

A White Paper from Perot Systems Healthcare Thought Leaders

# The Value of Clinical Transformation

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Better Information = Better Healthcare

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## Background

Societal and market forces for change in healthcare, including calls to improve the organization and delivery of services for patients, have been present for several decades. Until the last few years, however, the demand for improvement has largely been focused on controlling the increasing cost for healthcare services.

Despite its cost, historically, there has been little debate that the United States offers one of the most advanced healthcare systems in the world from a technological perspective. Our access to state-of-the-art medicine, coupled with well-trained clinicians, has resulted in the ability to provide truly life-saving interventions for individual patients. In addition, the general public has observed a dramatic change in the organization of healthcare delivery as healthcare institutions have evolved from largely community-oriented, “mom and pop” operations to large, multi-unit delivery organizations. Furthermore, these large organizations are perceived as holding tremendous resources.

Our access to state-of-the-art medicine, coupled with well-trained clinicians, has resulted in the ability to provide truly life-saving interventions for individual patients.

Yet, with all the success of the American healthcare system, the same public is boisterously questioning the value provided by these seemingly advanced systems of delivery. In many quarters, our healthcare system is increasingly seen as highly dysfunctional. For example:

- Advocates for the poor decry the American healthcare safety net as shredded, in disrepair, or woefully inadequate.
- Consumer advocates denounce the service mentality of the industry as either lacking, or callous at best.
- Policy makers question the value of society's investment when the price of healthcare is so high and yet basic services seem unavailable to many, and when fundamental measures of health status for our nation's populace are embarrassingly mediocre.
- Quality gurus point to the nearly 100,000 annual deaths<sup>1</sup> attributed to adverse drug events as a travesty against all American citizens.

Many people would even argue that the problems facing American healthcare have been compounded in recent years. The nation faces increased demands for better service and new requirements for quality in the face of increasing constraints on our nation's fiscal resources. Calls for dramatic performance improvement are much more public and open than at any time in recent history. The end result is an evolving imperative for transformation of the American healthcare system.

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<sup>1</sup> Institute of Medicine, 2000 - "To Err Is Human: Building a Safer Health System." L. T. Kohn, J. M. Corrigan, and M. S. Donaldson, eds. Washington, D.C: National Academy Press.



## Contents

Transformation—The Imperative.....	4
Clinical Transformation—A Definition .....	7
The Critical Role of Leadership in Clinical Transformation .....	10
One Approach to Clinical Transformation.....	11
Transformation Management in Action.....	22
A Call to Action.....	23
Summary .....	27

## Transformation—The Imperative

The value proposition for healthcare services is—like any other product or service—determined by a combination of technical quality, service quality, and cost. Critics of our current healthcare delivery system argue that the value is declining because cost is increasing much more rapidly than general inflation. These critics also contend that service quality is flat or declining and technical quality is highly variable, and thus undependable.

As a backdrop to these criticisms, which affect the perception of healthcare value, there are many intrinsic and extrinsic forces impinging upon the industry. The confluence of these forces is synergistic and is beginning to force change in the very fabric of our complex healthcare environment in subtle, yet substantive ways. While we can argue over the pace of change, it is increasingly evident that the change will be deep and wide. Why?

**Globalization.** The forces of economic globalization are precipitating profound and irreversible changes in industries throughout the United States. In fact, the opening of our economic borders is likely to continue unabated into the future, barring some unforeseen events. As a result, unremitting competition is forcing all sectors of the economy to examine cost structures for possible economies, demonstrate quality, provide service, and meet “value” standards. Industries that fail to meet these standards suffer loss. In particular, the production elements of our national economy have witnessed substantial loss, as evidenced by the disruptive dislocations of the shoe, garment, furniture, and automotive industries—just to name a few. In the service sector, new changes are occurring with the growth of outsourcing as a model for selected offerings. Even in healthcare, we are at the formative stages of global competition in selected service areas of the industry. Just as Canada has become the beacon for cheaper drugs, advances in technology and telemedicine, coupled with the advent of digital radiography are allowing radiology readings to be supported from virtually anywhere in the world. And, entrepreneurs are creating opportunities to provide these, and multiple other, healthcare services not only in the United States but also throughout the world.

In such a changing environment, healthcare is increasingly disconnected from the realities of the market place. We are organized to deal with large payers, yet healthcare services are increasingly paid for by service-, quality-, cost-conscious individuals.

Concurrently, healthcare costs in the United States remain one of the leading—and most rapidly increasing—cost indicators across most industries.<sup>2</sup> With the increasing ability to move work across national borders, every incremental cost added to the production of goods and services requires either a reciprocal increase in productivity and efficiency or a cost reduction. Without such a response, goods and services produced by American workers are offered to the world with a disparate cost disadvantage for American companies.

Globalization is, therefore, a major precipitating force for change in American healthcare. Taken together, efficiency, productivity, and cost requirements—in conjunction with reliable, meaningful data to measure quality—are facilitating transformation of healthcare.

**Consumerism.** There is a latent public mandate for access and transparency of healthcare information. The advent of the Internet and our ability to “Google” for all sorts of information has put consumers in the driver’s seat. They are now able to compare services from one provider or one delivery system with those provided by another, and the sophistication of the comparisons is increasing exponentially.

