

Harvard Business Review

Event Summary

Costs and Outcomes in Health Care

2016

Sponsored by **Medtronic**

Health Care Lessons Lead to Future Best Practices

Next Wave of Health Care Transformation Driven by Standardization of Value-Based Health Care Practices

SYNOPSIS: With the global shift from volume-based to value-based health care approaches underway, new challenges have risen in the form of defining what, exactly, “value” means to patients and health systems on a global basis. Quite simply, value-based health care is when all stakeholders take accountability for improving patient outcomes relative to their cost. And while simple in its theory, turning value-based health care into reality is complex and requires a new era of innovation and risk-taking to bring it to fruition.

Few industries are fortunate enough to have the opportunity to help people live longer, healthier lives. That’s one of the benefits of being in health care—our growth can continue as long as we’re driven to find new ways to keep patients healthier. And while much of the industry’s growth has been based on new treatments, inventions, and services, the biggest area of improvement within reach today is centered on the continued development and implementation of value-based health care strategies.

Medtronic’s mission, unchanged for six decades, speaks to this: we seek to “alleviate pain, restore health, and extend life.” We have been a company focused on patient outcomes since our inception. However, we recognize that we participate in health care systems worldwide that can inappropriately reward behaviors and outcomes that do not improve patient outcomes for the investment rendered. We believe that new forms of innovation and collaboration are needed to solve health care’s greatest challenges, and we are committed to participating in efforts around the world where value and patients are put at the center of new payment and delivery systems.

We are making strides. Over the past several years, we have begun participating in partnerships and pilots seeking to implement value-based health care principles and models that are showing tremendous promise. Together, we and our partners—including payers, physicians, hospital administrators, and patients—are proving that if we can align around the right patient outcomes, minimize the variance in care pathways, and share data, we can support the advancement of health systems worldwide.

We are just beginning. Defining and implementing value-based delivery and payment systems will require hard work and perseverance. At Medtronic, we know we must go further to contribute to this goal—with new technologies, services, and expertise. And we know we can’t do it alone—we will only do it together with new partners and new relationships. We call it **Further, Together**.

Join us at www.medtronic.com/furthertogether.

COSTS AND OUTCOMES IN HEALTH CARE

FEATURING

Omar Ishrak, Chairman and Chief Executive Officer, Medtronic

Robert Kaplan, Marvin Bower Professor of Leadership Development, Harvard Business School;
co-developer of value-based health care articles and research studies with Michael Porter

PANELISTS

Dr. Christina Akerman, President, International Consortium for Health Outcomes Measurement (ICHOM)

Dr. Rick Kuntz, Senior Vice President, Chief Scientific, Clinical, and Regulatory Officer, Medtronic

Dr. Thomas H. Lee, Chief Medical Officer, Press Ganey; Professor of Medicine, Harvard Medical School;
Professor of Health Policy and Management, Harvard School of Public Health

MODERATOR

Adi Ignatius, Editor-in-Chief, *Harvard Business Review*

OVERVIEW

Health care is in a major transition, moving from a sector where reimbursement is based on the volume of patient visits, tests, and procedures to a system designed to reward better patient outcomes at lower costs. This new focus on value-based health care demands new processes and approaches to delivering care, accompanied by new ways to evaluate costs and outcomes. The result of this shift will be a transformational change.

Standardization of measurements is a key element in making the shift to value-based health care possible. New frameworks are needed so that doctors can understand how to provide the most effective treatment for a patient's medical condition over a complete cycle of care. New business models must be developed so reimbursements shift to new payment models—such as emerging “bundled payments” methods—that reward the best outcomes from a complete cycle of care rather than reward the number of visits or operations. Without the ability to accurately map and measure the outcomes that are most valuable to patients and understand the clinical processes and costs of the necessary resources, there will be no common understanding—or agreement—on the best way to move value-based health care forward.

The shift to value is already underway and is gaining momentum. Insights from a recent forum with health care leaders revealed there are emerging case studies that illustrate how focusing on specific patient cohorts, developing standard outcomes measures, paying for the cycle of care, and developing creative new delivery and business models are changing the game and improving value.

