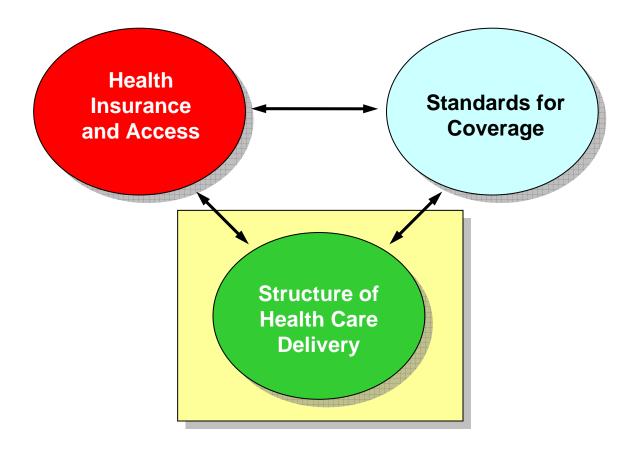
Value-Based Health Care Delivery: Implications for Providers

Professor Michael E. Porter Harvard Business School

Children's Hospital of Philadelphia October 17, 2007

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, and "How Physicians Can Change the Future of Health Care," *Journal of the American Medical Association*, 2007; 297:1103:1111. 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.

Issues in Health Care Reform



Redefining Health Care

- Universal insurance is essential, but not enough
- The core issue in health care is the value of health care delivered

Value: Patient outcomes per dollar spent



- How to design a health care system that dramatically improves value
 - Ownership of entities is secondary
- 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

Creating a Value-Based Health Care System

- Competition is a powerful force to encourage restructuring of care and continuous improvement in value
- Today's competition in health care is not aligned with value

Financial success of system participants

Patient success



Creating competition on value is the central challenge in health care reform

Zero-Sum Competition in U.S. Health Care

Bad Competition

- Competition to shift costs or capture a bigger share of revenue
- Competition to increase bargaining power
- Competition to capture patients and restrict choice
- Competition to restrict services in order to maximize revenue per visit or reduce costs



Zero or Negative Sum

Good Competition

 Competition to increase value for patients



- The goal should be value for patients, not community service or lowering costs
 - This will require going beyond waste reduction and administrative savings

- The goal should be value for patients, not community service or lowering costs
- 2. The best way to contain costs is to drive improvement in quality

Quality = Health outcomes

- Prevention
- Early detection
- Right diagnosis
- Early treatment
- Right treatment to the right patients
- Treatment earlier in the causal chain of disease
- Fewer mistakes and repeats in treatment

- Fewer delays in the care delivery process
- 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



Better health is inherently less expensive than poor health

- The goal should be value for patients, not community service or lowering costs
- 2. The best way to contain costs is to drive improvement in quality
- 3. There must be **competition** based on **results**

