Value-Based Competition in Health Care

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This presentation draws on a forthcoming book with Elizabeth Olmsted Teisberg (Redefining Health Care: Creating Value-Based Competition on Results, Harvard Business School Press). Earlier publications about the work include the Harvard Business Review article "Redefining Competition in Health Care". No part of this publication 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 and Elizabeth Olmsted Teisberg.
Issues in Health Care Reform

Health Insurance and Access

Standards for Coverage

Structure of Health Care Delivery
The Paradox of U.S. Health Care

The United States has a private system with intense competition

But

• Costs are high and rising
• Services are restricted and fall well short of recommended care
• In other services, there is overuse of care
• Standards of care often lag and fail to follow accepted benchmarks
• Diagnosis errors are common
• Preventable treatment errors are common
• Huge quality and cost differences persist across providers
• Huge quality and cost differences persist across geographic areas
• Best practices are slow to spread
• Innovation is resisted

• Competition is not working
• How is this state of affairs possible?
Competition on the Wrong Things
Zero-Sum Competition in U.S. Health Care

- Competition to **shift costs**
- Competition to **increase bargaining power**
- Competition to **capture patients** and **restrict choice**
- Competition to **restrict services** in order to reduce costs

- None of these forms of competition **increases value for patients**
Competition at the Wrong Levels

**Too Broad**
- Between broad line hospitals, networks, and health plans

**Too Narrow**
- Performing discrete services or interventions

**Too Local**
- Focused on serving the local community

- Market definition is misaligned with patient value
Principles of Value-Based Competition

1. The focus should be on value for patients, not just lowering costs.
Principles of Value-Based Competition

1. The focus should be on **value for patients**, not just lowering costs.

2. There must be **unrestricted competition** based on **results**.
   - Results vs. supply control
   - Results vs. process compliance
   - Reward results with patients vs. “lift all boats”
Principles of Value-Based Competition

1. The focus should be on **value for patients**, not just lowering costs.
2. There must be **unrestricted competition** based on **results**.
3. Competition should center on **medical conditions** over the **full cycle of care**.
What Businesses Are We In?

Nephrology practice

• Hypertension Management
• Chronic Kidney Disease
• End-Stage Renal Disease
• Kidney Transplants
Organ Transplant Care Cycle

1. Evaluation
2. Waiting for a Donor
3. Transplant Surgery
4. Immediate Convalescence
5. Adjustment and monitoring (Addressing organ rejection, Fine-tuning the drug regimen)
6. Long Term Convalescence
## The Care Delivery Value Chain

### Breast Cancer Care

<table>
<thead>
<tr>
<th>ACCESSING</th>
<th>INFORMING</th>
<th>MEASURING</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>• Office visits</td>
<td>• Self exams</td>
<td>• Office visits</td>
<td>• Medical history</td>
<td>• Medical history</td>
<td>• Medical counseling</td>
<td>• Surgery (breast preservation or mastectomy, oncoplastic alternative)</td>
<td>• In-hospital and outpatient wound healing</td>
<td></td>
</tr>
<tr>
<td>• Mammography lab visits</td>
<td>• Mammograms</td>
<td>• Office visits</td>
<td>• Monitoring for lumps</td>
<td>• Determining the specific nature of the disease</td>
<td>• Surgery prep (anesthetic risk assessment, EKG)</td>
<td>• Adjuvant therapies (hormonal medication, radiation, and/or chemotherapy)</td>
<td>• Psychological counseling</td>
<td>• Periodic mammography</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Control of risk factors (obesity, high fat diet)</td>
<td>• Genetic evaluation</td>
<td>• Patient and family psychological counseling</td>
<td>• Treatment of side effects (skin damage, neurotoxic, cardiac, nausea, lymphedema and chronic fatigue)</td>
<td>• Other imaging</td>
<td>• Follow-up clinical exams for next 2 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Clinical exams</td>
<td>• Choosing a treatment plan</td>
<td>• Plastic or oncoplastic surgery evaluation</td>
<td>• Physical therapy</td>
<td>• Treatment for any continued side effects</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Genetic screening</td>
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</tr>
</tbody>
</table>

