being solution-focused and to resolving conflict locally. As less energy was invested in conflict, productivity could increase. An even more important result of a strong internal leadership development program was that individuals could find greater purpose and meaning in their collective work—reinforcing a deep factor in human motivation.³⁵

Quality—The Next Frontier

When morale, mission productivity, and financial performance improve, an AHC is then in a position to focus on the issue of quality in a manner not possible when it is in a reactive posture.^{36,37} Currently much of the energy at Penn State Hershey is focused on creating tangible quality initiatives that align all three missions. In some cases, external corporate entities are seeing the value of participating as strategic partners (and investors) in these initiatives. Quality is difficult to attain and just as difficult to measure. When an organization has reinvented itself, however, the push to move to higher levels of quality (i.e., the drive to be better, and not only bigger) becomes compelling.

Outcomes assessment

In the absence of outcomes data, assertions of organizational transformation may be little more than platitudinous wishful thinking. Below we present some quantitative outcome measures for Penn State Hershey in the four years following the de-merger (July 1, 2000, to June 30, 2004). (See also Table 1.)

Academic performance

The typical measures of student and resident recruitment and performance did not suffer in any apparent manner during the merger and de-merger, a fact likely due to the dedicated efforts of faculty members to protect learners. The measures have remained solid, and the institution has received full institutional reaccreditations from the Liaison Committee on Medical Education and the Accreditation Council for Graduate Medical Education, with positive findings stronger than seen in prior cycles. One measure that has shown a positive trend is the percentage of medical students responding to the Graduation Questionnaire who “agree” or “strongly agree” or that they are satisfied with their educational experience, rising from 82.0% in 2000 to levels ranging from 86.6% to 90.3% over the next four years.

Research performance

Overall research funding during the three years of the merger was stagnant, an especially unfortunate event during core years of the doubling of the National Institutes of Health (NIH) budget. The response since July 2000 has been unprecedented. In line with the organizational emphasis on collaboration, basic and clinical investigators have established alliances and partnerships, yielding success in competing for large multidisciplinary grants. The basic science and clinical chairs also are aligning their interests and goals in order to facilitate the continuum from research product lines to clinical service lines. All departments now share centralized core instrumentation to eliminate redundancy, provide technical expertise and encourage collaboration. As a result, from 2000 to 2004, total sponsored funding (direct and indirect) increased 80%. One national research

Table 1

Performance Measure Comparisons, The Pennsylvania State University (Penn State) College of Medicine and Milton S. Hershey Medical Center, Hershey, Pennsylvania, Fiscal Year (FY) 2000 and FY 2004

Measure	FY 2000	FY 2004
No. (%) Penn State medical students who passed the United States Medical Licensing Examination (USMLE) at first attempt		
USMLE Step 1	95/108 (88.0)	122/124 (98.4)
USMLE Step 2	98/98 (100)	110/119 (92.4)
% Graduating students who overall were satisfied with the quality of their medical education		
	82.0	86.7
Total annual sponsored research funding (US\$ in millions)		
	\$54.7	\$98.5
No. of annual clinical encounters		
Admission	20,622	23,700
Clinic visit	524,411	697,235
Emergency room visit	33,705	45,044
Surgery	15,897	18,254
Annual revenues (US\$ in millions)		
College of medicine	\$176.5	\$191.2
Medical center	\$438.0	\$602.4
Total campus	\$614.5	\$793.6
Percentage of medical center revenue transferred to the college of medicine (US\$ in millions)		
	6.3 (\$27.7)	3.9 (\$23.5)
Medical center margin after funds transfer (US\$ in millions)		
	-\$21.8 (deficit)	\$16.4
Annual fund-raising (US\$ in millions)		
	\$12.8	\$27.2

benchmark for medical schools is NIH funding rank. The most recent data show that for the three-year period from 2000 to 2003, the Penn State rank actually fell from 64 to 70 for medical schools nationally for NIH support. Thus, the bulk of the increased research support for Penn State did not come from NIH; rather, it came from other federal and state sources. The fact that the Penn State funding portfolio is not dominated by NIH funding suggests that this institution may weather the slowdown in the growth of the NIH budget better than other medical schools.

Clinical performance

Even during the merger, data were accumulated separately for the Hershey Medical Center. Clinical volumes for the medical center as part of the merged clinical system actually suffered during the merger, in part because of unhappiness generated by the merger among traditional referral sources, as well as internal organizational conflict. The years 2000–2004 were marked by

dramatic growth in activity, with admissions increasing 15%, clinic visits 33%, surgeries 15%, and emergency room visits 34%. From the perspective of financial stability, the Hershey component of the merged health system lost nearly US \$22 million in the year prior to full de-merger. From 2000 to 2004, total medical center revenue rose from US \$438.0 million to US \$602.4 million. While this rate of growth is near the mean seen for a large AHC cohort during this period, it is important to note that in each of those years the operating margin for the Hershey Medical Center was solidly positive and well above the mean for teaching hospitals nationally. Length of stay and cost metrics similarly rank in the top quartile of performance within a national AHC cohort. Most importantly, patient satisfaction has increased, with the medical center ranking consistently in the upper quintile in a database of several dozen academic health systems using a shared patient satisfaction instrument.