“The idea of optimizing costs and efficiencies is what value-based health care is all about.”

Omar Ishrak, Medtronic

CONTEXT

In recent years, *Harvard Business Review* has increased its focus on health care, which now comprises nearly 20% of the U.S. economy and where its leaders face major challenges around strategy, management, talent, costs, revenue, and organizational culture. As part of increasing this new focus, *Harvard Business Review*—in collaboration with *The New England Journal of Medicine*—launched an online Insight Center, sponsored by Medtronic, that explores innovations and best practices for improving patient outcomes while reducing costs.

At a recent private HBR and Medtronic forum, presenters examined the shift to value-based reimbursement and delivery systems. They focused on elements of this shift to value: defining and measuring outcomes, determining accurate costs, and identifying key drivers of change. The presenters then engaged in a robust discussion with other health care leaders in attendance on key issues in the transition to value-based systems.

KEY LEARNINGS

Opportunities and Priorities

Medtronic Chairman and CEO Omar Ishrak shared an inspirational vision for the future of health care as a growth market with never-ending opportunities. He outlined three universal health care imperatives:

Improve clinical outcomes. People will always need health care, and there will always be opportunities to use and improve technology and information to deliver better outcomes.

Expand access. There is an opportunity, a need, and a responsibility to provide equality and access to health care around the world. Therapies that have been the standard of care in the developed world are still not available for billions of people. If such therapies were broadly available, they would lead to longer and better lives for many people.

Optimize costs and efficiencies. Health care is expensive, and societies don't know how to value it or pay for it. Costs are out of control, and there are tremendous inefficiencies in the system. But there is a risk of cutting costs arbitrarily and rationing, which would affect access and outcomes.

Defining Value

During the forum, Harvard Business School professor Robert Kaplan defined value as health outcomes that matter to patients for the cost of delivering those outcomes.

$$\text{Value} = \frac{\text{Health outcomes that matter to patients}}{\text{Costs of delivering the outcomes}}$$

The relevant unit of analysis for creating and measuring value is the treatment of a patient's medical condition over a complete episode of care, Kaplan said. Measuring value requires analyzing:

- The **full set of patient health outcomes** over the care cycle
- The **total costs of resources** used to care for a patient's condition over the care cycle

Thus, calculating value requires being able to measure health outcomes and calculate costs in a consistent, systematic way.

Measuring Health Outcomes

Too often, the term "outcome" in health care has traditionally meant compliance with guidelines, and not outcomes that truly matter to patients, said Dr. Thomas Lee, Chief Medical Officer for Press Ganey and professor of medicine at Harvard Medical School. To move forward, there must be a new agreement on the right outcome measures. Lee argued that standard minimum data sets have to come from outside of provider organizations. The marketplace must drive creation and adoption of comparable outcomes measures.

One organization working to address this need is the International Consortium for Health Outcomes Measurement, or ICHOM, a nonprofit organization formed to drive the health care industry toward value-based health care by defining global outcome standards. In defining outcomes, ICHOM is focused on what matters most to patients for specific medical conditions. ICHOM also emphasizes adopting standards, reporting results, and learning.

By the end of 2016, ICHOM anticipates having 21 standard sets covering 45% of the total disease burden. These data sets provide standards of care for patients with stroke, coronary artery disease, lung cancer, cataracts, and more. Standards are currently being developed for another 10 conditions.

Already, 60 organizations around the world are actively implementing ICHOM standards and another 200 are contemplating them. Adoption of ICHOM standards provides a consistent way to measure and compare outcomes, and to determine value.

Determining Costs

Historically, poor cost management has led to communication gaps between clinical personnel and health care administrators. Financially oriented administrators have focused on increasing margins, often by cutting costs. Clinicians have been appropriately focused on mission, sometimes with little concern for costs. These independent objectives have operated at odds and, in many cases, have created a wall between colleagues where they “haven’t spoken the same language.”

