Value-Based Health Care Delivery

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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 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. 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.
Redefining Health Care

• 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, 21st century medical technology is delivered with 19th century organization structures, management practices, and pricing models

- TQM, process improvements, and safety initiatives are beneficial but not sufficient to substantially improve value
Creating a Value-Based Health Care System

• 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 \textit{shift costs} or capture more revenue
• Competition to \textit{increase} bargaining power
• Competition to \textit{capture patients} and restrict choice
• Competition to \textit{restrict services} in order to maximize revenue per visit or reduce costs

Good Competition

• Competition to \textit{increase value for patients}

Zero or Negative Sum

Positive Sum
Principles of Value-Based Health Care Delivery

1. The goal must be value for patients, not lowering costs
Principles of Value-Based Health Care Delivery

1. The goal must be **value for patients**, not lowering costs

   - The best way to **contain costs** is to **improve quality**

   Quality = Health outcomes

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

2. Better health is **inherently less expensive** than poor health

   - **Better health** is the goal, not more treatment
Principles of Value-Based Health Care Delivery

1. The goal must be value for patients, not lowering costs

2. To deliver value, health care must be re-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
Restructuring Care Delivery
Migraine Care in Germany

Existing Model: Organize by Specialty and Discrete Services

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

New Model: Organize into Integrated Practice Units (IPUs)

- Imaging Unit
- West German Headache Center
  - Neurologists
  - Psychologists
  - Physical Therapists
  - Day Hospital
- Essen Univ. Hospital Inpatient Unit
- Network Neurologists

Integrating the Cycle of Care
Care Delivery Value Chain for Breast Cancer

INFORMING & ENGAGING
- Advice on self screening
- Consultation on risk factors
- Counseling patient and family on the diagnostic process and the diagnosis
- Explaining patient choices of treatment
- Counseling on the treatment process
- Achieving compliance
- Counseling on rehabilitation options, process
- Achieving compliance
- Counseling on long term risk management
- Achieving compliance

MEASURING
- Self exams
- Mammograms
- Mammograms
- Ultrasound
- MRI
- Biopsy
- BRACA 1, 2...
- Procedure-specific measurements
- Range of movement
- Side effects measurement
- Recurring mammograms (every 6 months for the first 3 years)

ACCESSING
- Office visits
- Mammography
- Lab visits
- High-risk clinic visits
- Office visits
- Hospital stay
- Visits to outpatient or radiation chemotherapy units
- Rehabilitation facility visits
- Office visits

MONITORING/ PREVENTING
- 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

DIAGNOSING
- Surgery prep (anesthetic risk assessment, EKG)
- Plastic or oncoplastic surgery evaluation

PREPARING
- Plastic or oncoplastic surgery evaluation

INTERVENING
- Plastic or oncoplastic surgery evaluation

RECOVERING/ REHABING
- Plastic or oncoplastic surgery evaluation

MONITORING/ MANAGING
- Periodic mammography
- Other imaging
- Follow-up clinical exams
- Treatment for any continued side effects
Principles of Value-Based Health Care Delivery

3. Value is driven by provider **experience, scale, and learning** at the medical condition level

![The Virtuous Circle of Value](image-url)
## Integrated Cancer Care
### MD Anderson Head and Neck Center

<table>
<thead>
<tr>
<th>Dedicated</th>
<th>Shared</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dedicated MDs</strong></td>
<td><strong>Shared MDs</strong></td>
</tr>
<tr>
<td>- 8 Medical Oncologists</td>
<td>- Endocrinologists</td>
</tr>
<tr>
<td>- 12 Surgical Oncologists</td>
<td>- Other specialists as needed</td>
</tr>
<tr>
<td>- 8 Radiation Oncologists</td>
<td>(cardiologists, plastic surgeons, etc.)</td>
</tr>
<tr>
<td>- 5 Dentists</td>
<td></td>
</tr>
<tr>
<td>- 1 Diagnostic Radiologist</td>
<td></td>
</tr>
<tr>
<td>- 1 Pathologist</td>
<td></td>
</tr>
<tr>
<td>- 4 Ophthalmologists</td>
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<tr>
<td><strong>Dedicated Skilled Staff</strong></td>
<td><strong>Shared Skilled Staff</strong></td>
</tr>
<tr>
<td>- Nurses</td>
<td>- Nutritionists</td>
</tr>
<tr>
<td>- 1 Audiologist</td>
<td>- Social Workers</td>
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<tr>
<td>- 1 Patient Advocate</td>
<td></td>
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<tr>
<td><strong>Facilities</strong></td>
<td><strong>Shared Facilities</strong></td>
</tr>
<tr>
<td>- Dedicated Outpatient Unit</td>
<td>- Radiation Therapy</td>
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<tr>
<td></td>
<td>- Inpatient Wards</td>
</tr>
<tr>
<td></td>
<td>- Pathology Lab → Medical Wards</td>
</tr>
<tr>
<td></td>
<td>- Ambulatory Chemo Center → Surgical Wards</td>
</tr>
</tbody>
</table>

