The Value-Based Hospital

A TRANSFORMATION AGENDA FOR HEALTH CARE PROVIDERS

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THE VALUE-BASED HOSPITAL

A TRANSFORMATION AGENDA FOR HEALTH CARE PROVIDERS

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THE PROVIDER CHALLENGE

Health care providers all over the world face an extraordinary combination of pressures. Despite decades of cost containment and other operational-improvement initiatives, costs continue to rise, putting unrelenting pressure on hospital budgets. The tight management of department budgets and clinical processes is further complicating already complex organizations, leaving staff demoralized and disengaged. At the same time, markets are becoming more competitive. Countries with public-health systems, such as the UK, are encouraging privatization; meanwhile, in the U.S., where the private sector already plays a major role, providers are becoming more consolidated. Payers everywhere are calling for more transparency on actual health outcomes and experimenting with value-based reimbursement. Patients are becoming more demanding and exercising more choice.

In response to these pressures, a few pioneering organizations are developing a new operating model that we call the value-based hospital. These providers are taking a fundamentally different approach to continuous improvement by monitoring the health outcomes of specific patient groups and understanding resource requirements and costs in the context of how those outcomes are achieved along the clinical pathway. And they are using the provision of better health outcomes and greater health-care value (defined as the ratio of outcomes to costs) as ways to drive the organizational improvement agenda and differentiate themselves from their provider peers. The focus on outcomes and value delivered has created a shared language that allows broad groups of staff to pursue common goals and increases collaboration to achieve those goals. Among the leading organizations that have embraced this approach are Kaiser Permanente and Cleveland Clinic in the U.S., Martini-Klinik and Schön Klinik in Germany, and Terveystalo, the largest private health-care provider in Finland.[1]

Cleveland Clinic's CEO, Dr. Toby Cosgrove, has called the value-based approach a "breakthrough that will change the face of medicine."[2] The vast majority of hospitals, however, have yet to embark on this journey. Despite years of quality management initiatives, hospitals are decades behind most other industries.

We believe that the value-based hospital is more than yet another improvement initiative. Relative to past efforts, it is a far more effective way of delivering health care and running a provider organization—one that puts patients and their outcomes at the center of a hospital's operations; that relies on the engagement, leadership, and cooperation of the hospital's clinical community; and that makes possible a more constructive interaction between hospital management and clini-

cians as they take joint responsibility for the delivery of cost-effective, quality care.

The Boston Consulting Group has been working with the pioneers to understand the key success factors in the value-based hospital. What's more, our work on the ground supporting a growing number of hospitals in their efforts to adopt this new operating model demonstrates that it is possible for any hospital, no matter what its starting point or regulatory environment, to move in the direction of value-based, continuous improvement quickly and to see positive results early. As the examples and case studies in this report illustrate, a hospital does not need to first have all the data and systems in place to see results. Simply bringing together the right people, who are committed to improving patient outcomes, in a structured process can lead to significant improvements. In our client work, we have seen organizations achieve productivity and other improvements of approximately 30 percent in just three months.

In this report, we describe the advantages of the new value-based operating model for hospitals and other health-care providers, provide examples of some of our recent client work in the U.S. and Europe to help organizations introduce the value-based approach, and propose a six-step transformation agenda for any provider that seeks to put value for patients at the center of its strategy and offering.

Notes

1. For more information on Kaiser Permanente, see *The Accountable Care Organization: If You Build It, Will They Come?* BCG Focus, May 2013, and *Competing on Outcomes: Winning Strategies for Value-Based Health Care,* BCG Focus, January 2014. For Cleveland Clinic, see Toby Cosgrove, "Value-Based Health Care Is Inevitable and That's Good," Harvard Business Review Blog Network, September 24, 2013, http://blogs.hbr.org/2013/09/value-based-health-care-is-inevitable-and-thats-good/. For Martini-Klinik, see *Competing on Outcome*s and Michael E. Porter, Jens Deerberg-Wittram, and Clifford Marks, "Martini Klinik: Prostate Cancer Care," Harvard Business School, Case N9-714-471, March 2014. For Schön Klinik, see Michael E. Porter, Emma Stanton, Jessica A. Hohman, and Caleb Stowell, "Schön Klinik: Eating Disorder Care," N9-712-475, March 2012, and Robert S. Kaplan, Mary L. Witkowski, and Jessica A. Hohman, "Schön Klinik: Measuring Cost and Value," Harvard Business School, Case N9-112-085, March 2012. For Terveystalo, see the sidebar "What Health Care Value Means to Me: An Interview with Terveystalo CEO Yrjö Närhinen" in this publication.

2. Toby Cosgrove, "Value-Based Health Care Is Inevitable and That's Good," Harvard Business Review Blog Network, September 24, 2013, http://blogs.hbr.org/2013/09/value-based-health-care-is-inevitable-and-thats-good/.

A BETTER WAY TO RUN A HOSPITAL

THE VALUE-BASED HOSPITAL IS a fundamentally different and better way to run a hospital, track performance, and organize care. To understand why, it pays to begin by exploring the typical ways that hospitals organize and manage care.

The Limits of the Traditional Hospital Operating Model

Every hospital wants to deliver quality care in a cost-effective fashion. But the way most hospitals are organized today makes that goal very difficult—and, in many cases, nearly impossible—to achieve.

Three organizational characteristics, in particular, stand in the way of sustainable continuous improvement.

Functional Organization. In many respects, the typical hospital is the last bastion of the traditional functional organization. Departments are organized by medical specialty: cardiology, thoracic surgery, rheumatology, radiology, and so on. In many hospitals, resources that could be shared, such as emergency care, intensive care, and surgery, are likewise organized into their own specialty units. Despite the high degree of formal interaction among departments through referrals for diagnostics or treatment, each unit is measured on its own budget and its own organizationally distinct KPIs. What's more, incentives are typically not shared across departments or care units.

This highly functional organization structure made sense in an era when the primary means of improving health care delivery was to increase the specialization and unique expertise of a hospital's clinicians and when choosing among diagnostic and therapeutic alternatives was far simpler. But that functional organization structure comes with a major organizational downside: the relative independence of separate specialized units makes it extremely difficult to optimize the full care pathway and manage costs in an integrated fashion. Although individual-unit performance and costs can be tracked, no one unit typically has responsibility for the health outcomes of a given group of patients across the entire care chain. There can even be negative incentives for the clinicians in one unit to collaborate with those in another. Handoffs between units often require duplicating data and work (classic examples are the duplication of lab tests, patient interviews, and examinations).

Narrow Performance Metrics. The problems of the rigid functional structure are exacerbated by the type of performance metrics that hospitals typically collect. In our experience, most hospitals track financial metrics (by department, usually in terms of whether a given unit is on budget) and process metrics (with an emphasis on waiting times and the

productivity of individual units). Some measure "quality," but when they do, quality is often defined as compliance with treatment guidelines (in effect, process efficiency) or assessed using surveys about the patient experience. But those approaches emphasize efficient throughput or subjective experience, not the actual health outcomes delivered to patients suffering from a particular disease or undergoing a specific procedure. The fact that costs for a given condition are distributed across many different departments makes it extremely difficult to get a clear picture of the whole and, therefore, to act on costs, because nobody "owns" or can manage the trade-offs between cost and quality along the clinical pathway.

Focusing on outcomes provides a whole new way to think about costs.

The Management-Clinician Divide. A highly fragmented organization and metrics that do not directly address the key purpose of the organization—improving the health and well-being of patients—tend to create a cultural disconnect between the management of the hospital and its clinical staff. Administrators of individual units focus on maximizing the efficiency of their own units through their control over the budget and staff schedules. Meanwhile, clinicians aspire to achieve the best clinical outcome for their individual patients but have little control over the budget and schedules and little useful data about patient outcomes and the specific costs that do—and don't—make a difference in delivering those outcomes.