We are also experiencing a shift in who the consumer is in healthcare. Historically, the largest purchaser of healthcare service has been the government with employers representing the second largest purchaser. With the move toward health savings accounts and increased out-of-pocket co-payments, the real consumer is fast becoming the individual. In such a changing environment, healthcare is increasingly disconnected from the realities of the market place. We are organized to deal with large payers, yet healthcare services are increasingly paid for by service-, quality-, cost-conscious individuals.

Compounding the problem is that our consumer expectations are frequently driven by our experiences in other service-related industries, which create “expectations” for healthcare. We are moving from general comparisons of costs and service to detailed, accurate, timely and transparent comparisons of clinical results provided by physicians, hospitals, and care programs.

In a consumer-driven world, reputation is a critical, as well as a fragile phenomenon driven primarily by public perception. In such a world, organizations are most at risk if they are perceived as:

- Offering lower than expected quality
- Dealing with patients in a misleading (or confusing) manner
- Engaging in inappropriate activities
- Operating without the community as its highest priority<sup>3</sup>

<sup>2</sup> Source: US Department of Labor, Bureau of Labor Statistics, <[www.bls.gov/iag/iaghome.htm](http://www.bls.gov/iag/iaghome.htm)>.

<sup>3</sup> Herzlinger, Regina E.—*Market-Driven Health Care*, Perseus Books, 1997, p. 42.

It is clear that consumerism is less about our internal, healthcare industry-driven definitions of quality and more about how consumers define quality. To meet these consumer expectations, the industry must better understand service, pricing, responsiveness, communication, and a host of other more consumer-driven attributes.

**Demographics.** There is no doubt our nation is aging at a rapid rate. The aging of our nation's populace is fostering a national debate on how best to manage the future funding of Social Security, Medicare, and a host of other social programs. The impact of the demographic change is clear.

When Social Security was first enacted, 16 workers contributed to the Social Security Retirement Fund for every retiree. Today, the ratio is nearing two workers for each retiree. While there is great debate regarding potential solutions to the problem of funding Medicare, there is uniformity of thought that the demographic trends will place significant pressure on our nation's resources and capabilities for delivering healthcare in the future.

**Reimbursement and Regulation Pressures.** The simultaneous ratcheting down of payments by government-based programs with increasing reliance upon personal, out-of-pocket payments by consumers is forcing the industry to "do more for less." Just as with other industries which have crossed this bridge before us—airlines, utilities, technology, and communications—the healthcare industry is now facing unyielding cost pressures. The unfortunate paradox for healthcare is, that as a business, it lives in the quiet schizophrenia of operating in the environments of consumerism and regulation simultaneously.

**Clinical Workforce Shortages.** There is a growing consensus that healthcare is facing an inadequate supply of clinicians of all types. Continued reliance upon a manpower intensive delivery model that does not fully embrace technology as an enabler of the care delivery process is problematic. The training pipeline is very long—so much so that any changes made today in our output of physicians will not be fully apparent for 10 to 15 years down the road. Most who are involved in care delivery will argue that such a slow response—if we continue to use current delivery models—is entirely insufficient. The end result is a rapidly evolving requirement for change in how healthcare is delivered.

**Biotechnology.** Genomics, nanomedicine, and rapidly changing approaches to pharmaceutical developments are but a few examples of the many exploding breakthroughs occurring in the field of biotechnology. The pace of change and its direct impact on the delivery of care is quickening. The capability of these medical devices, drugs, and delivery mechanisms—and their impact on where and how care will be delivered—are far greater today than at any point in human history.

**Information Technology.** The digitalization of data, availability of bandwidth, and the use of new and flexible software applications for tying disparate information together are all creating new possibilities in the healthcare computing world. The ubiquitous nature of telecommunications has begun to move from changing our daily lives and affecting our expectations to changing our work lives and affecting our requirements for how work is accomplished on behalf of patients. All of these changes present many opportunities and create many more forces for change in the industry.

In sum, these forces must be properly addressed by healthcare organizations. While the list is not exhaustive, it represents some of the key external forces that are requiring the industry to improve its value proposition through transformation of the care delivery process. To insure that the results of the healthcare enterprise are “safe, effective, efficient, timely, patient-centered, and equitable”<sup>4</sup>—as well as beneficial<sup>5</sup>—proceeding with a business-as-usual approach does not seem to be an acceptable direction. Meeting these challenges requires leadership at all levels—starting at the top—if transformation is to have a chance of success.

In essence, we are arguing that while much has been done over the preceding decades to change the business aspects of healthcare, insufficient focus has been given to these drivers of healthcare change, which all disproportionately affect the clinical side of the house. Furthermore, while the business elements of healthcare can be a frustrating by-product for most of us, the clinical outcomes, when debated in an open and transparent way, hold direct and personal implications for all of us.

### Clinical Transformation—A Definition

As noted, healthcare is a complex industry that is generating high societal and personal expectations from users, payers, and observers. It also hosts a diverse set of constituencies with competing demands and requirements. With the increasing consolidation of healthcare delivery organizations, leadership (both management and governance) plays a critical and expanding role in the world of healthcare. As an example, the National Quality Forum made a “Call to Responsibility” in 2004 calling upon governance to embrace its role as a force for change in

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<sup>4</sup> Institute of Medicine—“Crossing the Quality Chasm: A New Health System for the 21st Century,” National Academy Press, 2001.