Financial support for the academic and research missions

Penn State continues to cross-subsidize the important academic and research missions with resources garnered from the health system. While previously there was little scrutiny of allocations of these funds to departments, all support now is monitored by the principles of mission-based management. With mission-based management and a transparent budget process, departments also have been encouraged to invest reserves and gift funds rather than request institutional funds for special initiatives, and to be rigorous in evaluating the mission value of their programs. In addition, the mission-based approach has uncovered several situations where a department was needlessly subsidizing a function that more appropriately should have been covered by central institutional funds. This has resulted in increased program revenues and indirect cost recovery for these functions.

This rigor decreased the need for funds from clinical earnings to support academic and research activities. As a percentage of total medical center revenues, this academic support payment has decreased from 6.3% to 3.9% of total revenues between 2000 and 2004, thereby decreasing the stress placed on the health system. The academic support payment was reduced by increasing college of medicine revenues, specifically tuition and indirect cost recovery, and by decreasing expenses through a major cost reduction initiative in 2000 (saving over \$7 million) and other departmental expense reductions (including some program closures) since then.

Development

Philanthropic giving can provide an indicator of the public perception of the health of an organization. During the three years of the merger, annual giving remained flat for Penn State Hershey. From 2000 to 2004, total annual fund raising increased by 113%.

Morale

As noted above, the employee satisfaction survey in 2000 revealed only 44% of staff, faculty, and residents as having positive morale. A second survey done in early 2002 showed that figure to have increased to 62%. Preliminary data from a third survey completed in early 2005 show that

this positive trend continues. The firm that conducted the 2000 and 2002 surveys noted this increase as the best level of improved morale among its health system clients nationally for that year. The most important point regarding measuring morale, however, is that an organization should never do so unless it intends to share the results with its employees and to act on the findings. In the case of Penn State, it was these actions that played a key role in rebuilding organizational trust and commitment.

Applicability to other settings

The outcomes measures listed above provide strong support for the notion that the AHC on the Penn State Hershey campus indeed has been reinvented, with a resultant surge in organizational performance. This raises the question of whether a focus on the same critical success factors would achieve similar results in other AHCs.

The conditions that existed on July 1, 2000, the de-merger point for Penn State, are undeniably relevant. As the subsequent cultural analysis confirmed, there was a deep level of mistrust and unhappiness on the campus. While some might view this as a major obstacle to change, in fact it created a rare situation for an AHC. In July 2000, virtually no one advocated for maintaining the status quo. Certainly there were some individuals who imagined a return to the fondly remembered “better days of the past” (which may or may not actually have existed), but the vast majority realized that the external world had changed in ways that made turning back impossible.

Thus, the failed merger may have created a “burning platform,” i.e., a collective sense of urgency that actually facilitated the acceptance of sweeping change. Without a heightened readiness to accept change, major transformational change and reinvention are unlikely to occur.³⁸ A deep sense of urgency, such as that seen at Penn State at the de-merger, certainly does exist in many AHCs today. The key is to use this urgency to catalyze productive organizational transformation. Unfortunately, all too often the felt urgency simply becomes the impetus for conflict—or for incremental (or even counterproductive) change. It can be argued, however, that there is no

major obstacle (other than the inherent human resistance to change) preventing any AHC leader from coupling this urgency with explicit attention to the critical success factors described above. Doing so would give the AHC leadership an opportunity to move to a much higher level of performance. The rewards are considerable, and not measured merely in terms of financial stability and faculty productivity. The result can be the opportunity to learn, discover, and promote health in an organization in which morale is moving in a positive direction and relationships are felt to be mutually supportive rather than adversarial. Even more importantly, the meaning and purpose that led to careers in health care in the first place can be recaptured.

Dr. Kirch is senior vice president for health affairs, Pennsylvania State University; dean, Pennsylvania State University College of Medicine; and chief executive officer, Milton S. Hershey Medical Center, Hershey, Pennsylvania.

Dr. Grigsby is vice dean for faculty and administrative affairs, Pennsylvania State University College of Medicine and Milton S. Hershey Medical Center, Hershey, Pennsylvania.