This behavior in hospitals is not the result of some inherent unwillingness to cooperate. Rather, it is a logical consequence of the resources made available to the different actors in the hospital system and the constraints they face when trying to achieve their goals.[1] Indeed, participants on either side of the divide often complain about the constraints that the traditional operating model imposes. On the one hand, hospital administrators often feel powerless to influence clinicians, who are on the front line of care. On the other hand, highly committed clinicians often feel not only that the metrics and objectives the system imposes on them have little to do with patient care but also that they lack the information and tools needed to really make a difference in hospital performance. The management-clinician divide is the result of these misaligned goals, resources, and constraints, which are a consequence of the traditional organization and operating model.

The Advantages of the Value-Based Operating Model

The value-based operating model is fundamentally different. Its starting point is a commitment to collect and share data on the actual health outcomes that the hospital delivers to patients.

Systematically tracking outcomes is essential for two primary reasons. First, delivering quality health outcomes is the raison d'être of any provider organization. Quality health outcomes are what patients want from their providers and what payers ultimately should fund. Second, and perhaps even more important, not until an organization knows what kind of outcomes it is delivering can it begin to understand its true performance and what kind of value it is providing—that is, the level of outcomes delivered for a given cost. (See the sidebar "The Growing Standardization of Health Outcomes Metrics.")

Focusing on outcomes also has a third big advantage. It provides both administrators and clinicians with a whole new way to think about costs: whether the costs incurred actually contribute to outcomes that matter to patients.

Costs That Matter to Patients. By definition, health outcomes are specific to a given disease, medical condition, or procedure. The outcomes that matter vary by patient group. Similarly, the costs that matter in the value-based hospital are the costs per patient to achieve the target outcomes for a given disease or condition.

Therefore, the right way to track costs is not so much by each specialized unit but by the activ-

THE GROWING STANDARDIZATION OF HEALTH OUTCOMES METRICS

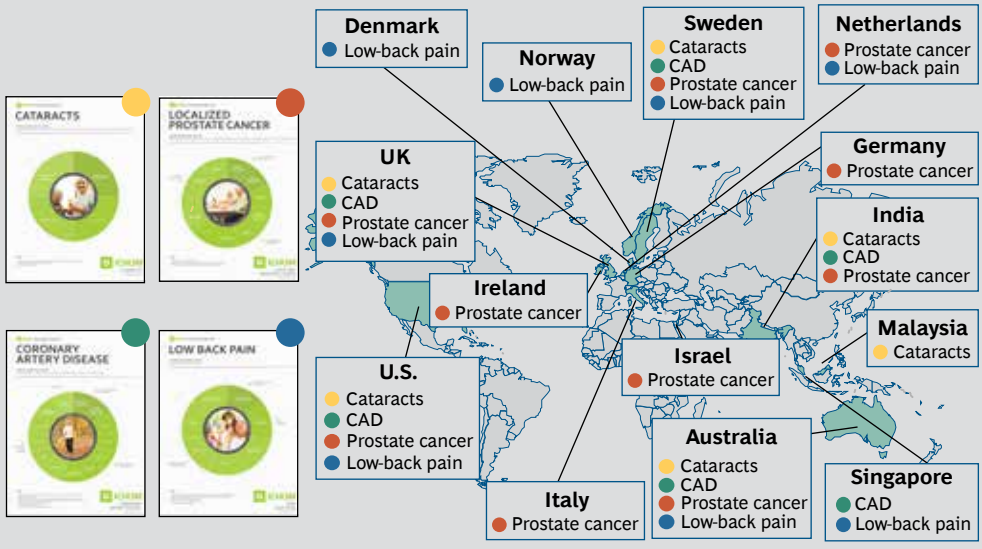
As more and more providers around the world focus on delivering high-quality care, the movement to standardize outcomes metrics is growing. A case in point is the work of the International Consortium for Health Outcomes Measurement (ICHOM), a nonprofit organization whose mission is to bring together disease registry leaders, patient group representatives, and other experts to define and publish globally harmonized sets of outcomes metrics. ICHOM was founded in 2012 by BCG, Michael Porter's Institute for Strategy and Competitiveness at Harvard Business School, and the Karolinska Institute in Sweden.

In November 2013, ICHOM published its first set of standardized metrics and risk adjustment variables for four major conditions: coronary-artery disease, localized prostate cancer, low-back pain, and cataracts. (See the exhibit below.) Since then, nearly 200 hospitals worldwide have expressed an interest in using ICHOM's metrics in their internal outcomes tracking. In 2014, ICHOM plans to develop standardized outcomes measures for an additional 8 conditions; by 2017, it intends to cover more than 50 conditions, representing more than 50 percent of the disease burden in industrialized countries.

Hospital executives who have been involved in ICHOM's early efforts see the initiative as key for both improving quality and managing costs. "Outcomes measurement is essential for quality improvement," said Dr. Tom Rosenthal, chief medical officer at the UCLA Medical System in Los Angeles. "It's the duty of every professional in medicine to be actively engaged in improving the quality of their care." And according to Dr. Jack Lewin, president and CEO of the Cardiovascular Research Foundation and former CEO of the American College of Cardiology, "We've got to measure to manage health care, and we've got to measure to manage health care costs as well as quality. This is an important area of focus, and I'm glad to see it happen on an international basis."[1]

NOTE
1. See the video testimonials at http://www.ichom.org/news/conferences/.

ICHOM Works with Leading Clinicians to Define International Standards for Outcomes Metrics



Source: ICHOM.
Note: CAD = coronary-artery disease.

ities undertaken and resources used for a given patient group across the entire care-delivery process.[2] (See Exhibit 1.) Once an organization has developed a system for tracking the cost per patient in a particular group of patients suffering from the same disease or condition or with a similar medical profile, it is in a position to identify which particular costs drive quality outcomes and which do not.

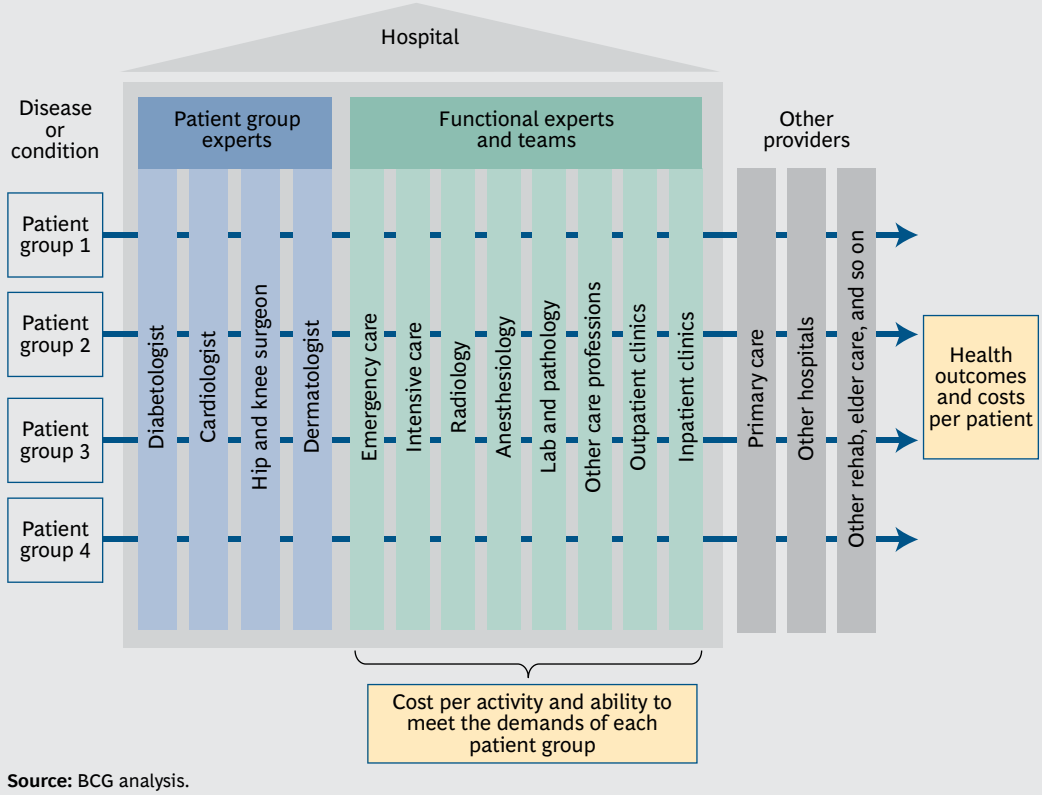
Clinicians are the key influencers in any hospital organization.