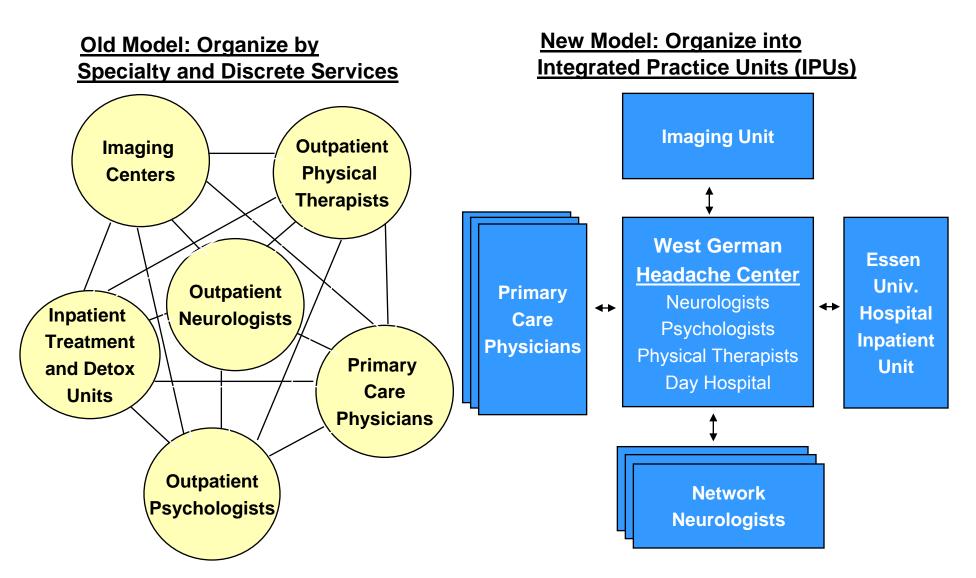
Value: Patient health outcomes

Total cost of achieving those outcomes

- Reward results vs. process compliance
- Get patients to excellent providers vs. "lift all boats" or "pay for performance"
- Expand the proportion of patients cared for by the most effective teams
- Grow the excellent teams by reallocating capacity and expanding across locations

- The goal should be value for patients, not community service or lowering costs
- 2. The best way to contain costs is to drive improvement in quality
- 3. There must be unrestricted competition based on results
- 4. Competition should center on **medical conditions** over the **full cycle of care**

Restructuring Health Care Delivery <u>Migraine Care in Germany</u>



Source: KKH, Westdeutsches Kopfschmerzzentrum

What is a Medical Condition?

- A medical condition is an interrelated set of patient medical circumstances best addressed in an integrated way
 - Defined from the patient's perspective
 - Involves multiple specialties and services
- Includes the most common co-occurring conditions
- Examples
 - Diabetes (including vascular disease, hypertension, others)
 - Breast Cancer
 - Stroke
 - Migraine
 - Asthma
 - Congestive Heart Failure



 The medical condition is the unit of value creation in health care delivery

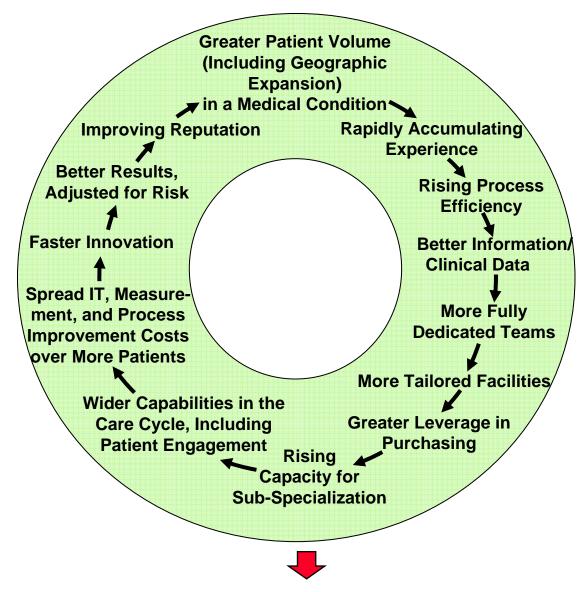
The Cycle of Care Care Delivery Value Chain for Breast Cancer

INFORMING & ENGAGING MEASURING	Advice on self screening Consultation on risk factors Self exams Mammograms	Counseling patient and family on the diagnostic process and the diagnosis Mammograms Ultrasound MRI Biopsy	patient choices of treatment	treatment and prognosis	Counseling on rehabilitation options, process Achieving compliance Range of movement Side effects measurement	Counseling on long term risk management Achieving compliance Recurring mammograms (every 6 months for the first 3 years)	
ACCESSING	Office visits Mammography lab visits	BRACA 1, 2 Office visits Lab visits High-risk clinic visits	Office visits Hospital visits	Hospital stay Visits to outpatient or radiation chemotherapy units	Office visits Rehabilitation facility visits	Office visits Lab visits Mammographic labs and imaging center visits	PROVIDER
	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	Medical counseling Surgery prep (anesthetic risk assessment, EKG) Patient and family psychological counseling Plastic or oncoplastic surgery evaluation	Surgery (breast preservation or mastectomy, oncoplastic alternative) Adjuvant therapies (hormonal medication, radiation, and/or chemotherapy)	RECOVERING/ REHABING • In-hospital and outpatient wound healing • Psychological counseling • Treatment of side effects (skin damage, neurotoxic, cardiac, nausea, lymphodema and chronic fatigue) • Physical therapy	MONITORING/MANAGING • Periodic mammography • Other imaging • Follow-up clinical exams • Treatment for any continued side effects	MARGIN
• Primary care providers are often the beginning and end of care cycles ☐ Other Provider Entities							