Principles of Value-Based Health Care Delivery

- Health care delivery should be integrated across facilities and regions, rather than take place in stand-alone units.

Children’s Hospital of Philadelphia (CHOP) Affiliations

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

1. The goal must be **value for patients**, not lowering costs

2. To deliver value, health care must be re-organized around **medical conditions** over the **full cycle of care**

3. Value is driven by provider **experience, scale, and learning** at the medical condition level

4. **Value** must be universally measured and reported
   - **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)

   - Results must be measured at **the level at which value is created** for patients
Measuring Value in Health Care

- Patient Initial Conditions
  - Protocols/Guidelines
- Process
- Health Indicators
  - E.g., Hemoglobin A1c levels of patients for diabetes
- (Health) Outcomes
The Outcome Measures Hierarchy

**Tier 1**
- **Health Status Achieved**
  - Degree of health/recovery

**Tier 2**
- **Process of 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)
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5. Reimbursement should be aligned with **value** and reward **innovation**

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

   - **Providers** must be proactive in driving new reimbursement models, not wait for health plans
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4. **Value** must be universally measured and reported
5. Reimbursement should be aligned with **value** and reward **innovation**
6. Information technology will enable **restructuring of care delivery** and **measuring results**, but is not a solution by itself

- Common data definitions
- Interoperability standards
- Patient-centered database
- Include all types of data (e.g. notes, images)
- Cover the full care cycle, including referring entities
- Accessible to all involved parties
Principles of Value-Based Health Care Delivery
Implications for Providers

• **Choose service lines** based on excellence in patient value
• Organize around **integrated practice units** (IPUs)
• Integrate care for each IPU **across geographic locations**
• Employ formal **partnerships** and **alliances** with other organizations involved in care
• Expand high-performance practices **across regions**
• Measure **outcomes** and **costs** for every patient
• Lead the development of **new contracting models**
• Implement a single, integrated, patient centric **electronic medical record system**
Managing Care Across Geography
The Cleveland Clinic’s Managed Practices

- Swedish Medical Center, WA
  Cardiac Surgery

- Rochester General Hospital, NY
  Cardiac Surgery

- CLEVELAND CLINIC
  Cardiac Care

- Chester County Hospital, PA
  Cardiac Surgery

- Cape Fear Valley Health System, NC
  Cardiac Surgery

- Cleveland Clinic Florida Weston, FL
  Cardiac Surgery
Creating a High-Value Health Care System

Health Plans

“Payor” — Value-Added Health Organization
Value-Adding Roles of Health Plans

• Measure and report **overall health results** for members by medical condition versus other plans

• Assemble, analyze and manage the **total medical records** of members

• Provide for comprehensive **prevention, screening, and chronic disease management** services to all members

• Monitor and compare **provider results** by medical condition

• Provide advice to patients (and referring physicians) in selecting **excellent providers**

• Assist in coordinating patient care across the **care cycle** and **across medical conditions**

• Encourage and reward **integrated practice unit** models by providers

• Design new **bundled reimbursement structures** for care cycles instead of fees for discrete services

• Health plans will require **new capabilities** and **new types of staff** to play these roles
Creating a High-Value Health Care System

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 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

• Limit **provider price discrimination** across patients based on group membership
Creating a High-Value Health Care System
Government, cont’d.

• Eliminate zero-sum practices of health plans such as re-underwriting and terminating sick members

• Encourage the responsibility of individuals for their health and their health care
How Will Redefining Health Care Begin?

• It is \textit{already happening} in the U.S. and other countries
• Steps by pioneering institutions will be \textit{mutually reinforcing}
• Once competition begins working, value improvement will \textit{no longer be discretionary}
• Those organizations that \textit{move early} will gain major benefits

• \textbf{Providers} can and should take the lead