The Power of Clinician Engagement. Because clinicians care about delivering high-quality outcomes, focusing on outcomes is a powerful mechanism for engaging clinicians in the value-based improvement agenda. Indeed, without genuine clinician engagement over an extended period of time, no change is likely to be sustainable.

Clinicians are the key influencers in any hospital organization. The clinical staff is closest to the patient and knows how things are really done. Indeed, without clinicians' commitment to a change effort, it is unlikely to get off the ground or prove sustainable over time. Most important, only by engaging the clinical community—up and down the hierarchy and across the entire care-delivery chain for a given disease or condition—can a hospital begin to break down the organizational barriers between departments in order to truly collaborate and share knowledge and ideas for improvement.

The combination of new visibility about outcomes and costs per patient group with across-the-board engagement on the part of clinicians creates the context for a new kind of behavioral dynamics in the hospital. New health-outcomes data and cost data that together provide an integrated perspective across the entire care-delivery value chain give clinicians new resources for care innovation. These data also make it possible to align the clinical goal of delivering high-quality care with the managerial

EXHIBIT 1 | The Value-Based Hospital Tracks Outcomes and Costs by Patient Group Across the Care Delivery Process



Source: BCG analysis.

goal of delivering that care as cost-effectively as possible. Put simply, clinicians in this context find that it is in their interest to cooperate with one another and with management in a genuine partnership in which each takes joint responsibility for providing quality outcomes in a cost-effective fashion. (See the sidebar "The Value-Based Hospital and Translational Medicine.")

Developing Sustainable Competitive Differentiation. Once a hospital has the right patient-focused metrics in place and an engaged clinical staff operating on the basis of effective processes for care redesign, it is also in a position to identify its areas of strength and leverage those strengths to establish its competitive differentiation in the rapidly changing health-care marketplace. By "competing on outcomes," a hospital can attract more patients, generate better economics, and develop a sustainable response to the trends that are transforming health care.[3] (See Exhibit 2.)

In some cases, a provider organization will focus on becoming an international leader in treating a specific condition that often requires highly specialized care—for instance,

THE VALUE-BASED HOSPITAL AND TRANSLATIONAL MEDICINE

For academic medical centers, the increased focus on measuring and understanding patient outcomes comes with an added benefit: the opportunity to achieve better connections between research and health care delivery. Over the past 15 years, so-called translational medicine—"from bench to bedside"—has been a major goal of biomedical research. And yet, the traditional model of health care delivery—with its functional organization of specialist departments, its increasing focus on productivity rather than quality of care, and its weak data management—is not well suited to the demands of clinical research, even in a university hospital setting. This disconnect has been a major reason for the declining number of clinical trials in many countries.

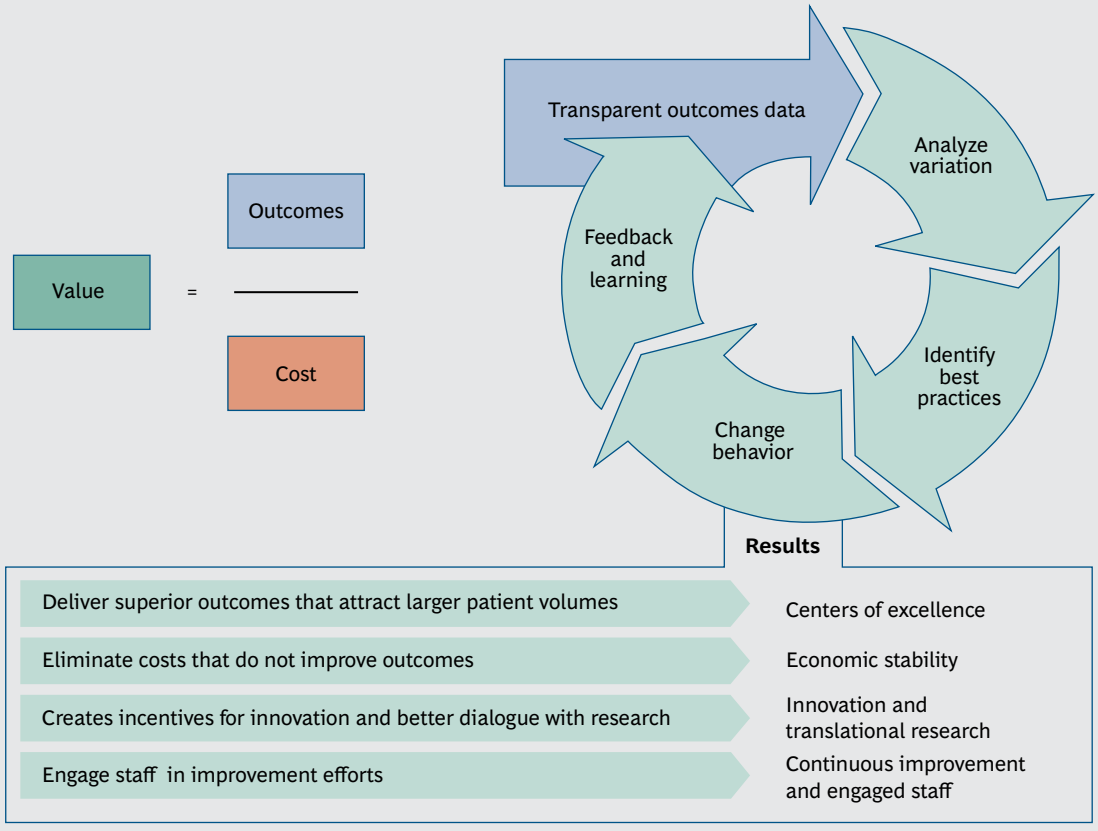
Most medical research focuses on diseases and patient groups, on measuring end results and outcomes, and on strict data management and analysis. The requirement to collect data separately—outside the everyday care-delivery process—has not only made research expensive but also created a cultural barrier in which research is often considered a special interest with a limited direct linkage to the improvement of clinical practice and, ultimately, health outcomes. When the measurement of real-world health outcomes is part of care delivery, however, it becomes possible to fully align research and clinical practice. A good example of this principle is the recent use of large, low-cost, registry-based, randomized clinical trials in which outcomes data collected routinely by disease-specific quality registries is used to assess the effectiveness of existing clinical practices and treatments.