### PROCEDURES

- **Specific Measurements:**
  - Range of movement
  - Side effects measurement

- **Side Effects Measurement:**
  - Skin damage
  - Neurotoxic
  - Cardiac
  - Nausea
  - Lymphedema
  - Chronic fatigue

- **Lifestyle and Diet Counseling:**
  - Education and reminders about regular exams
  - Counseling patient and family on the diagnostic process and the diagnosis

- **Office Visits:**
  - Mammograms
  - Ultrasound
  - MRI
  - Biopsy
  - BRACA 1, 2...

- **Hospital Visits:**
  - In-hospital and outpatient wound healing

- **Rehabilitation Facility Visits:**
  - Psychological counseling
  - Treatment of side effects

- **Physical Therapy:**
  - Bone and joint pain
  - Fatigue
  - Lymphedema

- **Surgery:**
  - Breast preservation or mastectomy
  - Oncoplastic alternative

- **Medical Counseling:**
  - Surgery prep
  - Anesthetic risk assessment

- **Adjuvant Therapies:**
  - Hormonal medication
  - Radiation
  - Chemotherapy

- **In-Hospital and Outpatient Wound Healing:**
  - Wound care
  - Dressing changes

- **Psychological Counseling:**
  - Emotional support
  - Stress management

- **Follow-Up Clinical Exams:**
  - Recurring mammograms (every 6 months for the first 3 years)

- **Mammographic Labs and Imaging Center Visits:**
  - Recurring mammograms (every 6 months for the first 3 years)

- **Other Imaging:**
  - MRI
  - PET scans

- **Other Provider Entities:**
  - Medical counseling
  - Surgery prep
  - Plastic or oncoplastic surgery evaluation

- **Medical History:**
  - Determining the specific nature of the disease
  - Genetic evaluation
  - Choosing a treatment plan

- **Periodic Mammography:**
  - Recurring mammograms (every 6 months for the first 3 years)

- **Other Imaging:**
  - MRI
  - PET scans

- **Follow-Up Clinical Exams:**
  - Recurring mammograms (every 6 months for the first 3 years)

- **Treatment for Any Continued Side Effects:**
  - Skin damage
  - Neurotoxic
  - Cardiac
  - Nausea
  - Lymphedema
  - Chronic fatigue

- **Physical Therapy:**
  - Bone and joint pain
  - Fatigue
  - Lymphedema
The Care Delivery Value Chain
Chronic Kidney Disease

INFORMING
- Lifestyle counseling
- Diet counseling
- Explanation of the diagnosis and implications
- Lifestyle counseling
- Diet counseling
- Education on procedures
- Medication counseling
- Medication counseling and compliance follow-up
- Medication counseling and compliance follow-up
- Medication compliance follow-up

MEASURING
- Serum creatinine
- Glomerular filtration rate (GFR)
- Proteinuria
- Special urine tests
- Renal ultrasound
- Serological testing
- Renal artery angioplasty
- Kidney biopsy
- Nuclear medicine scans
- Procedure-specific pre-testing
- Procedure-specific measurements

ACCESSING
- Office visits
- Lab visits
- Various
- Office visits
- Office/lab visits
- Office/lab visits
- Hospital visits
- Telephone/Internet interaction

MONITORING/ PREVENTING
- Monitoring renal function (at least annually)
- Monitoring and addressing risk factors (e.g. blood pressure)
- Early nephrologist referral for abnormal kidney function
- Medical and family history
- Directed advanced testing
- Consultation with other specialists
- Data integration
- Formal diagnosis
- Formulate a treatment plan
- Procedure-specific preparation (e.g. diet, medication)

PREPARING
- Pharmaceutical
- Kidney function (ACE Inhibitors, ARBs)
- Procedures
- Renal artery angioplasty
- Urological (if needed)
- Endocrinological (if needed)
- Vascular access graft at stage 4