<sup>5</sup> National Quality Forum, Back to Basics, “Hospital Governing Boards and Quality of Care: A Call to Responsibility”, December 2, 2004, Washington, DC.

healthcare by stating in its first principle that, "...governing boards play a vital role in monitoring and improving hospital care" to ensure that it is safe, effective, efficient, timely, patient-centered, equitable, and beneficial.<sup>6</sup> Successful change and performance improvement requires internal discipline and ongoing focus over an extended period of time. Therefore, the support of governance as the "window on the world" is a crucial and often poorly managed component of the overall change agenda within the organization.

While demands on management and governance are increasing, so are the requirements for effective leadership among leaders of healthcare systems. Pursuit and acceptance of transformational change, a priori, requires the appropriate culture, and culture is driven throughout the organization from the top.

Ultimately, any change agenda, whether expansive like transformation or more limited in nature, requires a symbiotic relationship between management and governance. Change will only occur in the organization to the degree that management is supported and empowered by governance. Therefore, management and governance must hold a common understanding of what constitutes clinical transformation.

We offer a definition of clinical transformation as a comprehensive, ongoing approach to care delivery excellence that measurably improves quality, enhances service, and reduces costs through the effective alignment of people, process, and technology.

If we deconstruct the definition into its component parts, the following elements are important considerations:

- **...a comprehensive ongoing approach**—Healthcare transformation is not a project; rather, it is a process. Organizations that approach complex change as projects frequently fail. In fact, some have argued that effective transformation "will play out over the tenure of at least two CEOs, if not more."<sup>7</sup> Management and governance must understand that embarking upon a change strategy requires ongoing support, people resources, and organizational investments if success is to be realized. It also requires ongoing involvement of clinicians and other subject matter experts who hold a deep understanding of how care is actually delivered in the organization. It is only by mobilizing these resources across the entire organization that a healthcare transformation effort can effectively support quality, patient safety, and continuous improvement.

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<sup>6</sup> National Quality Forum, Ibid.

<sup>7</sup> Reinertsen, James, "A Theory of Leadership for the Transformation of Healthcare Organizations", p 5, [www.ihi.org](http://www.ihi.org), January 13, 2004.

- **...care delivery excellence**—While many healthcare organizations operate as either local or regional enterprises, it is critical to drive the organization toward national best practices and standards. In today's world where information is ubiquitous and readily available, the best quality outcome becomes the standard bearer for all other comparisons. Through the adoption of accepted national, or increasingly international, criteria, healthcare leaders can drive a consistent level of quality throughout the organization. As Don Berwick, M.D., posited to healthcare leaders several years ago, healthcare organizations must be “places with no needless deaths, pain, waits, helplessness, and waste.”<sup>8</sup> Excellence, under such a definition, extends far beyond the traditional quality perspective offered by individual clinicians or others who are involved in the care delivery process.
- **...measurably improves quality, enhances service, and reduces costs**—As Brent James, M.D., has aptly pointed out, “If you can't measure it, you can't change it.”<sup>9</sup> Healthcare transformation initiatives require the use of specific metrics to measure outcomes. In fact, based on the experience of the authors, it is the failure of rigor in setting defined outcomes that frequently contributes to the lack of accountability for driving change in healthcare organizations. Furthermore, management and governance must appreciate that defined metrics require a comprehensive approach involving all aspects of the organization, not simply the clinical processes. While a focus on clinical areas is critical, it is a not sufficient focus for driving change in healthcare.
- **...effective alignment of people, process, and technology**—Attention to any one element of the transformation triad is insufficient. Too frequently, healthcare transformation initiatives are relegated to the IT department without further discussion, debate, and dialogue. True transformation focuses on technology as an enabler, rather than as the driver of change in care delivery, with equivalent focus on people and process.

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<sup>8</sup> Berwick, Donald, “Pursuing Perfection: Raising the Bar for Healthcare Performance,” The Institute for Healthcare Improvement, [www.ihl.org](http://www.ihl.org), March 2001.

<sup>9</sup> James, Brent, Executive Director, Institute for Healthcare Delivery Research.

## The Critical Role of Leadership in Clinical Transformation

The forces described earlier are changing the face of healthcare delivery. As a response to those forces, most healthcare delivery organizations have, to date, focused on making incremental changes, despite their increasing recognition that the requisite improvements in clinical care can only be achieved through a major and fundamental transformation of the healthcare organization rather than through a piecemeal approach.

Experience in other industries (i.e., airlines, financial services) suggests that, ultimately, the transformational change is usually initiated from outside the mainstream of the affected industry. Furthermore, the process of transformation tends to marginalize many, if not most, of the traditional players in the industry during the process of change. The same will be true for the delivery of healthcare services unless management and governance take charge of the clinical transformation efforts within their organizations.

Interestingly, healthcare governing bodies may be in the best position to lead the clinical transformation effort. The reason is the unique role that boards of healthcare delivery organizations play relative to their counterpart governing bodies in other industries. Regardless of industry, the board is responsible for fiduciary oversight of the organization's assets and is accountable to its stakeholders. However, in the case of not-for-profit, community-based organizations, the primary stakeholder is the community served rather than the company's shareholders. The greater good for these organizations, and the fiduciary obligation, is to do what is best for the community, and serves as a driving force for sustaining services within the community. This reality should serve as a catalyst for the board to drive clinical transformation throughout the organization for the good of the community.