Mr. Zolko is associate vice president for finance and business and controller, Pennsylvania State University College of Medicine and Milton S. Hershey Medical Center, Hershey, Pennsylvania.

Dr. Moskowitz is vice dean for research and graduate studies, Pennsylvania State University College of Medicine and Milton S. Hershey Medical Center, Hershey, Pennsylvania.

Mr. Hefner is executive director and chief operating officer, Milton S. Hershey Medical Center, Hershey, Pennsylvania.

Dr. Souba is professor and chair of surgery, Pennsylvania State University College of Medicine and Milton S. Hershey Medical Center, Hershey, Pennsylvania.

Dr. Carubia is chief academic liaison officer, Pennsylvania State University College of Medicine and Milton S. Hershey Medical Center, Hershey, Pennsylvania.

Mr. Baron served as executive director and chief operating officer of the Milton S. Hershey Medical Center. His untimely death occurred prior to final submission of this manuscript. His vital contributions to its contents, however, merit his inclusion as a named author.

This article is dedicated to Steven D. Baron.

The authors also wish to acknowledge the contributions of Drs. Robert C. Aber, Julien F. Biebuyck, Richard C. Simons, and Ms. Rose Nissley. These findings were presented in part at the Annual Meeting of the University HealthSystem Consortium in Tucson, Arizona, on October 7, 2004.

References

- 1 Aaron HJ (ed). *The Future of Academic Medical Centers*. Washington, DC: Brookings Institution Press, 2001.
- 2 DeAngelis CD. The plight of academic health centers. *JAMA*. 2000;283:2438–39.
- 3 Pardes H. The perilous state of academic medicine. *JAMA*. 2000;283:2427–29.
- 4 Fein R. The academic health center: some policy reflections. *JAMA*. 2000;283:2436–37.
- 5 Kassirer JP. Academic medical centers under siege. *N Engl J Med*. 1994;331:1370–71.
- 6 Shine KI. The future of academic health centers. *Physiologist*. 1995;38:51–55.
- 7 Korn D. Reengineering academic medical centers: reengineering academic values? *Acad Med*. 1996;71:1033–43.
- 8 Goldman L. The academic health care system: preserving the missions as the paradigm shifts. *JAMA*. 1995;273:1549–52.
- 9 Saxton JF, Blake DA, Fox JT, Johns MME. The evolving academic health center: strategies and priorities at Emory University. *JAMA*. 2000;283:2434–36.
- 10 Weiner BJ, Culbertson R, Jones RF, Dickler R. Organizational models for medical school—clinical enterprise relationships. *Acad Med*. 2001;76:113–24.
- 11 Watson RT, Romrell LJ. Mission-based budgeting: removing a graveyard. *Acad Med*. 1999;74:627–40.
- 12 Kirch DG. Reinventing the academy. In: Gilkey RW (ed). *The 21st Century Health Care Leader*. San Francisco: Jossey-Bass, 1999.
- 13 Mallon WT. The alchemists: a case study of a failed merger in academic medicine. *Acad Med*. 2003;78:1090–104.
- 14 Iglehart JK. Health policy report: rapid changes for academic medical centers: first of two parts. *N Engl J Med*. 1994;331:1391–95.
- 15 Iglehart JK. Health policy report: rapid changes for academic medical centers: second of two parts. *N Engl J Med*. 1995;332:407–11.
- 16 Pardes H. The future of medical schools and teaching hospitals in the era of managed care. *Acad Med*. 1997;72:97–102.
- 17 Blumenthal D, Meyer GS. Academic health centers in a changing environment. *Health Aff (Millwood)*. 1996;15:200–15.
- 18 Ludmerer KM. *Time to Heal: American Medical Education from the Turn of the Century to the Era of Managed Care*. New York: Oxford, 1999.
- 19 Topping S, Hyde J, Barker J, Woodrell FD. Academic health centers in turbulent times: strategies for survival. *Health Care Manage Rev*. 1999;24:7–18.
- 20 Watson RT. Rediscovering the medical school. *Acad Med*. 2003;78:659–65.
- 21 Iglehart J. Forum on the future of academic medicine: session I—setting the stage. *Acad Med*. 1997;72:595–99.
- 22 Iglehart J. Forum on the future of academic medicine: session II—finances and culture. *Acad Med*. 1997;72:754–59.