For instance, a team of Swedish, Danish, and Icelandic researchers recently conducted a "multicenter, prospective, randomized, controlled, open-label clinical trial" to test the effectiveness of coronary-artery thrombosis aspiration, a technique that is increasingly used along with percutaneous coronary intervention (PCI) for patients suffering from ST-segment-elevation myocardial infarction (STEMI), a type of heart attack.[1] The trial enrolled 7,244 STEMI patients from the comprehensive Swedish Coronary Angiography and Angioplasty Registry. The patients were randomly assigned to receive either manual thrombus aspiration followed by PCI or PCI alone. The study found that routine thrombus aspiration before PCI did not significantly reduce mortality and, therefore, did not contribute to health care value.

NOTE

1. Ole Fröbert, et al., "Thrombus Aspiration during ST-Segment Elevation Myocardial Infarction," *New England Journal of Medicine,* October 2013, http://www.nejm.org/doi/full/10.1056/NEJMoa1308789.

Exhibit 2 | Competing on Outcomes Improves Performance for Providers



Source: BCG analysis.

prostate cancer.[4] Providers that use this strategy leverage their depth of experience in clinical-practice R&D, excel at systematically driving outcomes improvements that matter for patient groups, and increase volume by attracting new patients who want the highest-quality outcomes. (See the sidebar "Making Outcomes and Price Transparent at Texas Health Resources.")

In other cases—for example, chronic diseases such as diabetes or congestive heart failure—providers will strive to become integrated-service institutions that take responsibility for the entirety of patient health in a given population across primary, secondary, and in some cases tertiary care. The integrated providers will manage the population for maximum health-care value and will, to a large extent, manage their own integrated care chains. But they will also act as brokers, helping their patients navigate to the best independent providers, which align their approaches with the integrated providers' systems and offer unique capabilities. (See the sidebar "What Health Care Value Means to Me: An Interview with Terveystalo CEO Yrjö Närhinen.")

Notes

1. For more on viewing organizational behavior as a rational response to goals, resources, and constraints, see Yves Morieux and Peter Tollman, *Six Simple Rules: How to Manage Complexity Without Getting Complicated,* Harvard Business School Publishing, 2014.
2. See Robert S. Kaplan and Michael E. Porter, "The Big Idea: How to Solve the Cost Crisis in Health Care," *Harvard Business Review,* September 2011, http://hbr.org/2011/09/how-to-solve-the-cost-crisis-in-health-care/ar/1.
3. For more on this theme, see *Competing on Outcomes: Winning Strategies for Value-Based Health Care,* BCG Focus, January 2014.
4. For more on prostate surgery, see *Competing on Outcomes: Winning Strategies for Value-Based Health Care,* BCG Focus, January 2014, and Michael E. Porter, Jens Deerberg-Wittram, and Clifford Marks, "Martini Klinik: Prostate Cancer Care," Harvard Business School, Case N9-714-471, March 2014.

MAKING OUTCOMES AND PRICE TRANSPARENT AT TEXAS HEALTH RESOURCES

With 25 hospitals in the Dallas–Fort Worth region, Texas Health Resources (THR) is the largest nonprofit health-care-delivery system in the state of Texas, serving a region that is home to more than 6.2 million people. Recently, THR began working with BCG to develop a set of value-based bundled offerings for employers, insurance plans, and individual consumers. The new offerings are designed to be both comprehensive in coverage (including professionals and facilities for the entire episode of care) and completely transparent in terms of pricing and outcomes.

THR's new bundled services are the result of its partnership with its clinicians to create episode-related packages for specific medical procedures—for example, lumbar laminectomy (a surgical procedure performed primarily to alleviate leg pain caused by lumbar spinal stenosis) or coronary-artery-bypass grafting. The clinicians take the lead in developing outcomes measures to ensure high quality, a positive patient experience, and superior value through efficient, cost-effective care delivery. Then a multidisciplinary team—including physicians who specialize in the chosen procedures, staff at the facility where the procedures are performed, and THR staff who provide analytical and financial support—redesigns the clinical-care pathway to better achieve those outcomes.

According to Dr. Daniel Varga, chief clinical officer at THR, the focus on high-quality outcomes and the fact that clinicians will share in the gains resulting from more efficient delivery of care have garnered strong physician support and engagement in the project.

THR's new offerings are designed to address two new characteristics of the U.S. health system that are, in part, a result of the Affordable Care Act (ACA): incentives to improve quality and insurance plans with relatively large out-of-pocket expenditures.

One of the major themes in the debate about health care reform in the U.S. has been the highly variable quality delivered by the existing system. In response, the ACA created a variety of incentives for improved quality performance. According to THR chief strategy officer Jonathan W. Scholl, THR has been a leader in offering enhanced quality and a more consistent care-delivery experience for patients in north Texas. The new value-based services are another step forward in this agenda.

At the same time, more and more people in the U.S. are covered by health insurance plans that require an increasing out-of-pocket expenditure. These consumers are looking for significantly higher value for the dollar and up-front transparency on price and quality. The move toward increased purchasing on health exchanges is expected to exacerbate this trend. The new offerings, which are transparent on price and outcomes, are ideal for this segment.

Finally, employers and payers view these offerings as a method to share manageable risk with the health system while getting high levels of transparency for the outcomes delivered. They can also utilize these offerings to enhance the attractiveness of new narrow-network products designed to better coordinate care and control costs.

WHAT HEALTH CARE VALUE MEANS TO ME: AN INTERVIEW WITH TERVEYSTALO CEO YRJÖ NÄRHINEN

Terveystalo is the leading private health-care service provider in Finland, employing 6,500 health-care professionals in a nationwide network of 150 health clinics, of which 18 also provide some of the specialized care found in a typical hospital. About 900,000 patients, roughly 17 percent of the total Finnish population, receive some or all of their health care at Terveystalo clinics. Terveystalo has been a leader in the adoption of outcomes metrics and using a value-based approach to manage the company. Recently, BCG senior partner Stefan Larsson spoke with Terveystalo's CEO, Yrjö Närhinen, about the company's approach.

What role does Terveystalo play in the overall Finnish health-care system?

About 82 percent of Finnish health care is provided by the public system. We represent about one-third of the remaining 18 percent of care provided by private providers. About half of our revenues come from the approximately 19,000 Finnish companies that have contracted with us to deliver primary care to their employees. The rest comes from private care, where individuals pay out-of-pocket, or from contracts with insurance companies. We even occasionally get contracts from the public system itself—for instance, in situations where the system has long wait times and is striving to shorten delays for certain kinds of care.

As the CEO of a company that aspires to lead on quality care, how do you think about "value" in the health care context?

Value often means different things for different constituencies in the system. For patients, it's the quality of the care. For clinicians, it's the ability to practice good medicine and do the best for their patients. For payers, it's minimizing not only the direct costs of insurance but also the indirect costs of sickness.

For us, the idea of value has always been connected to the customer. We always need to be able to demonstrate that it's worth it for a company or an individual to spend the money on our services. For example, if we can help employers reduce sick leave for chronically ill patients, that's value to the customer. What we've discovered over time, however, is that making improved value the common "currency" across all stakeholders leads to improvements in medical quality and health outcomes as well.

What have you done at Terveystalo to improve outcomes and deliver better value?

We have an advantage over other players. Because most of our customers are companies that want to see what value they are getting from our services, we have always had to provide data. In the early days, the issue was, Can we reduce the number of sick days that companies have to pay for, or help them avoid disability-related pensions? Those concerns provided a "backbone"—the fundamental need to develop reporting systems and documentation. It also helped inspire our focus on prevention, annual checkups, and the like.

Take the example of diabetes. Finland has very good national treatment guidelines for diabetes, but there is remarkably little data on how well providers and patients adhere to those guidelines and the outcomes achieved. We developed some data showing that more than 9 percent of the total Finnish working population has either prediabetes or diabetes, and that many of the dia-

betic patients were incompletely monitored according to the guidelines. And yet, those who were properly managed had on average ten fewer sick days per year.