Accepting that mandate, management and governance must understand the full scope of what clinical transformation is and how it can be accomplished. The board must assure executive management of its commitment to clinical transformation. Senior management must execute the plan according to agreed-upon parameters and positive achievement in three key areas:

1. **Adoption and Implementation of a Formalized Change Acceleration Process.** A disciplined performance improvement process using appropriate tools and techniques is critical for an organization to break away from the traditional "way-we-do-things-around-here" mentality. In addition, it can help the organization to appropriately face and make performance improvement changes in the most effective and efficient manner.

**2. Technological Support.** Clinical transformation will not happen without the use of appropriate clinical information systems to support data collection, transfer, and information sharing to enable the seamless delivery of healthcare across multiple providers and settings. While appropriate technology will be an accelerator for clinical transformation, it will require major capital investment in the short-term that would otherwise be used for more traditional capital projects.

**3. Support for Affected Stakeholders.** Clinical transformation and clinical information systems have the greatest impact on the daily work and environment of support for physicians, nurses, and other direct care providers. Accordingly, as the primary deliverers of care, clinicians' involvement must be supported in the clinical transformation process and also be held accountable for facilitating performance improvement in support of clinical transformation.

It is essential that the governing board understand and support these roles. Subsequently, executive management must be expected to design and lead the clinical transformation process. Executive management also needs personal support from the board to weather the difficult period of working with physicians and other providers and employees through a major change process. Without that level of leadership and ongoing support for executive management, governance can inadvertently close the door to dealing with the expected impediments to change, thus, becoming a barrier to clinical transformation.

### One Approach to Clinical Transformation

Holding a clear point of view on the approach to clinical transformation is important as a foundation for management and governance as they assess the critical capabilities of their organization in supporting the transformation process. While change can frequently be initiated and driven for a period of time in an organization, it often cannot be sustained without investment in new infrastructure and support systems. The deployment of clinical information systems is one key example of the infrastructure and support systems required for maintaining transformation on the clinical front.

Given that the landscape is littered with so many clinical information system failures, the operative question becomes: *How does management and governance enhance its opportunity for success in a clinical transformation initiative?* Figure 1 provides a framework that depicts three key elements that must be in place and effectively integrated to provide the greatest possible value in the organization and delivery of healthcare services—people, processes, and technology. While it represents a relatively simple framework, it provides a focus on three specific areas that, in our experience, will dramatically enhance the success of such initiatives for any organization involved in clinical transformation.

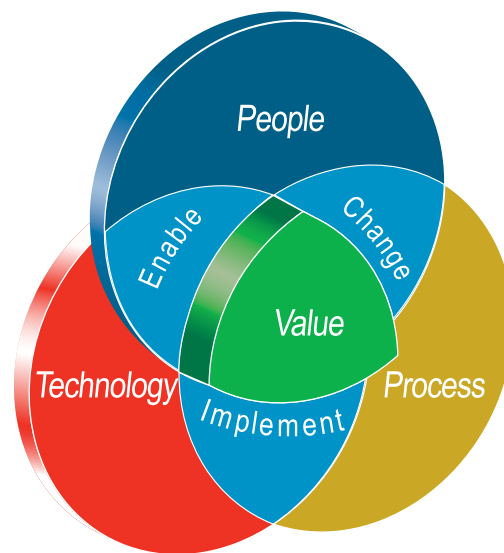


Figure 1: The Clinical Transformation Triad

### People.

It should go without saying that successfully carrying out a major change is dependent on people, and specifically, on the support of those people most affected by the potential changes. In the case of clinical transformation, many professional disciplines are involved, each with a rich history of training and experience that informs how clinical work should be carried out.

Collectively, this combination of people and historical process creates the culture of the organization, which in turn drives how work is accomplished within the organization. The culture of the healthcare delivery system is a very powerful force that will strongly resist transformation by constantly pushing back or sabotaging anything that is not consistent with the “way we do things around here.”

Based on research conducted during development of its Change Acceleration Process (CAP)<sup>10</sup>, General Electric Corporation identified four areas of focus and discipline that are particularly critical if an organization is to be effective in addressing the people considerations of transformation. These areas of focus are:

- Leadership
- Creating a Shared Need
- Shaping a Vision
- Mobilizing Commitment

The core of the change acceleration process is the commitment of organizational leadership and the involvement of key stakeholders in determining how the organization can best accomplish its goals for change and transformation.

**1. Leadership.** To accomplish any major change, leadership must begin at the top of the healthcare delivery system. The initiative must have a champion who sponsors the change. That champion must provide the time, passion, and focus for the transformation effort to be successful.

Effective leadership requires the ability to foster a shared vision among the multiple constituencies that participate in care delivery in most complex healthcare organizations. Without such leadership, transformation efforts are likely to fail. As a result, governance has a particularly critical role in assessing leadership's capabilities for supporting, guiding, directing, and managing transformation for the organization. In too many organizations, the failure of clinical transformation efforts lies directly in the hands of leaders and managers who were ineffective in setting the vision and providing the necessary strategic leadership.

Finally, a collaborative governance and management structure, which fosters more effective communication and interaction between governance and management, is essential. Mutual support is critical in taking on projects that will last for long periods of time. Clinical transformation initiatives are not projects. Rather, they represent the design of a fundamental change in the way business and care delivery are accomplished within the organization. Clinical transformation is a process representing a change in the way work is accomplished within the organization. Support from governance to senior leaders to managers through the organization then becomes an essential foundation for success in such a bold initiative.

