Value Based Health Care Delivery
The Strategic Agenda

Prof. Michael E. Porter
Harvard Business School

Strategy for Health Care Delivery
Leadership Workshop
January 11, 2009

This presentation draws on Michael E. Porter and Elizabeth Olmsted Teisberg: Redefining Health Care: Creating Value-Based Competition on Results, Harvard Business School Press, May 2006, “How Physicians Can Change the Future of Health Care,” Journal of the American Medical Association, 2007; 297:1103:1111, and “What is Value in Health Care,” ISC working paper, 2008. No part of this presentation may be reproduced, stored in a retrieval system, or transmitted in any form or by any means — electronic, mechanical, photocopying, recording, or otherwise — without the permission of Michael E. Porter. Further information about these ideas, as well as case studies, can be found on the website of the Institute for Strategy & Competitiveness at http://www.isc.hbs.edu.
Value-Based Health Care Delivery
Executive Education Course

• The Leadership Workshop on Strategy for Health Care Delivery is an intensive, two day workshop on the principles of value-based health care delivery, examining organizations working to implement those principles in practice.
Participants

71 Leaders from Health Care Organizations Worldwide

- 37 Hospital/Provider Organization CEO’s and Senior Executives
- 10 Chief Medical/Clinical Officers
- 2 Chief Nursing Officers
- 7 Health Plan CEO’s and Senior Executives
- 4 Educators
- 9 Government Officials
- 2 Health Care Philanthropists/ Board Members

Countries

- United States (48)
- Canada (13)
- Finland (4)
- Sweden (3)
- Germany (2)
- Taiwan (1)
Faculty

- **Michael E. Porter**, Harvard Business School, Course Head
- **Elizabeth Olmsted Teisberg**, University of Virginia, Darden Graduate School of Business Administration
- **Robert Huckman**, Harvard Business School
- **Sachin Jain**, Research Fellow, Institute for Strategy and Competitiveness
- **Scott Wallace**, Batten Fellow, University of Virginia, Darden Graduate School of Business
Redefining Health Care Delivery

• Universal coverage and access to care are **essential, but not enough**
• The core issue in health care is the **value of health care delivered**

Value: Patient health outcomes per dollar spent

• How to design a health care system that **dramatically improves value**
  – Ownership of entities is secondary (e.g. non-profit vs. for profit vs. government)
• How to create a **dynamic system** that keeps rapidly improving
Creating a Value-Based Health Care System

• Significant improvement in value will require **fundamental restructuring of health care delivery**, not incremental improvements

Today, 21\(^{st}\) century medical technology is delivered with 19\(^{th}\) century organization structures, management practices, and pricing models

- Process improvements and safety initiatives are beneficial but **not sufficient**
Harnessing Competition on Value

- Competition is a powerful force to encourage restructuring of care and continuous improvement in value
  - Competition for patients
  - Competition for health plan subscribers

- Today’s competition in health care is not aligned with value

Financial success of system participants ≠ Patient success

- Creating competition to improve value is a central challenge in health care reform
Zero-Sum Competition in U.S. Health Care

**Bad Competition**

- Competition to *shift costs* or *capture more revenue*
- Competition to *increase bargaining power* and secure discounts or price premiums
- Competition to *capture patients* and *restrict choice*
- Competition to *restrict services* in order to maximize revenue per visit or reduce costs

**Good Competition**

- Competition to *increase value for patients*

Zero or Negative Sum

Positive Sum
Principles of Value-Based Health Care Delivery

1. Set the goal as value for patients
   - Not volume
   - Not access
   - Not equity
   - Not cost reduction
   - Not “profit” in the current scheme

\[
\text{Value} = \frac{\text{Health outcomes}}{\text{Costs of delivering the outcomes}}
\]

- Outcomes are the full set of health outcomes achieved by the patient
- Costs are the total costs, including costs not necessarily borne within the health care system
Principles of Value-Based Health Care Delivery

1. Set the goal as **value for patients**
2. The best way to **contain cost** is to **improve quality**, where quality is health **outcomes**

- Prevention of disease
- Early detection
- Right diagnosis
- Early and timely treatment
- Right treatment to the right patients
- Treatment earlier in the causal chain of disease
- Rapid care delivery process with fewer delays
- Less invasive treatment methods
- Fewer complications
- Fewer mistakes and repeats in treatment
- Faster recovery
- More complete recovery
- Less disability
- Fewer relapses or acute episodes
- Slower disease progression
- Less need for long term care
- Less care induced illness