According to Kaplan of HBS, time-driven activity-based costing (TDABC) can provide a consistent language, help tear down walls, and align the organization around a single view of costs. Here’s how TDABC works:

- **Clinical processes are mapped.** Clinical and administrative teams work collaboratively to map the entire treatment process for a patient’s complete cycle of care for a particular medical condition. This can also be done for patients with chronic conditions.
- **Resources used are determined.** For each process and each patient cycle of care, the resources involved are determined. Further, for each resource in a process, the quantity of the resource used is determined. For a particular process, there might be 10 minutes of an office assistant’s time, 30 minutes of an X-ray technician’s time, and 60 minutes of a surgeon’s time.
- **Costs of each resource used are determined.** For each resource used, the fully loaded cost per minute of that resource is calculated.

FIGURE 1: PROCESS MAP AND RESOURCES USED

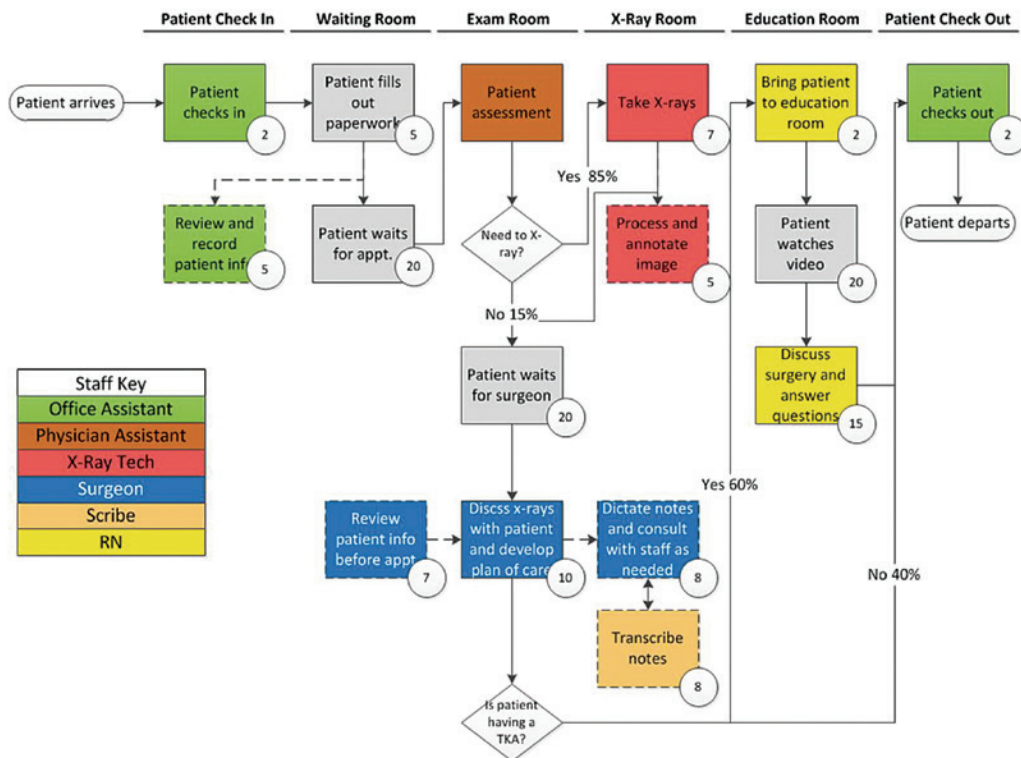
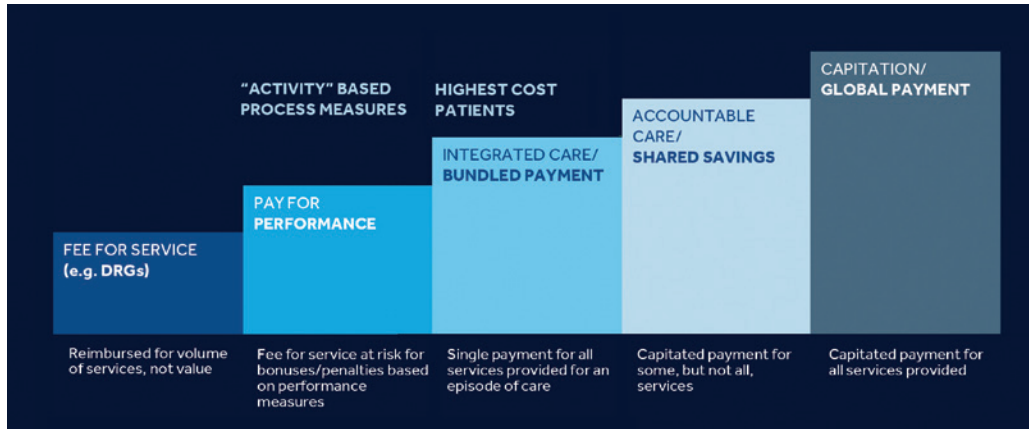