So, we developed a program to make sure our diabetic patients were monitored and managed better. My chief medical officer, Juha Tuominen, working closely with our clinicians, created a scorecard that allows our physicians to see which of their patients have diabetes, whether their disease is on balance or off balance, whether they are missing any key tests, and so on. Our physicians can also compare their performance by clinic or across regions or with the Swedish and Finnish averages, using data from internationally recognized diabetes registries.

By making the data visible and using it to shape our care model, we are able to more actively manage this specific population of patients. As a by-product, we also get data that we can report back to the payer. It's good for the payer because it limits time off from work. It's good for the physicians because it helps them treat their patients better—which is what they care about, why they became doctors in the first place. And, of course, it's great for the patients because they are getting better care and having better health outcomes.

You say that quality and impact of treatment are Terveystalo's competitive advantage. How are you trying to "compete on outcomes"?

We feel there is always a customer who can choose. If companies aren't happy with our services, they can always go elsewhere. Therefore, we always have to be improving and demonstrating the value we create. When we can show value, it takes the pressure off of price. And it differentiates us from our competitors.

Take the example of breast cancer screening. In Finland, local municipalities are legally required to provide mammograms for women over a certain age. Despite the law, however, not everyone was getting a mammogram. Since we have a nationwide network of health clinics, we developed a national screening process. The screening itself is highly decentralized. We even take mobile equipment to isolated villages in the north of Finland so that women don't have to travel. But the analysis of the screening data is highly centralized so that we can follow a rigorous scientific process and take advantage of scale efficiencies, not only to minimize costs but also to improve our capability to identify early signs of cancer. As a result of this conscious effort to improve diagnostic quality, we now do 85 percent of the mammograms conducted in Finland.

You don't have a medical background; you worked in consumer goods at Procter & Gamble. What are the challenges of management in the health care setting?

Health care is a highly specialized service business. Which means it's a trust business and a respect business. That makes the task of management extremely complex. Health care is in the midst of such a transformation now that being successful requires many different skill sets. We need to learn one another's languages and respect each other's expertise. We have to balance among the needs of payers, of individuals, of experts. No one has all the answers. It's about dialogue, teamwork, looking at problems from multiple perspectives and angles.

AN AGENDA FOR VALUE-BASED TRANSFORMATION

Although more and more hospital leaders see the promise of the new value-based operating model, many hesitate because they perceive the transformation challenge to be overwhelming. After all, the pioneers of the value-based hospital have taken decades to transform their organizations. In our recent work with hospitals in the U.S. and Europe, however, we have identified six steps that are most effective in helping organizations get started and in accelerating the rate of change.

Assess Organizational Readiness

The starting point is to understand an organization's readiness for value-based health-care delivery by carefully assessing its operations against a comprehensive set of criteria that we have developed from our work with leading value-based organizations. This first step will not only build knowledge among the senior team about the extent of the organization's current capabilities but also help create buy-in, provide valuable inputs to a discussion about strategic direction, and identify where to focus some initial pilot projects.

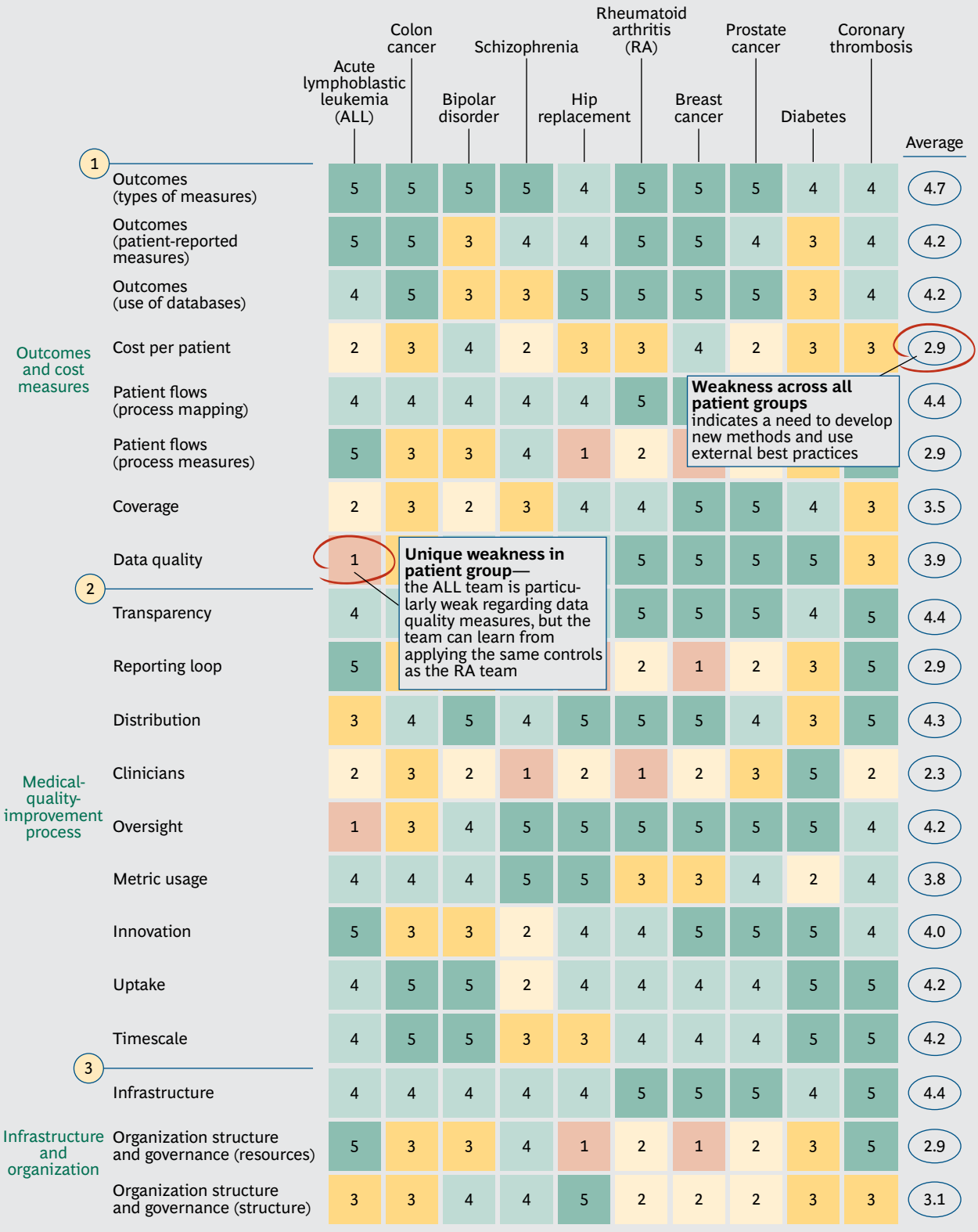
For an idea of how this process works, consider the recent experience of Sahlgrenska University Hospital, based in Göteborg, Sweden. One of the largest hospital networks in northern Europe, Sahlgrenska provides emergency and basic care for the 700,000 inhabitants of the Göteborg region and specialized care for the 1.7 million inhabitants of western Sweden. It is also one of only two Swedish hospitals that perform pediatric heart surgery and heart, liver, and lung transplants for patients of all ages.

As is the case for many public hospitals in Europe, however, Sahlgrenska is facing severe pressure from the regional government (regional governments are the chief payers in Sweden's public-health system) to keep costs down. What's more, as Sweden introduces more patient choice and elements of value-based reimbursement into its public-health system, the hospital is facing growing competition and the need to make strategic choices about the specialist areas on which to focus its resources.

