Measuring Outcomes
The Key to Value-Based Health Care

A HARVARD BUSINESS REVIEW WEBINAR FEATURING

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International Consortium for Health Outcomes Measurement (ICHOM)

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OVERVIEW

Everyone in health care is focused on increasing value, by improving outcomes and lowering costs. But measuring value, organizing around it, and delivering it is incredibly challenging to many organizations.

Christina Åkerman and Caleb Stowell from ICHOM laid out strategic questions that providers must address in transforming from their current volume-based systems to systems based on value. The transformation to value must be grounded in the measurement of outcomes. Measuring outcomes defines clear organizational goals, drives team alignment, and motivates clinicians to compare their results and learn from each other. It highlights value-enhancing cost-reduction opportunities, and enables payment to shift from volume to results.

CONTEXT

Åkerman and Stowell described why outcomes measurement is essential in transforming to a value-based health care system, and described best practices in organizations where measurement is making a difference.

KEY LEARNINGS

Future success in health care requires a value-based strategy.

Value-based health care is increasingly the dominant paradigm for the future of health care because it is the only way to make health care sustainable. For providers, this is a dramatic shift from getting paid based on activity, regardless of whether the activity was high quality or not, to getting paid based on results. The transformation required that providers address six key strategic questions.

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<th>Key Strategic Questions</th>
<th>Today: Traditional Organizations</th>
<th>Future: Value-based Organizations</th>
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<td>1. How should I measure success?</td>
<td>Process compliance and charging based on activity/volume</td>
<td>Outcomes and cost per patient (value)</td>
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<td>2. How should I organize my service lines?</td>
<td>Specialty departments</td>
<td>Integrated practice units (IPUs) organized around the patient</td>
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<td>3. How should I be reimbursed?</td>
<td>Fee for individual services</td>
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<td>4. How should I grow and expand?</td>
<td>By federation of stand-alone hospitals and clinics</td>
<td>Through integration of care offerings across facilities</td>
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<td>5. What markets should I serve?</td>
<td>All service lines in a local market</td>
<td>Grow excellence service lines across geographies</td>
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<td>6. How will technology help?</td>
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A successful value-based strategy is built on a foundation of measurable outcomes. The shift to a value-based system can feel overwhelming for many providers. Experience has shown that measuring outcomes is the key for transformation. Without outcomes data, organizations don’t have the facts to make the difficult decisions that drive the rest of the value agenda. Starting with outcomes enables the rest of the strategic agenda to happen naturally.

There are five reasons why outcomes measurement is essential.

People enter the health care field with a desire to achieve good outcomes for their patients, yet medicine is often practiced as a craft, with high variability. When quality has been measured, it has been measured the wrong way, with a focus on defects. Measurement has not answered the ultimate question about the impact of care or if the patient’s goals have been achieved.

In contemplating the role of measurement, Åkerman and Stowell have identified five principles for how outcomes enable the transformation to a value-based system.

1. **Outcomes define the goal of the organization and set direction for its differentiation.** Most hospitals’ missions include words like “caring” and “quality,” but rarely mention outcomes. What is needed is for providers to set “measurable excellence” as their goal, a move that will differentiate their organizations.

   **Example:** Martini Klinik is a specialized prostate cancer clinic in Germany composed of a team of experts who operate as equals across the continuum of care for prostate cancer. The clinic has developed a systematic process for evaluating different practices and surgical techniques to understand their influence on outcomes—both cancer recurrence outcomes and functional outcomes. The clinic’s survival rates are not that different from others across Germany, which are already high. But on other outcomes measures that matter greatly to patients, Martini Klinik performs far better. These quality advantages have led this small clinic to become the largest prostate cancer center in the world.

   **The Impact of Focus and Teamwork**

   ![Figure 1: Outcomes at Martini Klinik](source: BARMER GEK Hospital Report 2012, Martini-Klinik database)

   **“This gives us some sense of what can happen if we set measurable excellence as our goal.”**

   – **CALEB STOWELL**

   “We have found that the simplest and most powerful thing to do first [in transforming to a value-based system] is to start measuring outcomes.”

   – **CHRISTINA R. ÅKERMAN**
2. **Outcomes inform the composition of integrated care teams.** Poor outcomes data can be a strong driver of the need for better integration.