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<sup>10</sup> The Change Acceleration Process (CAP), Copyright 2005, General Electric Company.

2. **Shared Need.** A shared need is created within an organization when it is broadly evident that the need for change significantly outweighs the resistance to change. Shared need can be created by involving the right stakeholders with the right professional capabilities, skills, and experience to evaluate the threat or opportunity, which drives the potential change. The approach used must be data- and fact-driven, with clear and open communication so that the reason to change is fully instilled within the organization.
3. **Common Vision.** The shared recognition for change is a necessary, but insufficient, element in a clinical transformation effort. For change to be successful, the management and governance that are providing leadership for the change process must have a clear vision of where the organization needs to go, what must be accomplished, and why. The desired outcomes (vision and goals) must be clear, legitimate, and widely understood throughout the healthcare delivery organization.
4. **Mobilizing Commitment.** In order to mobilize commitment to the clinical transformation process, key stakeholders must be identified. Then potential resistance can be analyzed and action plans developed to gain a strong commitment from constituents whose support and investment in the change effort is critical for success.

Another important aspect of leadership and clinical transformation is the need for creating an environment that aligns leaders within the organization and with the initiative. All too often, the organization will initiate a transformation project without considering the impact of the incentive plan on where leaders will actually spend time, energy, and resources. Therefore, tying the incentive structure of the organization to the specific elements of the transformation initiative is important. Finally, measurement of results becomes a critical component of overall success in driving the transformation initiative (Please refer to the chart on the following page).

Given that the landscape is littered with so many clinical information system failures, the operative question becomes: *How does management and governance enhance its opportunity for success in a clinical transformation initiative?*

**People.** Critical questions for organizational leaders in assessing the readiness of the organization for change include:

- Who will serve as the executive sponsor of the change strategy?
- What is the degree of readiness among healthcare workers? Physicians? Managerial and administrative leadership?
- Is there a shared vision?
- What is the degree of credibility, trust, and communication between physicians and leadership?
- How are clinicians being involved in the transformation process? Who are the champions for the transformation among the clinicians? How were they identified?
- What is the leadership style of the organization? How are decisions made? Will the approach work in a transformation environment?
- How does communication occur within the organization?
- What are the incentives of the senior leadership and others in the organization? Are the incentives aligned with the transformation goals?
- Who holds accountability for success?
- What are the competitors to the transformation process in terms of time, money, and other resources?
- Are the elements of value or the ROI definition clear? Have clinicians bought into the parameters along with the leadership?

## Process.

Any major change initiative requires a formal and disciplined approach to performance improvement. Without adequate attention to fully understanding the current state of how work is accomplished, a clear vision of the future state for how work should be done, and the capabilities of the systems to be deployed in support of the future state, the transformation effort is placed in jeopardy. In our experience, organizations are too dismissive of the issues related to work flow and process redesign. The end result is that new work is designed into the system without removing old work, resulting in a situation whereby new work is piled on top of old work, creating more work, which is ultimately rejected by physicians, clinicians, and other workers intimately involved in the care delivery process.

Again, while there are many elements of process that are important in a transformation effort, several key areas are essential to success. They include:

- Effective process redesign support
- Transparency related to the work of the organization
- Using measurement as a core driver for evaluating results
- The acceptance of standards throughout the organization

**1. Process Improvement.** Too frequently, process redesign is pursued by healthcare organizations without a formal structure or methodology for capturing the process changes. However, a process focus is only as effective as the discipline used in defining current state, future state, and the inherent gap along with steps required for mitigating the gap. The approach to the many issues involved in process redesign cannot be intuitive. It requires discipline and rigor. In fact, quality and patient safety demand a fastidious focus and clarity on what changes need to occur, and where and how they will occur.

Whether developed internally or adopted from external sources, an effective approach to the process elements of a transformation initiative requires attention to project management, change management, quality testing, information technology transition, and a host of other methodologies. To the extent that the organization engages discipline and rigor related to the process issues, the chances for success are greatly enhanced.

**2. Transparency.** Donald Tapscott, a noted futurist, has stated, “Trust is the expectation that others will be honest, accountable, considerate, and open.”<sup>11</sup> He goes on to state that “... transparency forces trustworthy behavior: if you’re open, you are less likely to have something to hide.” We are not suggesting a transparent process whereby a transformation project is scrutinized by the external world. Rather, by “transparency”, we are suggesting that the organization must put in place mechanisms for regular, open, reliable communication on the status of the transformation initiative.

Transparency must address the trade-offs of the many different interests held within the organization—organizational governance and leadership, physicians, clinicians, and care delivery team members of all types and perspectives, the IT department staff, CIS vendors, other infrastructure vendors, support staff, and others who may be involved in the transformation effort. And, transparency can only be sustained through clear metrics defined and accepted by all who are involved. Senior leaders hold a critical role in assuring that the metrics will fairly evaluate the process of the transformation, as well as the implementation of the support systems.

Also, the inclusion of transparency as a core philosophy of the organization leads to other critical considerations. For example, a transparent approach to transformation will naturally lead to calls for transparent documentation of technical and service quality from external stakeholders and constituencies. Therefore, any decisions to move the organization towards transparency will have spin-off effects on other, equally compelling, reporting needs of the organization. Therefore, leadership must articulate and governance must support a “raising the bar” on this issue due to the strategic nature of the question.