In the fall of 2013, Sahlgrenska's CEO, Dr. Barbro Fridén, determined that value-based health care should be one of the hospital's three areas of strategic focus. An MD with a research background in in vitro fertilization, Fridén found the value-based approach's reliance on patient data appealing. But she didn't want to wait until all the right data were in place; she wanted to move faster.

In its work with the senior-management team at Sahlgrenska, BCG used a version of the self-assessment tool portrayed in Exhibit 3. The tool ranks an organization's care-delivery

EXHIBIT 3 | A Self-Assessment Reveals a Hospital's Readiness for Value-Based Health Care



Source: BCG analysis.
Note: The data is for illustrative purposes only. The assessment uses a scale from 1 through 5; 1 indicates a low readiness and 5 a high readiness for value-based health care.

capabilities for a particular disease or medical condition on a scale from 1 through 5 across three key dimensions: outcomes and cost measures, the medical-quality-improvement process, and infrastructure and organization. Sahlgrenska established ten disease-focused teams to evaluate the hospital's performance in key disease areas or medical conditions. This assessment became the basis for an initial strategic discussion among Sahlgrenska's senior leadership. The process allowed those leaders to develop a shared understanding of where the hospital was strong and define hypotheses about the most important areas of improvement in order to enhance the value delivered to different patient groups.

The outcome of this assessment process was a decision to start with four pilot initiatives, each focusing on a particular disease or procedure: bipolar disease, prostate cancer, hip arthroplasty, and pediatric cardiac surgery. A variety of criteria were used to choose the pilots, including the size and financial importance of the patient group; whether the group had obvious areas of improvement that could lead to quick wins and, thus, feed the appetite for change; the strategic importance of the group to the hospital's competitive differentiation; and the availability of good data. But in every case, it was essential that the teams be able to identify a dynamic clinical leader interested in trying the approach and willing and able to inspire his or her colleagues to participate. These leaders serve as integrators of the heterogeneous clinical team contributing to the care of each patient group. After the completion of the pilot project, these leaders typically take on formal responsibility for managing the continuous improvement of care delivery for their patient group.

Define the Outcomes That Matter

Once an organization has identified the initial medical conditions and patient groups for which it wants to launch the value-based initiative, the next step is to set up multidisciplinary teams to define the key outcomes metrics that matter for those groups.

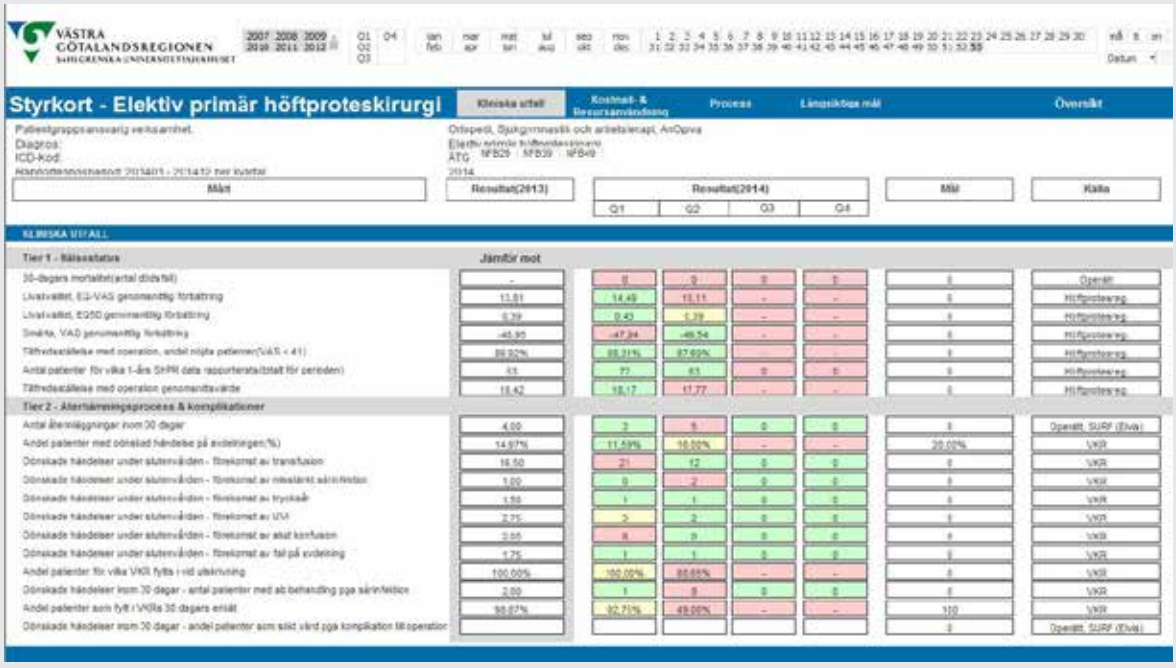
It's essential that the members of these teams be broadly representative, including specialists across medical and other functions at the main steps in the care delivery process, as well as patient representatives. Some members of these clinical-care teams will be working with colleagues from other points on the care delivery value chain for the first time. At one hospital we worked with, a pilot team focusing on orthogeriatrics included orthopedic surgeons, rehabilitation specialists, and geriatricians. These specialists had been referring their patients to each other for years without ever sitting down to discuss how best to jointly manage the entire care pathway.

Sahlgrenska's hip-replacement team developed a scorecard to track health outcomes.

When it comes to defining the outcomes measures, often the issue is less whether such measures exist than whether they are actually used to manage care. Take the example of Sahlgrenska's hip-replacement pilot team. For hip replacement, identifying the appropriate outcomes metrics was relatively straightforward. Sweden has an active hip-arthroplasty registry that for more than 30 years has been collecting data on all patients in the nation who undergo the procedure. The key challenge, however, was figuring out how to make the data more user-friendly and actionable. So, instead of continuing the previous practice of receiving the unit's results once a year from the registry, the team developed a "scorecard" that clinicians in the unit receive every month—which allows them to take action and adapt in response to the data far more quickly. (For an image of the online scorecard used by Sahlgrenska, see Exhibit 4.)

Not long after the scorecard was introduced, for instance, the unit discovered that there had been a sudden spike in the number of patients who were experiencing falls during inpatient recovery. When team members discussed the new data, they noticed that in every case where a patient had suffered a fall, the hospital had neglected to conduct a risk assessment upon admission—even though doing so was part of the unit's formal

EXHIBIT 4 | A Monthly Scorecard Helps Sahlgrenska's Hip-Replacement Unit Track Outcomes



Source: Sahlgrenska University Hospital.

procedural guidelines. By ensuring that a systematic risk assessment took place at intake, clinicians were able to identify high-risk patients and better plan their post-surgical recovery.

Allocate Costs per Patient

Once the right outcomes measures are defined, the expert team is in a position to discuss how each step in the clinical pathway contributes both to outcomes and to costs. Mapping the clinical pathway requires a well-defined methodology that is both consistent and flexible. Consistency is important so that the methodology can be applied across all patient groups and so that the organization can develop a common vocabulary that is easy to use internally and easy to communicate to outside groups such as other providers and payers. But flexibility is also important to capture multiple perspectives, to allow deep dives into especially important process steps, and to customize to the unique circumstances of specific patient groups.

But even with the best methodology, genuine improvements will occur only if the team engages the senior leaders of those parts of the hospital that play an important role in caring for the specific patient group. In our experience, the effort to map and discuss the clinical pathways surfaces many good insights about the everyday challenges facing the clinical teams. When functional and unit leaders are exposed to those insights, they are able to rapidly make decisions to resolve "silo based" inefficiencies.