   *Example:* When Charles Fraser started at Texas Children’s Hospital, the hospital was doing poorly on outcomes measurement for complex surgeries, and also wasn’t performing well on more common procedures. Fraser used the outcomes data to motivate his team members to come together to deliver better team-based care. Over a 20-year period, mortality rates on the most complex procedures have gone down by a factor of 10 and mortality rates on the most common procedures are near zero.

![Figure 2]( texas children's hospital mortality rates)

3. **Outcomes motivate clinicians to compare their performance and learn from each other.** Martini Klinik and Texas Children’s Hospital are both examples of how transparency of outcomes data motivates clinicians to compare and improve their performance.

   *Example:* Blue Cross Blue Shield of Michigan (BCBSMI), which insures 40% of people in the state, had aligned interests with employers and other payers in the state in wanting to control costs while maintaining or improving quality. BCBSMI’s senior vice president of value partnerships knew that it was necessary for payers and providers to form a new type of collaborative, trusting relationship. Working together, several organizations formed collaborative quality initiatives focused on specific areas of care. Payers funded infrastructure along with collection and analysis of data. Providers set improvement goals and identified what was working and what wasn’t working in improving value.

![Figure 3]( collaborative quality initiatives in michigan)
The first four collaboratives saved BCBSMI $120 million and saved the state $600 million. The state has since formed 22 collaboratives which have saved the state $1.4 billion.

4. **Outcomes highlight value-enhancing cost reduction.** In health care, statistics are often cited on how much waste exists in the system. Yet reducing waste is hard because it often comes from a clinician’s decision to perform a test or provide care, based on what a clinician thinks is necessary or works. By using data, decisions can be based on evidence about what actually works and is appropriate and necessary.

*Example:* Partners Healthcare System is a large health system in Massachusetts. Partners is part of an accountable care organization, which means it is accepting a budget from a payer to take care of patients, making Partners financially responsible for the cost of care. Partners concluded that it needed a data-driven method to help patients and doctors optimize care decisions. The result of adopting this process is that when diagnostic catheterizations are performed, they are almost always deemed “appropriate” in contrast to the same procedure in New York (see Figure 4 below).

![Appropriateness scores for Diagnostic Catheterization at MGH vs. NY Cardiac Database](source)

This shows the pathway of how across stakeholders, payers and providers can work together to improve quality and lower costs.”

– CALEB STOWELL

5. **Outcomes enable payment to shift from volume to results.** The U.S. Department of Health and Human Services has set a goal that by the end of next year, 80% of payments will be tied to quality. It will be challenging to achieve this goal because the United States has not defined value and lacks an infrastructure for measuring outcomes. The United States needs to learn from the international experience, as many countries are more advanced.

*Example:* In Stockholm, Sweden, routine hip and knee replacements are paid for through bundled payments for the entire cycle of care. This includes the pre-op visit, the operation, a prosthesis, inpatient rehab, and follow-up physician visits. The institution is responsible if a setback occurs, such as an infection. The government’s expectation was that the price
of the bundle would be 25% below the previous costs, which several providers agreed to. As a result of this switch to bundled payments, complications went down by 15-20%, and the volume at specialized orthopedic providers increased by 30%. The total spend on this condition barely rose, even though the number of patients receiving the surgery increased dramatically.

**Transparency on value is coming. The key is to be in front of it.**

Like global warming, transparency on value is coming, and everyone knows it’s happening, but there is a temptation to ignore it. There will be benefits to being ahead in this transformation and penalties for lagging behind.

**TOPICS IN Q&A**

- **Global standards.** It is possible to define global standards for outcomes that matter to patients, as the human experience of suffering from a particular illness is common.

- **Empowering patients with data.** Today, patients don’t act on data. Common reasons are because the data that is available isn’t terribly helpful, and data isn’t available at the right time. What is needed is to have the right information available at the right time.

- **Operationalizing measurement.** Provider organizations need to build or acquire IT platforms to aggregate data and make it actionable. Åkerman suggested starting with a pilot in an area of interest.

- **Managing two business models.** A challenge for providers is operating concurrently in a fee-for-service system and a value-based system. This is a challenge, but similar challenges are faced in any industry undergoing transformation. It requires leadership, vision, preparation, and investments in IT, HR, and analytics.

- **Cultural change.** Changing an organization’s culture requires champions and clear goals.

> “Start with the facts, which are the data on outcomes that you produce for your patients. If you make them transparent to your clinical teams and to the public, in time, the rest of the value agenda will follow.”