**Measurement.** It is often said, “You manage what you measure.” Building on that perspective, we suggest that the new mantra of the healthcare industry should be, “You can’t change what you can’t measure.” While relatively straightforward in concept, we are continually amazed at the number of healthcare organizations that do not rigorously use measurement of current state as a foundation for measuring success in future state initiatives. In addition, measurement reinforces the notion of effective use of transparency as a driver for change.

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<sup>11</sup> Tapscott, Donald – *The Naked Corporation*, Free Press, New York, 2003, p. 78.

Increasingly, regulatory agencies (i.e., JCAHO), external groups (i.e., Leapfrog), and the general public are demanding measurable responses to changes in healthcare. Beyond simply measuring and reporting, however, the industry should much more aggressively set standards and definitions for what is measured. While some organizations will be vulnerable under such a scenario, those organizations which embrace the current environmental forces and engage in clinical transformation will be well prepared for meeting this challenge.

**3. Evidence-based Standards.** As noted above, while standards are in some respects a part of life in the healthcare industry, they also serve as a threat for parts of the healthcare community. For example, while most hospital medical staffs are accepting of standards as evidenced through the plethora of protocols and guidelines used across the nation, the number of such hospitals that have adopted these standards and require their use in all appropriate situations is minimal. While a growing number of hospitals are moving in this direction, the pace seems slow and pedantic compared to the compelling evidence in support of such procedures. So, while standards are available, standardization is not commonplace. Without standardization—frequently connoted as a non-professionally friendly approach to healthcare—healthcare organizations are less likely to be successful in precipitating the requisite change for meeting the external challenges described in previous sections of this White Paper.

A comparison to another industry may be useful here. For the airline pilot who is responsible for the lives of the many people he flies, the use of the pilot's take-off and landing check list is absolutely required. In fact, it is not possible to take off from any airport in the nation on any airline without first going through a very detailed list, which was painstakingly developed by the industry. The list represents the standard list of issues that must be acknowledged by the pilot and co-pilot as they prepare for airport departure. Whether the plane is small or large, the procedure is the same. The results are self-evident. These procedures were designed to prevent accidents. Yet, there is no such comparable standard used throughout the healthcare industry for all, or even for many situations, regardless of institution, geography, or the type of professional care givers involved.

Standards are needed, standards will help, and standards must be applied if standardization is to be realized. Adoption of standardization as part of modus operandi in healthcare would, no doubt, yield dramatic results on behalf of patients. The important point should not be lost here. We realize that standards are being applied in some situations or by some individual providers in some hospitals. However, for true standardization to occur, the application of standards must be universal.

**Process.** Critical questions for governance in determining if sufficient focus has been given to process redesign within the organization include:

- What is the philosophy of the organization related to care management? How will the philosophy be embodied within the implementation effort?
- What type of work redesign effort is planned around the existing or current state work flow?
- Who will benefit from the change in work patterns? Has the impact on physicians been adequately assessed? Is it clear how the benefit will be derived?
- Where does the organization intend to focus its primary deployment efforts?
  - Medical Units
  - Surgical Units
  - Special Care Units
  - Other Specialty Units
  - Women's and Children's Care
  - Support Service Areas
- How will decision-support systems be incorporated into the workflow for clinicians? Is it supported by the clinicians?
- What types of plans have been made for promoting and support usage of the new system? Will training be individualized? Is a "just-in-time" approach appropriate?
- Are use requirements included in the discussions with medical staff?
- Is the allocated project timeframe sufficient to support a redesign effort?

## Technology.

As a major investment for the healthcare organization, the decisions surrounding the approach to technology deployment are a critical foundation for success. However, too often the approach used in deployment initiatives is haphazard; it does not use a methodology framework or apply evidence-based standards. Discussions related to the technology are “deferred” or “delegated” to the technology departments. Yet, the decisions related to the approach for deployment can have lasting and far-reaching implications across the organization. Several areas are of particular importance for focus by management and governance, including:

- Maintaining a patient focus as information is collated and used across the healthcare enterprise
- Using an integrated approach in the coordination of information systems so that multiple players in caring for patients have access to information
- Deploying systems that are flexible and usable

1. **Patient-Focused.** Clinical transformation is supported with technology that provides patient-focused information to physicians and other clinicians. Maintaining fidelity to obtaining information at the point of care or the transaction level also facilitates the provision of relevant data for managing the care process. Increasingly, many of the new clinical information systems are able to meet this objective. It has to become an essential core functionality of such systems if they are to gain acceptance by providers across the board. Quality and patient safety are truly enhanced with a patient-focused approach to information management.

2. **Integrated Approach.** The entire issue of how “integrated” the information technology will be is a functional question of considerable strategic importance to the healthcare organization. In the past, information technology was frequently purchased and deployed in independent silos in support of individual department needs. The need for sharing information on a real-time basis between clinical departments was not deemed to be a necessary pre-requisite functional requirement. While silo systems can work very well for the individual users of an information system (e.g., pharmacists managing pharmacy issues), such systems frequently do not, or can not, meet the needs of others who will be interacting with the system. For example, a physician providing care to an emergency room patient requires simultaneous access to multiple data bases (i.e., integrated information systems) if he or she is expected to make full use of the system. Without integration, clinicians will reject a new electronic system in favor of a more “reliable” paper-based system, thereby defeating the clinical transformation of the organization.