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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



- The virtuous cycle extends across geography within integrated organizations
- Fragmentation of provider services works against patient value

- The goal should be value for patients, not community service or lowering costs
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- Competition should center on medical conditions over the full cycle of care
- 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
 - Manage integrated care across geography
 - Utilize partnerships and inter-organizational integration among separate institutions

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- 6. Competition should be regional and national, not just local
- 7. Results must be universally measured and reported

Value: Patient health outcomes over the care cycle

Total cost of achieving those outcomes

Measuring Value: Unit of Analysis

- The appropriate unit for measuring value must align with how value is created for patients
 - Across services
 - Across time
- Value should be measured for medical conditions over the cycle of care
 - vs. for hospitals, practices, or clinics
 - vs. types of service (e.g. inpatient, outpatient, tests, rehabilitation)
 - vs. for interventions or short episodes

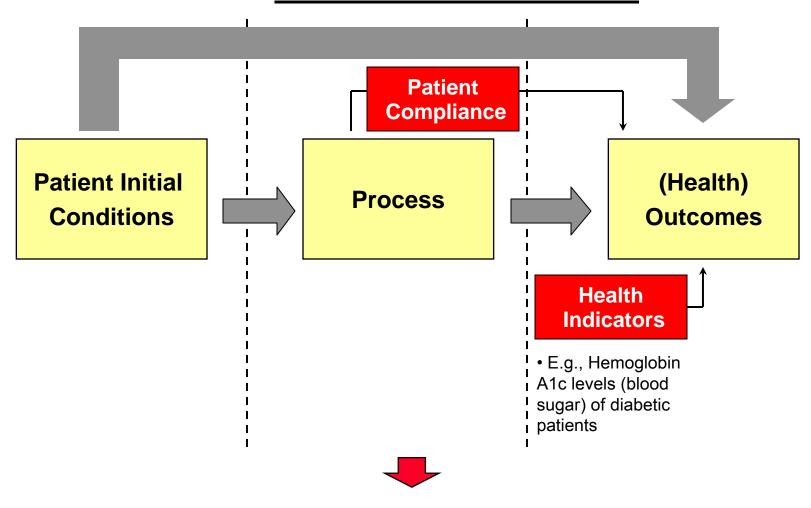


 Current efforts suffer from measuring value at differing/ inappropriate levels

Measuring Results Principles

- Measure outcomes versus processes of care
- Outcomes must be adjusted for risk/patient initial circumstances