- 23 Omenn GS, Lichter AS, Warren L, Bollinger LC. Shaping a positive future for academic medicine at Michigan. *JAMA*. 2000;283:927–28.
- 24 Griner PF, Blumenthal D. Reforming the structure and management of academic medical centers: case studies of ten institutions. *Acad Med*. 1998;73:818–25.
- 25 Dellasega C. Healing in spaces. *JAMA*. 2004;292:780.
- 26 Katzenbach JR, Smith DK. *The Wisdom of Teams*. Boston: Harvard Business School Press, 1993.
- 27 Feifer C, Nocella K, DeArtola I, Rowden S, Morrison S. Self-managing teams: a strategy for self improvement. *Topics Health Inf Manage*. 2003;24:21–28.
- 28 Lencioni P. *The Five Dysfunctions of a Team*. San Francisco: Jossey-Bass, 2002.
- 29 Bulger RJ, Osterweis M, Rubin ER (eds). *Mission Management: A New Synthesis Volume 1*. Washington, DC: Association of Academic Health Centers, 1998.
- 30 Rubin ER (ed). *Mission Management: A New Synthesis Volume 2*. Washington, DC: Association of Academic Health Centers, 1999.
- 31 Souba WW. The new leader: new demands in a changing, turbulent environment. *J Am Coll Surg*. 2003;197:79–87.
- 32 Grigsby RK, Hefner DS, Souba WW, Kirch DG. The future-oriented department chair. *Acad Med*. 2004;79:571–77.
- 33 Bachrach DJ. Developing physician leaders in academic medical centers. *MGM J*. 1996;Nov/Dec:35–50.
- 34 McCurdy FA, Beck G, Maroon A, Gomes H, Lane PH. The administrative colloquium: developing management and leadership skills for faculty. *Ambul Pediatr*. 2004;4:124–28.
- 35 Souba WW. Academic medicine and our search for meaning and purpose. *Acad Med*. 2002;77:139–44.
- 36 Cohen JJ. Realizing our quest for meaning. *Acad Med*. 2004;79:464–68.
- 37 The Academic Medical Center Working Group of the Institute for Healthcare Improvement. The imperative for quality: a call for action to medical schools and teaching hospitals. *Acad Med*. 2003;78:1085–89.
- 38 Gilmore TN, Hirschhorn L, Kelly M. Challenges of leading and planning in academic medical centers (http://www.cfar.com/Documents/Lead_AMC.pdf). Accessed 19 July 2005. CFAR (unpublished), March 1999.

Teaching and Learning Moments

The Balancing Act

As I entered the room, the patient transformed from that of hopeful trustee to acerbic lecturer, “Are you a student?” she demanded.

“Yes, I am a fourth-year medical student working with Dr. Y and he . . .”

“I am sorry but I am not seeing students. I am here to see Dr. Y.”

I located Dr. Y and he explained that the patient’s unwillingness to see me was unacceptable because this was a university hospital. He would see her following my presentation and discussion of the case. He walked back with me to the exam room.

“Good morning, I am Dr. Y and this (with a hand gesture in my direction) is the fourth-year student on our service. He is part of our team, I expect him to evaluate you, and he will be involved in today’s consultation.” Dr. Y explained that being evaluated by me was part of being evaluated by him, and that if patients never allowed student participation, then student’s education would be incomplete.

I began to interview her with substantial anxiety initially. I learned every detail of her illness—what she had experienced emotionally and

physically, and how she had comprehensively traversed the complicated topography of a vast medical system in search of a physician with expertise and compassion that coincided with her needs. After spending almost an hour with her, I presented her case to Dr. Y and then we saw her together. She learned about the most beneficial management and treatment for her malignancy according to Dr. Y, and I learned how to begin to navigate the waters of challenging patient interactions.

Now as a faculty member at an academic medical center, I am the one handling patient requests. Sometimes, the patient is just not interested in visiting with the trainee. These scenarios require a balancing act that accounts for and answers to the patient’s needs and rights, the educational obligation to trainees, and the academic mission that has become increasingly complex. As a faculty member and educator, I am sometimes caught in the crossfire between a patient who is disinterested in student or trainee involvement, and the trainee who needs the educational experience of patient interaction.

I certainly do not have a solution. Often, it is easiest to simply acquiesce,

but this is not always best for the patient, especially within environments that are organized around layers of caregivers that include resident physicians. Careful negotiation is likely to yield the most favorable outcome, but if the final assessment calls for the exclusion of the trainee, lack of reconciliation may lead to pejorative sentiments on behalf of those exiled. Students and trainees deserve access to all reasonable training opportunities and are a critical part of the clinical team. The implications of decision making that supports exclusion of trainees may be substantial.

The approach used by Dr. Y could certainly be challenged. His support and protection of my educational opportunity, however, enhanced my view that student and resident training is an important priority during interactions with a patient. The experience elevated my sensitivity to all involved when a patient requests a change in the roster of the medical team.

Lynn D. Wilson, MD, MPH

Dr. Wilson is associate professor, clinical director and vice chairman, Department of Therapeutic Radiology, Yale University School of Medicine, New Haven, Connecticut.