3. **Flexible and Usable.** In a rapidly changing IT era, the need for system flexibility and data usability in multiple formats are critical capabilities. With attention to these issues, healthcare providers can more easily move information across functional and organizational boundaries with the objective of enhancing care for patients.

**Technology.** Critical questions for governance related to technology deployment include the following:

- What is the relationship of the vendor to the project?
- What is the vision of the vendor for their product? Has your internal team determined that the vision is current-state or future-state?
- Is the skill base of the internal team sufficient to lead the effort? How was this documented? What external resources, if any, are required to augment success?
- What is the reliability of the vendor in meeting timelines?
- Who assisted leadership in crafting the final agreement? What implementation timelines were established? Is the organization protected in some fashion for adverse results?
- Has a risk analysis and comprehensive business case been completed on the project? By whom?

## Transformation Management In Action

People, process, and technology are the three key elements required for clinical transformation and break-through performance improvement. The ultimate success of the transformation initiative depends on the creation of value as these three elements are integrated on an operational basis. The necessary integration of these elements delineates the following three important management processes to support performance improvement and clinical transformation:

- **Change Management**—Dealing with organizational issues derived from the interaction of people with the way they do their work.
- **Implementation Management**—Resulting from the intersection of process with the technology (i.e., clinical information systems) used to support work processes.
- **Enablement Management**—Assuring the proper use of technologies by focusing on how people use them effectively.

In simple terms, value is created by people working together through an effective change management process and using technology (e.g., CIS) to support the people doing their work in ways that create added value for patients and others served by the organization.

There are a number of critical change management issues such as creating a flexible learning culture, assessing organizational readiness for change, and determining the degree of alignment within the organization on the need for transformation, among other issues. We believe that for most organizations to undertake clinical transformation initiatives, it is as important to transform the culture as it is to transform the work. In fact, leadership should approach such an initiative as a cultural transformation initiative. As any leader knows, such efforts require commitment, resources, and focus. Undertaking such projects without understanding these issues creates both unnecessary risk for the organization and its leaders.

The interaction of process and technology is represented by effective implementation management, which requires rigorous attention to detail such as project planning and management. In fact, regardless of whether the organization seeks outside assistance or pursues the transformation using strictly internal resources, clarity on the methodology to be used is an important consideration. Without a clear framework for how implementation is to proceed, the likelihood of failure increases.

Examples of issues that need to be rigorously assessed include assessing patient throughput and tracking for the purposes of enhancing efficiency and productivity; determining how the new systems will support effective clinical information flow; creating clear and detailed workflow assessments on current state versus future state ranging from medical records management to medication management; and order/results reporting to how clinical knowledge will be retained. The use of benchmarking and a best practices approach will facilitate an effective dialogue within the organization, as well as create a baseline for measuring changes once implementation occurs.

Finally, the interaction of people and technology is embodied in the notion of enablement management. Effective deployment requires that the organization consider how workers, clinicians, and others will be interacting with the system. Technologies that are appropriate for the technician may very well hamper the productivity and efficiency of a primary care provider. It is clear that no one technology platform or tool best meets the needs of all clinicians involved in the care delivery process. Therefore, a more circumscribed approach, which incorporates the needs of clinicians within the context of their work patterns and flow, enhances the usefulness of the technology.

**Summary.** Clinical transformation and clinical process improvement are the best work an organization can undertake because it affects the very essence of the value provided by the healthcare delivery system. If governance and leadership pursue a strategy that involves the right people using a disciplined process with the appropriate technology, clinical transformation can be driven across an organization and, ultimately, create value for the organization and the people for whom it provides care.

### A Call to Action

Clinical transformation is a daunting task for even the most sophisticated and heralded healthcare organizations. The combination of multiple external forces impinging upon healthcare delivery organizations, the difficulty of designing and implementing change acceleration processes, and the challenges associated with selecting and implementing clinical information systems are all potentially overwhelming. This paper has made the case for management and governance to take on the challenge of clinical transformation, outlined a framework for approaching transformation initiatives, identified key questions to be addressed, and enumerated some of the roadblocks to be avoided during the process.

Governing boards often rely upon management to provide the parameters for success on major healthcare organization initiatives. Whether related to the overall physician strategy, building projects, organizational structure, or other important organizational priorities, management's role is to provide governance with clear, thoughtful options and recommendations that enhance overall organizational capabilities. The same holds true for clinical transformation initiatives.

Despite huge investments over the last decade, successful clinical transformation initiatives supported by fully functioning clinical information systems installations are rare. The reasons for this dilemma are many, but generally revolve around a lack of strategic prioritization, focus, and discipline to support the transformation. At the outset, management and governance must adopt clinical transformation as a primary strategy and focus for driving organizational performance improvement. As a board and management team, answer the following question: *Where does clinical transformation fit among your strategic imperatives?* Deliberate debate and dialogue on this question is essential before proceeding with implementation. If the answer is “yes,” then we offer the following eight guidelines for action:

**1. Commit to a strategic process, not a project.** The magnitude of change required for transformation initiatives is substantial and ongoing. Organizations must accept the fact that the pace of change in transformation initiatives requires more than an incremental response if success is to be realized. As the old saying goes, “When surrounded by alligators, it’s hard to remember that the goal is to drain the swamp.” In these challenging times, it is very hard to shift one’s focus away from the immediate operational problems and incremental, short-term improvement. The need to focus on day-to-day operations will never change. Given the forces of change facing healthcare delivery, management and governance must also focus on the need for breakthrough improvement in the delivery of clinical services.