- **Better health** is the goal, not more treatment
- Better health is **inherently less expensive** than poor health
Principles of Value-Based Health Care Delivery

1. Set the goal as **value for patients**

2. The best way to **contain cost** is to **improve quality**, where quality is health **outcomes**

3. To maximize value health care delivery must be organized around **medical conditions** over the **full cycle of care**

- A medical condition is **an interrelated set of patient medical circumstances best addressed in an integrated way**
  - Defined from the **patient’s** perspective
  - **Includes** the most common co-occurring conditions
  - Involving **multiple** specialties and services

- The medical condition is the **unit of value creation** in health care delivery
Restructuring Care Delivery
Migraine Care in Germany

Existing Model: Organize by Specialty and Discrete Services

- Primary Care Physicians
- Outpatient Neurologists
- Outpatient Physical Therapists
- Imaging Centers
- Inpatient Treatment and Detox Units
- Outpatient Psychologists

New Model: Organize into Integrated Practice Units (IPUs)

- Imaging Unit
- Primary Care Physicians
- West German Headache Center Neurologists, Psychiatrists, Physical Therapists, Day Hospital
- Essen Univ. Hospital Inpatient Unit
- Network Neurologists

- The health plan was crucial to this transformation

# The Cycle of Care

## Breast Cancer

<table>
<thead>
<tr>
<th>INFORMING &amp; ENGAGING</th>
<th>MEASURING</th>
<th>ACCESSING</th>
<th>MONITORING/ PREVENTING</th>
<th>DIAGNOSING</th>
<th>PREPARING</th>
<th>INTERVENING</th>
<th>RECOVERING/ REHABING</th>
<th>MONITORING/ MANAGING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice on self screening</td>
<td>Counseling patient and family on the diagnostic process and the diagnosis</td>
<td>Counseling on the treatment process</td>
<td>Counseling on rehabilitation options, process</td>
<td>Counseling on long term risk management</td>
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<tr>
<td>Consultation on risk factors</td>
<td>Explaining patient choices of treatment</td>
<td>Achieving compliance</td>
<td>Achieving compliance</td>
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<td></td>
<td>Patient and family psychological counseling</td>
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<td>Psychological counseling</td>
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<td>Recurring mammograms (every 6 months for the first 3 years)</td>
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</tbody>
</table>

- Self exams
- Mammograms
- Mammography lab visits
- Office visits
- Mammography lab visits
- Medical history
- Control of risk factors (obesity, high fat diet)
- Genetic screening
- Clinical exams
- Monitoring for lumps
- Medical history
- Determining the specific nature of the disease
- Genetic evaluation
- Choosing a treatment plan
- Surgery prep (anesthetic risk assessment, EKG)
- Plastic or oncoplastic surgery evaluation
- Surgery (breast preservation or mastectomy, oncoplastic alternative)
- Adjuvant therapies (hormonal medication, radiation, and/or chemotherapy)
- In-hospital and outpatient wound healing
- Treatment of side effects (e.g. skin damage, cardiac complications, nausea, lymphodema and chronic fatigue)
- Physical therapy
- Periodic mammography
- Other imaging
- Follow-up clinical exams
- Treatment for any continued side effects
Principles of Value-Based Health Care Delivery

4. Value is enhanced by increasing provider experience, scale, and learning at the medical condition level.

The virtuous cycle extends across geography when care for a medical condition is integrated across locations.
### Fragmentation of Hospital Services
#### Sweden

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Number of hospitals performing the treatment (of 116)</th>
<th>Average number of procedures per provider per year</th>
<th>Average number of procedures per provider per month</th>
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</thead>
<tbody>
<tr>
<td>Heart transplants</td>
<td>3</td>
<td>13</td>
<td>1.1</td>
</tr>
<tr>
<td>Cardiac valve procedures with cardiac catheter</td>
<td>5</td>
<td>11</td>
<td>0.9</td>
</tr>
<tr>
<td>Coronary bypass with cardiac catheter</td>
<td>6</td>
<td>56</td>
<td>4.7</td>
</tr>
<tr>
<td>Cleft lip and palate repair</td>
<td>8</td>
<td>67</td>
<td>5.6</td>
</tr>
<tr>
<td>Splenectomy, Age &gt;7</td>
<td>39</td>
<td>4</td>
<td>0.3</td>
</tr>
<tr>
<td>Total Mastectomy (without complications)</td>
<td>66</td>
<td>45</td>
<td>3.8</td>
</tr>
<tr>
<td>Iguinal &amp; femoral hernia procedures, Age &gt;17 (without complications)</td>
<td>67</td>
<td>47</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Principles of Value-Based Health Care Delivery

5. Integrate health care delivery *across facilities* and *across regions*, rather than duplicate services in stand-alone units.