When allocating costs to key activities, it is important to be pragmatic in the face of complexity. When it came to mapping the costs along the hip replacement value chain at Sahlgrenska—from diagnosis to surgery to rehabilitation—the hospital's existing cost system wasn't much help. So the pilot team took a rough "resource based" approach, allocating various costs according to the resources used, activities performed, and time the patient was in hospital at the various steps of the process. Although this approach did not perfectly allocate all the costs per patient, it was good enough to provide a first-generation understanding of where the majority of costs were incurred. As the team continues its work, it will refine its cost-allocation model.

But even the first-order reallocation done at Sahlgrenska was enough to focus the teams on key areas for improvement.

Implement Quick Wins

As important as identifying and collecting this new data is the learning that happens as pilot teams talk about the data and its implications for clinical practice. Again, the make-up of the teams is critical.

Competitive differentiation will improve patient volume and economic stability.

At Sahlgrenska, for instance, Fridén insisted that the hip replacement team include not only surgeons and rehabilitation specialists but also nurses and nurse's aides. The inclusion of nursing personnel, who spend the most time with patients during recovery, led to important insights. At one meeting, for example, a nurse's aide mentioned that after surgery a significant number of patients experience nausea, a postsurgical complication that not only degrades the quality of care but also adds costs by extending these patients' length of stay in the hospital. As a result, the team has designed new steps for the regular monitoring of severe postsurgical nausea and for identifying potential interventions to alleviate it.

As pilot teams identify clinical-improvement opportunities like this one, these ideas can be immediately translated into an implementation plan and, once implemented, tested for their impact on both outcomes and costs. As a result of the pilot team's efforts, the hip replacement unit at Sahlgrenska was able to improve the productivity of its surgical procedures by more than 30 percent in three months.

Enhance Service Function Productivity

The patient group pilots will typically result in a number of suggestions for how hospital service functions—such as the routines in the emergency ward, the scheduling in the radiology department, or the type of specialists available in the outpatient clinic—can better support the disease-specific clinical pathways. As these suggestions accumulate, these specialty units need to consider how to change their processes, roles and responsibilities, and performance metrics to better satisfy the needs of high-value patient care.

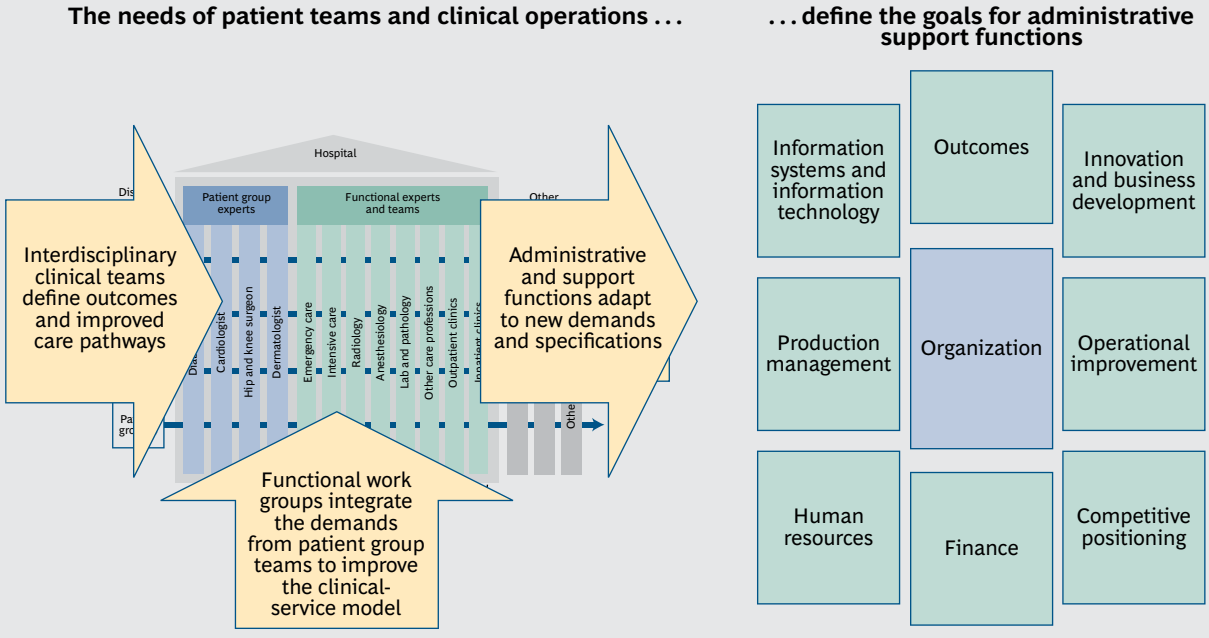
In one hospital where we worked, for example, inpatients had priority access over outpatients to magnetic-resonance imaging (MRI). As a result, patients with cancer of the esophagus, who ordinarily are prepared for treatment through outpatient visits and diagnostics, were instead routinely admitted to the hospital for a costly overnight stay, simply because that was the fastest way to get access to the needed diagnostics. In the process mapping, this work-around quickly became apparent. As a result, the routines for MRI scheduling were changed so that priority outpatients had the same access as inpatients.

Institutionalize the Value-Based Approach

The final step in the pilot process is for teams to develop recommendations for how the continuous tracking of outcomes and costs per patient can be integrated into the day-to-day management of the organization. Doing so often requires some clarification of governance, including new roles in the team; some modifications in IT systems to automate as much of data gathering and analysis as possible; and possibly a change in the hospital's financial-control routines. These last actions lay the foundation for creating a self-reinforcing cycle of continuous improvements that allow hospitals to build on their strengths and develop strategies for competitive differentiation that drive increased patient volume and better economic stability. (See Exhibit 5.)

The hip replacement pilot at Sahlgrenska, for example, has now morphed into an ongoing capability for continuous improvement. Now that the detailed scorecard is in place, the unit has the data that will allow it to take another big step to improve the value it delivers: implementing a new approach to postsurgical rehabilitation known as Fast Track.

Exhibit 5 | Over Time, the Work of the Patient Group Teams Results in Changes Throughout the Hospital Organization



Source: BCG analysis.

(Clinical studies show that the faster a hip replacement patient can get up and about after surgery, the better the health outcomes from the surgery.[1])

Fast Track uses small but effective innovations in care delivery—setting patients' expectations so that they anticipate getting up and standing in 24 hours, putting four patients who have all had the same surgery on the same day in one room to encourage constructive competition in recovery, replacing in-room TVs with a TV room down the hall so that patients have an incentive to get up and move about—to speed patient recovery. With this approach, Sahlgrenska aims to improve the long-term outcome and reduce the average length of stay from the current four to seven days to two days. This change will result in a significant improvement in patient value.

As an organization strives to institutionalize the value-based approach, it will, eventually, have to address a few big-picture items—in particular, the role of IT and the implications for the hospital's organization structure. In a data-driven approach such as we have described, the quality of an organization's information systems is an important success factor. But organizations shouldn't wait for such systems to be put in place to get started on value-based transformation. In our experience, engaged clinical teams can identify effective ways to track outcomes and costs that do not require significant new IT investment. Once organizations have begun to work with a focused set of outcomes metrics and have developed a picture of costs per patient group, they will be in a position to identify the key priorities for future IT investments to further support value improvement—for instance, the automation of data collection and analysis, the integration of new outcomes metrics into the hospital's electronic-medical-record system, improved financial accounting systems that generate patient group data, and so on.