> — CALEB STOWELL


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Dr. Christina R. Åkerman is President of ICHOM and Senior Institute Associate at the Institute for Strategy and Competitiveness (ISC) at Harvard Business School. Between 2008 and 2014, she served as Director General for the Medical Products Agency (MPA) in Sweden, a national agency employing approximately 750 people and under the aegis of the Swedish Ministry of Health and Social Affairs. During this period, she was also a Member of the Board of the European Medicines Agency (EMA), which is responsible for the scientific evaluation of medicines for use in the European Union. Before her position with MPA, Christina served as Vice President Medical of AstraZeneca Sweden as well as Marketing Company President of AstraZeneca Philippines. She has also been working chair of start-up companies and on the Board of Fouriertransform, a Swedish state-owned venture capital company. Christina received her medical degree from the University of Linköping. She wrote her doctoral thesis in Clinical Physiology and is a specialist in Clinical Pharmacology. She has an Executive MBA in General Management from the Stockholm School of Economics.

Dr. Caleb Stowell joined ICHOM after spending two years as a research associate and then as a senior health care researcher with Professor Michael Porter at the Institute for Strategy and Competitiveness (ISC) at Harvard Business School. During this time, he contributed to academic articles, case studies, and presentations promoting a value-based approach to health care delivery in the U.S. and abroad. More recently, he served as the ISC’s primary liaison in launching ICHOM. In November 2012, he joined ICHOM full-time to lead its global outcome standardization efforts. Stowell received his M.D. from Harvard Medical School.

Gardiner Morse is a senior editor at Harvard Business Review where he focuses on marketing, innovation, and technology. He has developed articles on a wide range of topics including marketing technologies, data privacy, health care management, and smart products strategy. Before coming to HBR, Morse served for 15 years in a range of editorial and business roles with the publishers of the New England Journal of Medicine. There he developed and launched numerous publications for physicians and the general public, and served as executive editor of Hippocrates, a journal for primary care physicians.
GOING LONG ON VALUE

Value-Based Healthcare Starts With Measuring and Improving Long-Term Outcomes

The move toward value-based healthcare starts with standardizing how we think about outcomes and how we measure them.

Currently, the healthcare industry has been focused on measuring short-term medical outcomes: Was the procedure a success? How quickly did the patient leave the hospital? Did he or she have to come back to the hospital for follow-up care?

What’s missing are some of the longer-term outcomes that matter most to patients — what is the patient’s long-term prognosis? Will the therapy improve the patient’s quality of life? How often will the patient need to use healthcare resources going forward? These are the long-term questions we need to be asking and answering collaboratively as our industry moves toward value-based care.

Standardization of outcomes measurement has to begin with collaboration amongst providers, suppliers, physicians, payers and patients on disease-specific outcomes. Collectively, we have to agree on how to systematically measure outcomes for specific disease states and medical conditions.

Once we have established the importance of long-term outcomes and standardized the measurements, then we have the ability to link them to cost of care. The last step — measuring outcomes and tying them to reimbursement — is important, not just for providers and payers, but for the entire healthcare system. We need to know more about how patients’ outcomes look across medical technology, pharmaceuticals, and other interventions.

At Medtronic, we define value-based healthcare as an effort to develop and deploy products, services and integrated solutions that improve patient outcomes per dollar spent in the healthcare system by improving the quality of care and/or reducing the associated expense. Most importantly, the value derived from the quality of care isn’t determined at a specific point in time that focuses on transactional value. Instead, value should be measured holistically over a longer time horizon and in ways that are meaningful to the patient.

We believe Medtronic has an important role to play in the move toward value-based healthcare. There’s an opportunity to build on what we are driven to do every day: leverage the full power of our technologies, services and people to work in collaboration with others to help improve healthcare outcomes around the world.

Learn more about Medtronic’s perspective on value-based healthcare and ways we can work together to improve outcomes at medtronic.com.

ABOUT MEDTRONIC

As a global leader in medical technology, services and solutions, Medtronic improves the health and lives of millions of people each year. We believe our deep clinical, therapeutic and economic expertise can help address the complex challenges — such as rising costs, aging populations and the burden of chronic disease — faced by families and healthcare systems today. But no one can do it alone. That’s why we’re committed to partnering in new ways and developing powerful solutions that deliver better patient outcomes.

We’re now among the world’s largest medical technology, services and solutions companies, employing more than 85,000 people worldwide, serving physicians, hospitals and patients in nearly 160 countries. Join us in our commitment to take healthcare Further, Together. Learn more at www.medtronic.com.