*Excellent providers can manage care delivery across multiple geographies.*
Principles of Value-Based Health Care Delivery

1. Set the goal as **value for patients**
2. The best way to **contain cost** is to **improve quality**, where quality is health **outcomes**
3. To maximize value, health care delivery must be organized around **medical conditions** over the **full cycle of care**
4. Drive value improvement by increasing provider **experience, scale**, and **learning** at the **medical condition level**
5. Value requires integrating health care delivery **across facilities** and **across regions**, rather than duplicating services in stand-alone units
6. Value must be **measured** and ultimately **reported** by every provider for each medical condition
   - Results should be measured at **the level at which value is created**

**For** medical conditions over the cycle of care
- Not for interventions or short episodes
- Not for practices, departments, clinics, or hospitals
- Not separately for types of service (e.g. inpatient, outpatient, tests, rehabilitation)
Measuring Value in Health Care

- Value is co-produced by clinicians and the patient

- Protocols/Guidelines

- Patient Initial Conditions

- Process

- Indicators

- Patient Compliance

- E.g., Hemoglobin A1c levels of patients with diabetes

- (Health) Outcomes

- Structure
The Outcome Measures Hierarchy

Tier 1
Health Status Achieved
- Survival

Tier 2
Process of Recovery
- Degree of health/recovery
- Time to recovery or return to normal activities
- Disutility of care or treatment process (e.g., discomfort, complications, adverse effects, errors, and their consequences)

Tier 3
Sustainability of Health
- Sustainability of health or recovery and nature of recurrences
- Long-term consequences of therapy (e.g., care-induced illnesses)
Principles of Value-Based Health Care Delivery

1. Set the goal as **value for patients**, not containing costs
2. The best way to **contain cost** is to **improve quality**, where quality is health outcomes
3. Reorganize health care delivery around **medical conditions** over the **full cycle of care**
4. Drive value improvement by **increasing** provider **experience**, **scale**, and **learning** at the **medical condition level**
5. Value requires integrating health care delivery **across facilities** and **across regions**, rather than duplicating services in stand-alone units
6. Value must be **measured** and ultimately **reported** by every provider for each medical condition
7. Reimbursement must be aligned with **value** and reward **innovation**

- Bundled reimbursement for **care cycles**, not payment for discrete treatments or services
  - Most DRG systems are **too narrow**
  - Adjusted for **patient complexity**
- Reimbursement for **overall management of chronic conditions**
- Reimbursement for **prevention** and **screening**, not just treatment

- **Providers** and **health plans** must be proactive in driving new reimbursement models, not wait for sgovernment
Principles of Value-Based Health Care Delivery

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7. Reimbursement must be aligned with **value** and reward **innovation**
8. Information technology can enable **restructuring of care delivery** and **measuring results**, but is not a solution by itself

- Common data definitions
- Precise interoperability standards
- Patient-centered data warehouse
- Include all types of data (e.g. notes, images)
- Cover the full care cycle, including referring entities
- Accessible to all involved parties
- Templates for medical conditions
Value-Based Health Care Delivery: The Strategic Agenda

1. Integrated Practice Units
   – Partnerships with other organizations involved in the care cycle, including primary care

2. Outcomes and Cost Measurement

3. New Reimbursement Models

4. Provider System Integration
   – Specialization of services within units
   – Integration of care across units

5. Growth Models
   – Enhancing value through expanding across geography

• How can health plans, employers, and government best encourage and enable these changes?
Value-Based Healthcare Delivery: Implications for Health Plans

“Payor”

Value-Added Health Organization
Value-Based Health Care Delivery: Implications for Employers