Furthermore, management and governance must build the organization’s investment strategy around clinical process improvement. Clinical transformation requires adequate investment in people, process, and technology, or failure will occur. Leadership must ensure that the investments are coordinated and integrated with ongoing operations to maximize the efficiency and effectiveness of your clinical improvement efforts. Therefore, determining when and how your organization will make these investments is a crucial first step.

**2. Declare and support a senior executive champion.** Delegating the responsibilities of clinical transformation downward in the organization is a sure sign of potential failure. And, the failure has little to do with capabilities and talents of the individuals. Rather, it has much to do with maintaining the proper strategic focus on a change imperative that by its very nature will redirect the time and resources of the entire organization. We recommend that the senior executive champion report directly to the Chief Executive Officer and have regular input to governance. Through such a high profile leadership focus, the organization is much more likely to enhance the success of the overall initiative.

3. **Openly debate the critical decisions and make them.** Major change projects require clear, definitive, and accountable decision-making capability. Despite the best planning efforts, errors will occur in budget allocations, people selection, technology integration, vendor capabilities, and a host of other areas. The inability to grapple with the difficult decisions as they arise often precipitates failure in the transformation effort. This is one of the more pernicious problems associated with transformation efforts and requires continuous monitoring by management and governance in support of the overall effort. To facilitate this objective, we recommend that the entire clinical transformation process be included as a focal point for discussion at every board or senior management meeting. While elements of clinical transformation can be delegated to committees or steering groups, the strategic focus of the initiative must be retained as a priority by management and governance alike.

It is also important to remember that the Pareto Principle applies to healthcare transformation initiatives, meaning that 80% of the value is derived from 20% of the activity. In our experience, the greatest value is derived from:

- Simplifying, as well as improving, the care processes
- Eliminating or minimizing duplication of work
- Improving communications across disciplines and the organization
- Improving patient care documentation compliance
- Improving access to, and ease of use of, information
- Providing adequate decision support tools to enhance the delivery of patient care services

4. **Assure adequate resource allocation for budget, people, and time.** Too frequently in an effort to contain costs, the budget for transformation initiatives does not support the magnitude of the change. In our experience, budgets related to the more technical aspects of the effort are scrutinized in some detail while the “softer”—yet equally critical investments in change management and adequate people resources are insufficiently supported. While the organization may hold the talent for a technical initiative, the extant talents and capabilities required for supporting change, implementation, and enablement management are often inadequate. Enhancing the internal team with people holding experiences related to these critical functions is essential.

5. **Embrace process redesign.** An ongoing, standardized approach to performance improvement is an important foundation in support of clinical transformation. Adopting an approach (i.e., Six Sigma, CAP, etc.) provides the organization with a standardized framework to improve cross-functional focus, communications, and decision-making as it proceeds with redesigning the approach to care delivery. Again, in our experience, the lack of attention to process redesign is one of the hallmarks of failed healthcare transformation and clinical information system deployment initiatives.

6. **Define your metrics.** Because of the perceived “complexity” of transformation initiatives and the companion IT projects, management, and governance frequently do not demand the same caliber of thoughtful, outcomes-focused measurement reserved for other strategic projects. Without the benefit of clear, agreed-upon metrics, attaining organization clarity on the ultimate benefits of the transformation effort is difficult at best. Leadership must “shine the light” on the need for metrics and require their use to ensure there is a firm foundation and guide for measuring organizational success.
7. **Use national standards, guidelines, and evidence-based best practices (where they exist).** While clinical aspects of the care delivery process (i.e., best practices, guidelines, etc.) have not yet resulted in clear national standards, other elements related to the technical and implementation aspects of deployment can be held to rigorous, national standards. For example, the application of ISO9001 (organizational management), PMI (project management), CMMI (quality testing and deployment methodologies), and ITIL standards (infrastructure management) can and should be applied in transformation initiatives. The use of these standards provides assurance to organizational leaders that adequate attention has been given to national best practices for the deployment aspects of the project.
8. **Operations must drive the initiative with support from Information Technology rather than the reverse.** Too frequently, major projects involving information technology are “assigned” to the IT department, which often approach them as an “IT project” rather than as a transformation initiative. In reality, any one department—if assigned such a broad, sweeping change project—will likely not succeed. Rather, a cross-disciplinary approach that includes nursing, pharmacy, and other clinical departments, in addition to support from human resources, finance, and information technology, among others, is critical. Ultimately, the clinical transformation process must be seen as being a primary accountability of operational leadership, with appropriate staff support.

## Summary

Clinical transformation and clinical process improvement are arguably the most profound challenges an organization can undertake because it affects the very essence of the healthcare enterprise at virtually every level and with every task. Not surprisingly then, taking on clinical transformation can be perceived as “certain professional death” or at least a “career-limiting experience” by many healthcare executives. Therefore, for a clinical transformation process to succeed, management and governance must work as a team to challenge and support one another throughout the process. Governance must be steadfast in its commitment to management on seeing the process through, and management must be open in bringing the challenges of the process to the governance table for active discussion, dialogue, and debate.

We believe that if management and governance as a leadership team pursue a change strategy that involves the right people using a disciplined process with the appropriate technology, clinical transformation can be driven across an organization and, ultimately create value for both the organization and the people for whom it provides care.

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