INTERVENING
- Fine-tuning drug regimen
- Determining supporting nutritional modifications

RECOVERING/ REHABING
- Managing renal function
- Managing kidney side effects of other treatments (e.g. cardiac catheterization)
- Managing the effects of associated diseases (e.g. diabetes, hypertension, uremia)
- Referral for renal replacement therapy (RRT)

MONITORING/ MANAGING
- Medical and family history
- Directed advanced testing
- Consultation with other specialists
- Data integration
- Formal diagnosis
- Formulate a treatment plan
- Procedure-specific preparation (e.g. diet, medication)

Feedback Loops

☐ Nephrology Practice
☐ Other Provider Entities
Principles of Value-Based Competition

1. The focus should be on **value for patients**, not just lowering costs.
2. There must be **unrestricted competition** based on **results**.
3. Competition should **center on medical conditions** over the **full cycle of care**.
4. High quality care should be **less costly**.
   - Right diagnosis
   - Right treatment to the right patients
   - Fewer mistakes and repeats in treatment
   - Reducing delays in care delivery
   - Faster recovery
   - Less invasive treatment methods
   - Less disability
   - Less long term care
   - Prevention
   - Treatment earlier in causal chain
   - Slower disease progression

- Better health is inherently less expensive than worse health
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5. Value is driven by provider experience, scale, and learning at the medical condition level.
The Virtuous Circle in a Medical Condition

- Deeper Penetration (and Geographic Expansion) in a Medical Condition
  - Improving Reputation
  - Better Results, Adjusted for Risk
  - Faster Innovation
- Rapidly Accumulating Experience
  - Rising Efficiency
  - Better Information/ Clinical Data
  - More Fully Dedicated Teams
- Wider Capabilities in the Care Cycle
  - More Tailored Facilities
- Rising Capacity for Sub-Specialization
  - Greater Leverage in Purchasing
  - More Fully Dedicated Teams
- Spread IT, Measurement, and Process Improvement Costs over More Patients

- Feed virtuous circles vs. institutionalize fragmentation
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4. High quality care should be less costly.
5. Value is driven by provider experience, scale, and learning at the medical condition level.
6. Competition should be regional and national, not just local.
   – Virtuous circles extend across geography
   – Management integration across geography
   – Partnerships and inter-organizational integration
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4. High quality care should be **less** costly.
5. Value is driven by **provider experience, scale, and learning** at the medical condition level.
6. Competition should be **regional** and **national**, not just local.
7. **Information** on results and prices needed for value-based competition must be widely available.
The Information Hierarchy

- Patient Results
  (Outcomes, costs and prices)
- Experience
- Methods
  (For internal improvement)
- Patient Attributes
  (For risk adjustment and clinical insight)
# Boston Spine Group

## Clinical and Outcome Information Collected and Analyzed

### OUTCOMES

<table>
<thead>
<tr>
<th>Patient Outcomes</th>
<th>Medical Complications</th>
<th>Surgery Process Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(before and after treatment, multiple times)</td>
<td>Cardiac</td>
<td>Operative time</td>
</tr>
<tr>
<td>Visual Analog Scale (pain)</td>
<td>Myocardial infarction</td>
<td>Blood loss</td>
</tr>
<tr>
<td>Oswestry Disability Index, 10 questions</td>
<td>Arrhythmias</td>
<td>Devices or products used</td>
</tr>
<tr>
<td>(functional ability)</td>
<td>Congestive heart failure</td>
<td></td>
</tr>
<tr>
<td>SF-36 Questionnaire, 36 questions</td>
<td>Vascular deep venous thrombosis</td>
<td></td>
</tr>
<tr>
<td>(burden of disease)</td>
<td>Urinary infections</td>
<td></td>
</tr>
<tr>
<td>Length of hospital stay</td>
<td>Pneumonia</td>
<td></td>
</tr>
<tr>
<td>Time to return to work or normal activity</td>
<td>Post-operative delirium</td>
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<tr>
<td></td>
<td>Drug interactions</td>
<td></td>
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</tbody>
</table>

### Service Satisfaction

(periodic)

Office visit satisfaction metrics (10 questions)

### Overall medical satisfaction

(“Would you have surgery again for the same problem?”)