So, too, with organization design and structure. Some of the pioneers of the value-based model have taken the ultimate step of aligning their entire organization around individual diseases. In 2008, for instance, Cleveland Clinic under-

went a major reorganization in which it jettisoned a structure organized around traditional medical disciplines in favor of a new structure based on multidisciplinary institutes organized by disease areas, such as digestive disease and respiratory disease (comprising lungs, breathing, and allergy). Each institute combines medical and surgical departments for specific diseases or somatic systems. All are required to publish outcomes and measure costs. Cleveland Clinic has integrated care through shared protocols and use of electronic medical records at all 75 of its care-delivery sites.[2]

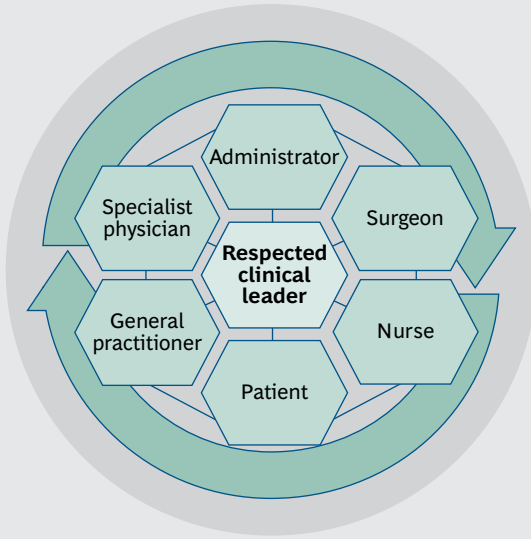
The change has allowed the clinic to take a more patientcentric approach to care and to achieve the cooperation and alignment necessary to improve outcomes and treatment efficiency by taking a holistic view of costs along each treatment pathway. As part of the transformation, Cleveland Clinic also created its in-house Quality & Patient Safety Institute, which tracks outcomes as defined by each of the disease-based teams.

But an organization can take steps short of a complete reorganization. For instance, it can create a matrix structure in which clinical experts within the traditional functional organization are formally assigned the integrator role, with the responsibility to take a horizontal view of the entire experience for a given patient group. Such patient-group "owners" report simultaneously to line management and to a senior executive for value-based health care who has a cross-departmental perspective. It is critical, of course, that these new patient-group leaders are sufficiently empowered to drive the change agenda. (See the sidebar "Value-Based Consolidation at Munich City Hospital.")

In our experience, going through the six steps for an initial pilot group of diseases requires a focused initiative of approximately six to nine months. During that period, the organization customizes and refines its methodological approach and tests it, typically in two waves of patient group pilots. (See Exhibit 6.)

Of course, to work through the full range of 200 or so diseases typically covered by a major hospital network, as well as to execute major changes in IT and in hospital organization, takes longer—about two to three years of persistent senior leadership. To support institutions going through this major transformation

Exhibit 6 | Multidisciplinary Clinical Teams Drive the Agenda for Value-Based Transformation



Six key pilot steps

- Assess organizational readiness
- Define the outcomes that matter
- Allocate costs per patient
- Implement quick wins
- Enhance service function productivity
- Institutionalize the value-based approach

Ongoing activities

- Review metrics and scorecards
- Identify variations, root causes, and best practices
- Drive innovation and implement best practices

Source: BCG analysis.

VALUE-BASED CONSOLIDATION AT MUNICH CITY HOSPITAL

Munich City Hospital is one of the largest public hospitals in Germany, with four large independently operated sites, all located in the city of Munich; 69 separate departments, each with its own medical director; and a 30 percent market share in the Munich metropolitan area. Because of overcapacity in the local market (Munich's ratio of beds to inhabitants is twice the average in Germany, which already has 70 percent more per capita than the average for Organisation for Economic Co-operation and Development countries), the hospital has been losing money for ten years. New European Union rules limiting public subsidies are requiring the hospital to develop a sustainable operating model in order to avoid bankruptcy.

In 2013, BCG began working with Munich City Hospital to define a new strategic direction. The guiding principle behind the work was the conviction that the only way to consolidate and cut costs effectively was not to focus on costs alone. Instead, the team started with a question: What is the right medical concept to ensure that we can deliver the highest quality of care?

The team took a hard look at what the various units in the hospital network were really good at and devised an operating model in which the four sites were treated not independently but as part of an integrated network. By identifying where the hospital delivered patient value—for instance, those specialty units that had enough patient volume to deliver high-quality outcomes—the team was able to establish a set of criteria not only for where to cut but also for where to invest. The key question changed: How can we grow beds in those areas where we are strong?

Answering that question required broad and deep interactions with clinical staff, with a great deal of discussion and close examination of clinical practice. Through these interactions, the team identified some departments with positive patient outcomes and strong growth prospects. The goal was to maintain the core of these high-performing units and consolidate the rest. For example, one of the hospitals in the network was especially good at rehabilitation. The team recommended that this hospital become the rehab center for the entire network, allowing the rehab units at the other three hospitals to close.

The final strategic plan calls for massive consolidation (from 69 departments down to 40), the centralization of support services such as testing labs and pharmaceutical supplies, and painful job cuts (roughly 2,000 of the hospital's 8,000 employees). And yet, there is a relatively strong consensus in support of the new strategy.

Most of the hospital's constituencies understand that the current organization structure is neither economically nor medically sustainable. What's more, because the new strategy builds on the considerable strengths of the hospital and because the process for transformation has been collaborative, it includes an achievable roadmap for growth in addition to the painful but necessary cuts. As one medical director commented, "Finally, we have a concept we can believe in."

effort, BCG has created the BCG Center for Health Care Value to help hospital and other provider-organization executives develop the internal experience and capabilities they need to lead their transformation efforts. In addition to providing both hands-on coaching of hospital management and change teams and training for working-group members, the center will facilitate exchanges among provider organizations so that, in the spirit of continuous improvement, they can learn from one another.

The multiple pressures that health care providers face will not go away. The traditional focus on operational efficiency has reached its limit. Executives at hospitals and other provider groups need a new strategy to succeed. The value-based hospital aligns all constituencies to a common goal, one that engages and motivates the full range of staff around the change agenda and that provides society with a sustainable model for cost-effective and high-quality health-care delivery.

NOTE

1. Kristian Larsen, et al., "Accelerated Perioperative Care and Rehabilitation Intervention for Hip and Knee Replacement Is Effective," *Acta Orthopaedica,* April 2008, http://informahealthcare.com/doi/pdf/10.1080/17453670810016632.

2. Toby Cosgrove, "Value-Based Health Care Is Inevitable and That's Good," Harvard Business Review Blog Network, September 24, 2013, http://blogs.hbr.org/2013/09/value-based-health-care-is-inevitable-and-thats-good/.

FOR FURTHER READING

The Boston Consulting Group publishes many reports and articles on value-based health care that may be of interest to senior executives in the industry.

Competing on Outcomes: Winning Strategies for Value-Based Health Care
A Focus by The Boston Consulting Group, January 2014

The Accountable Care Organization: If You Build It, Will They Come?
A Focus by The Boston Consulting Group, May 2013

Alternative Payer Models Show Improved Health-Care Value
A Focus by The Boston Consulting Group, May 2013

Health Reforms Should Focus on Outcomes, Not Costs
An article by The Boston Consulting Group, October 2012

Progress Toward Value-Based Health Care: Lessons from 12 Countries
A Focus by The Boston Consulting Group, June 2012

What Value-Based Health Care Means for Pharma
An article by The Boston Consulting Group, March 2012

Improving Health Care Value: The Case for Disease Registries
A Focus by The Boston Consulting Group, December 2011

From Concept to Reality: Putting Value-Based Health Care into Practice in Sweden
A Focus by The Boston Consulting Group, November 2010

NOTE TO THE READER

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