FIGURE 2: REIMBURSEMENT MODELS SHIFTING TO VALUE



The result of TDABC is that the process of care is defined, all resources involved in a process are determined as well as the amount of each resource (the “quantity” needed), and the cost of each resource is calculated (the “price”). Once the quantity of all resources involved is known along with the price, the total cost of a specific cycle of care can be determined. Since clinicians and administrators are all involved in TDABC, everyone can agree on the output.

By measuring outcomes using consistent standards, and by using TDABC to understand the actual costs of an episode of care, it’s possible to measure value and compare the value delivered by different providers.

A Global Shift Toward Value

Many countries are already taking steps to move toward a more value-based reimbursement model, including the Netherlands, Scandinavian countries, Western European nations, and the United States.

The legacy reimbursement model in the United States has been based on “fee for service,” where reimbursement correlates to the volume of services, not the value of services. Movement to pay for performance was a slight shift toward value, but payment was still based on activity rather than results. Focusing on performance was a good starting point, but it could backfire into meaningless work and frustrating bureaucracy.

At the other end of the spectrum is capitation, or global payments, where providers receive a fixed fee to pay for all the health care services needed for a population. This is a complex approach, since populations include both sick and healthy people, and people with a wide range of different conditions. The payment amount selected can sometimes seem arbitrary, and providers are often not well equipped to assume the risk or manage capitated payments effectively.

Another emerging approach gaining momentum is a reimbursement model focused on bundled payments as a building block toward population health. With bundled payments, a provider receives a single payment to cover all services associated with a complete episode of care. Reimbursing in bundles for clearly defined episodes of care has the potential to change how care is delivered, resulting in dramatic improvements in outcomes and efficiency.

HOW BUNDLED PAYMENTS WORK

- Payment is aligned with areas providers can **directly control**.
- Provider **accountability for value** and rewards for good **outcomes** at the **medical condition level** are provided.
- There are strong incentives to **improve efficiency**.
- Bundled payments **decouple** payments from performing particular services or using specific treatments or protocols, freeing the provider to **innovate and optimize overall resource use**.
- The approach directly aligns reimbursement with **value creation**; encourages value-based **competition that improves outcomes and lowers costs**.

Bringing About Change

Dr. Akerman from ICHOM and Dr. Lee described the current state of health care delivery as “a time of transition.” Lee asserted that operational effectiveness, which has long been a priority for health care providers, is now table stakes, or an assumed part of organizational capability. Thriving in today’s environment requires strategy and making strategic choices. Drawing from the seminal *Harvard Business Review* article “The Strategy That Will Fix Health Care,” which Lee co-authored with Harvard colleague Michael Porter, Lee shared the strategic framework for creating a value-based health care delivery system. The framework’s six elements identify what needs to occur to transform and dramatically improve the value of health care delivery.

CREATING A VALUE-BASED HEALTH CARE DELIVERY SYSTEM: THE STRATEGIC AGENDA

1. Reorganize care into **Integrated Practice Units (IPUs)** around patient medical conditions.
2. Measure **outcomes** and **costs** for every patient.
3. Move to **bundled payments** for care cycles.
4. Integrate care delivery **systems**.
5. Expand **geographic reach**.
6. Build and enable an **information technology platform**.

Lee also offered six key questions that organizations must answer when developing a strategy. These are:

1. What is the goal?
2. What businesses are we in?
3. What businesses should we compete in?
4. What is our unique value proposition for each business?
5. What synergies can we create across business units and sites?
6. What should our geographic density and scope be?