### METHODS

<table>
<thead>
<tr>
<th>Surgery Complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient returns to the operating room</td>
</tr>
<tr>
<td>Infection</td>
</tr>
<tr>
<td>Nerve injury</td>
</tr>
<tr>
<td>Sentinel events (wrong site surgeries)</td>
</tr>
<tr>
<td>Hardware failure</td>
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6. Competition should be **regional** and **national**, not just local.

7. **Information** on results and prices needed for value-based competition must be widely available.

8. **Innovations** that increase value must be strongly rewarded.
Moving to Value-Based Competition

Providers

Defining the Right Goals

• Superior patient value

Strategic and Organizational Imperatives

• Redefine the business around medical conditions
• Choose the range and types of services provided
• Organize around medically integrated practice units
• Create a distinctive strategy in each practice unit
• Measure results, experience, methods, and patient attributes by practice unit
• Move to single bills and new approaches to pricing
• Market services based on excellence, uniqueness, and results
• Grow locally and geographically in areas of strength
Analyzing the Care Delivery Value Chain

1. Is the set and sequence of activities in the CDVC aligned with value?
2. Is the appropriate mix of skills brought to bear on each activity and across activities, and do individuals work as a team?
3. Is there appropriate coordination across the discrete activities in the care cycle, and are handoffs seamless?
4. Is care structured to harness linkages across different parts of the care cycle?
5. Is the right information collected, integrated, and utilized across the care cycle?
6. Are the activities in the CDVC performed in appropriate facilities and locations?
7. What provider departments, units and groups are involved in the care cycle? Is the provider’s organizational structure aligned with value?
8. What are the independent entities involved in the care cycle, and what are the relationships among them? Should a provider’s scope of services in the care cycle be expanded or contracted?
Moving to Value-Based Competition

Health Plans

“Payor”

Value-Added Health Organization
Moving to Value-Based Competition

Consumers

• Participate actively in managing personal health

• Expect relevant information and seek advice

• Make treatment and provider choices based on excellent results and personal values, not convenience or amenities

• Choose a health plan based on value added

• Build a long-term relationship with an excellent health plan

• Act responsibly

• Consumers cannot (and should not) be the only drivers
Moving to Value-Based Competition
Health Plans

Provide Health Information and Support to Patients and Physicians
1. Organize around medical conditions, not geography or administrative functions
2. Develop measures and assemble results information on providers and treatments
3. Actively support provider and treatment choice with information and unbiased counseling
4. Organize information and patient support around the full cycle of care
5. Provide comprehensive disease management and prevention services to all members, even healthy ones

Restructure the Health Plan-Provider Relationship
6. Shift the nature of information sharing with providers
7. Reward provider excellence and value-enhancing innovation for patients
8. Move to single bills for episodes and cycles of care, and single prices
9. Simplify, standardize, and eliminate paperwork and transactions

Redefine the Health Plan-Subscriber Relationship
10. Move to multi-year subscriber contracts and shift the nature of plan contracting
11. End cost shifting practices, such as re-underwriting, that erode trust in health plans and breed cynicism
12. Assist in managing members’ medical records
Roles of Government in Value-Based Competition

• Require the collection and dissemination of the risk-adjusted outcome information

• Open up value-based competition at the right level

• Enable bundled prices and price transparency

• Limit or eliminate price discrimination

• Develop information technology standards and rules to enable interoperability and information sharing

• Invest in medical and clinical research
How Will Redefining Health Care Begin?

• It is already happening!

• Each system participant can take voluntary steps in these directions, and will benefit irrespective of other changes.

• The changes are mutually reinforcing.

• Once competition begins working, value improvement will no longer be discretionary or optional

• Those organizations that move early will gain major benefits.