- Set the goal of employee health
- Assist employees in healthy living and active participation in their own care
- Provide for convenient and high value prevention, screening, and disease management services
  - On site clinics
- Set new expectations for health plans
  - Plans should contract for integrated care, not discrete services
  - Plans should assist subscribers in accessing excellent providers for their medical condition
  - Plans should contract for care cycles rather than discrete services
  - Plans should measure and improve member health results, and expect providers to do the same
- Provide for health plan continuity for employees, rather than plan churning
- Find ways to expand insurance coverage and advocate reform of the insurance system
- Measure and hold employee benefit staff accountable for the company's health value received
Value-Based Healthcare Delivery: Implications for Consumers

• Participate actively in managing personal health

• **Comply** with treatment and preventative practices

• Expect relevant information and seek advice

• Make choices of treatments and providers based on outcomes and value, not convenience or amenities

• Work with a health plan on long-term health management
  – Shifting plans frequently is not in the consumer’s interest

• But “consumer-driven health care” is the wrong metaphor for reforming the system
Value-Based Health Care Delivery: Implications for Government

- Establish **universal measurement** and **reporting** of provider **health outcomes**
- Require universal reporting by health plans of **health outcomes for members**
- Create mandatory IT standards including **data architecture and definitions**, **interoperability standards**, and **deadlines for system implementation**
- Remove obstacles to the **restructuring of health care delivery** around the integrated care of medical conditions
- **Open up competition** among providers and across geography
- Shift reimbursement systems to **bundled prices for cycles of care** instead of payments for discrete treatments or services
- Encourage greater **responsibility of individuals** for their health and their health care
## Schedule

<table>
<thead>
<tr>
<th>Sunday, January 11</th>
<th>Monday, January 12</th>
<th>Tuesday, January 13</th>
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<tbody>
<tr>
<td></td>
<td><strong>Session 2:</strong></td>
<td><strong>Session 4:</strong></td>
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<td>(9:00 - 10:30am)</td>
<td>(Participant</td>
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<td>Case: The Joslin</td>
<td>Breakout Groups and</td>
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<td>Diabetes Center</td>
<td>Plenary Session</td>
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<td>Faculty: Elizabeth</td>
<td>All Program Faculty</td>
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<td>Teisberg</td>
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<td>Break (10:30 - 10:45am)</td>
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<td></td>
<td><strong>Case Protagonist</strong></td>
<td><strong>Lunch</strong></td>
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<td></td>
<td>and Topic Lecture</td>
<td>(11:45am - 12:45pm)</td>
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<td>(10:45am - 12:30pm)</td>
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<td></td>
<td>Guest: Ranch Kimball,</td>
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<td>CEO, Joslin Diabetes</td>
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<td>Center</td>
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<td><strong>Group Photo (12:30 - 12:45pm)</strong></td>
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<td>Lunch (12:45 - 1:30pm)</td>
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<td><strong>Session 3:</strong></td>
<td><strong>Session 5:</strong></td>
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<td>(12:45 - 2:15pm)</td>
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<td></td>
<td>Case: Cleveland Clinic: Growth Strategy 2008</td>
<td>Case: The U. of Texas MD</td>
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<td>Faculty: Michael Porter</td>
<td>Interdisciplinary Cancer Care</td>
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<td>Break (2:15 - 2:30pm)</td>
<td>Faculty: Elizabeth Teisberg</td>
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<td><strong>Protagonist Video</strong></td>
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<td>Topic Lecture</td>
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<td></td>
<td>Guest: Toby Cosgrove, CEO, Cleveland Clinic</td>
<td>MD Anderson video</td>
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<td>Break (3:00 - 3:15pm)</td>
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<td><strong>Case Protagonist</strong></td>
<td><strong>Q&amp;A and Wrap Up</strong></td>
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<td>and Topic Lecture</td>
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<td>Guest: Toby Cosgrove, CEO, Cleveland Clinic</td>
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<td><strong>Introduction</strong></td>
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<td>Faculty: Michael Porter</td>
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<td><strong>Session 1:</strong></td>
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<td>Case: ThedaCare: System Strategy</td>
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<td>Faculty: Michael Porter</td>
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<td><strong>Case Protagonist</strong></td>
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<td>Guest: John Toussaint, former CEO, ThedaCare</td>
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<td><strong>Reception and Dinner</strong></td>
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<td>Williams Room, Spangler Hall</td>
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<td>Kresge Hall</td>
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</table>
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• How can **health plans**, **employers**, and **government** best encourage and enable these changes?
Workshop Goals

Operational Improvement

Strategy and Structure

What?

How?
- Obstacles
- Enablers