Importantly, Lee stressed the role of teamwork as a differentiator in the delivery of health care.

“I strongly believe the real competitive differentiator for 21st-century health care systems is going to be teamwork—the ability to organize terrific multidisciplinary teams with clear roles and responsibilities.”

Thomas Lee, Press Ganey and Harvard University

Value-Based Health Care in Practice

During the forum, Dr. Rick Kuntz, Chief Scientific, Clinical, and Regulatory Officer for Medtronic, shared details of the company’s 7-Step Value-Based Healthcare Framework™ that Medtronic developed to work with others in the health care system and contribute to value-based health care models. The framework utilized by Medtronic includes:

- **Identifying patient cohorts.** Cohorts are distinct groups with a disease or condition for whom a common care pathway can be defined.
- **Defining and baselining outcomes.** Once a cohort is defined in a consistent, systematic way, and a common care pathway is identified, it is possible to define and baseline outcomes measures. For example, one cohort of cardiac patients may need single vessel treatment; another cohort may need multiple stents. These different cohorts have different care pathways and different expected outcomes as well as costs.
- **Developing business models around the value-based construct.** Once cohorts have been identified and outcomes measures have been defined, it is possible to determine prospective performance and cost objectives, and develop the value proposition and business model to support the value-based approach. The principles of outcomes-based payments can be applied to these business models, and the thinking around paying for outcomes over a certain period of time can be incorporated in bundled payment models.

To measure the outcome, Dr. Kuntz of Medtronic explained, it is necessary to accurately measure and map a patient’s health status at the beginning of a care process and at the end of it. The intent of the care process is to improve the patient’s health status, which can be measured and documented.

MEDTRONIC EXAMPLE

Lowering Risks for Patients with Diabetes

This example involves better managing Type 1 diabetes using an insulin pump and continuous glucose monitoring. Multiple outcomes measures have been defined, including both traditional clinical measures and patient-focused measures. Medtronic’s goals are improvement along multiple dimensions using a variety of technologies, some proprietary to Medtronic. The intent is to deliver realizable value over a period of time by lowering the risks for patients with chronic conditions. The business model may be an annual service fee, moving to some form of a bundled payment.

Discussion

Harvard Business Review Editor-in-Chief Adi Ignatius and members of the audience raised several topics for discussion. Among them:

- **Driving change.** Dr. Lee argued that economic pressures are real and will serve as a catalyst for making care better and driving change within health care.
- **Focusing on the patient.** Historically, measures in the health care system have not incorporated what matters to patients. What is different about ICHOM's measures is that value and outcomes are defined from patients' perspectives. Also, in addition to defining and measuring value from patients' perspectives is the importance of empowering individuals with tools and information to better manage their own care. Value-based models must also account for the fact that patients contribute greatly to the end result based on their behaviors.
- **Including physicians.** Several hospital leaders in attendance noted that physicians are often *not* included in discussions about value-based health care, but they need to be involved. In fact, physicians should be part of efforts to redesign health care delivery, as opposed to having designs imposed on them. Lee didn't dispute the importance of involving physicians, but he doesn't believe that change will come about from physician lectures and education sessions. He believes the primary driver of change will be fear among providers of losing business. In his view, the fear of potentially losing market share and revenue, and the need to align incentives, will be what truly drives change.
- **Managing in two worlds.** Participants noted that even as interest in value-based health care grows, fee for service will remain prominent, meaning that providers must concurrently navigate within two worlds. Most forum participants agreed, but still see advantages in better managing both acute and chronic conditions. The type of effort to improve efficiency and outcomes that come about by focusing on value in a bundled payment scenario would yield benefits in any type of payment model.
- **Consider targeting employers.** Some insurers have been slow to embrace concepts of value-based payment and bundled payments. Large self-insured employers may be a better target, as they want better outcomes and value for their employees, and they ultimately bear the financial responsibility for treatment. Providers should consider efforts to directly access large employers or groups of employers for value-based initiatives.