Measuring Value in Health Care Outcomes versus Processes

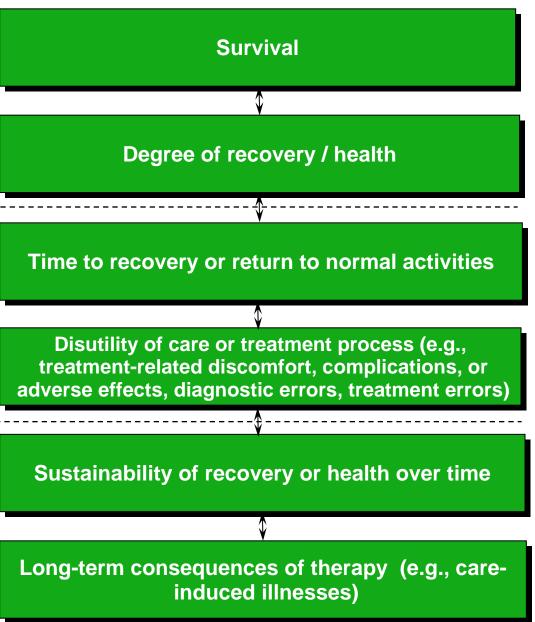


Process compliance is not quality

Measuring Results Principles

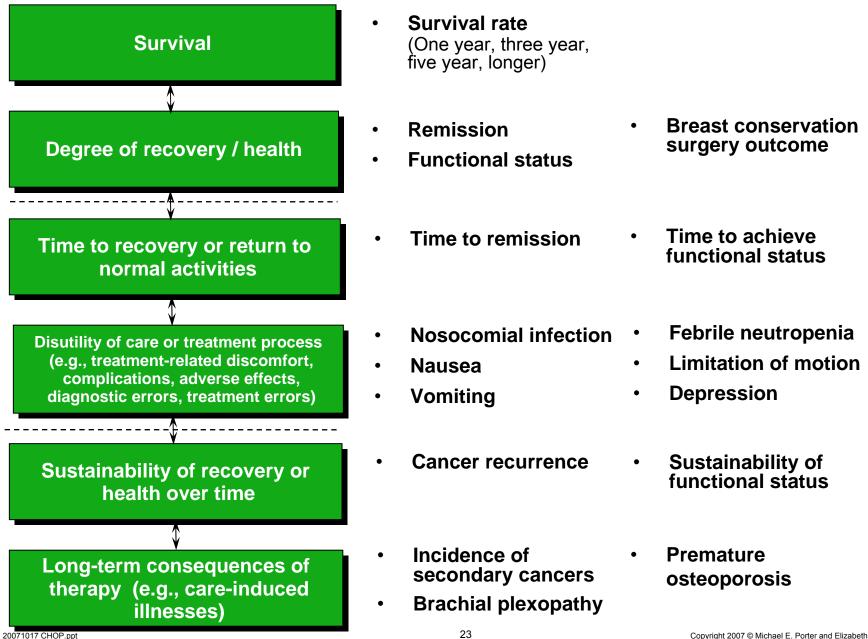
- Measure outcomes versus processes of care
- Outcomes must be adjusted for risk/patient initial circumstances
- Outcome measurement should take place:
 - At the **medical condition** level
 - Over the cycle of care
- There are multiple outcomes for every medical condition

Measuring OutcomesThe Outcome Measures Hierarchy



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Measuring Breast Cancer Outcomes



Measuring Breast Cancer Outcomes Initial Conditions

- Stage of disease
- Type of cancer (infiltrating ductal carcinoma, tubular, medullary, lobular, etc.)
- Estrogen and progesterone receptor status (positive or negative)
- Sites of metastases
- Age
- Menopausal status
- General health, including co-morbidities



 As care delivery improves, some initial conditions will decline in importance for outcomes

Measuring Results Principles

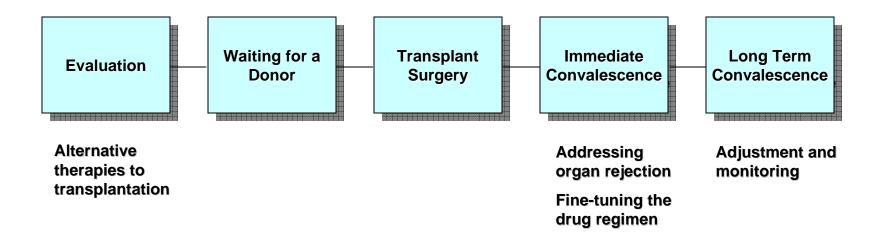
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- Outcomes must be adjusted for risk/patient initial circumstances
- Outcome measurement should take place:
 - At the **medical condition** level
 - Over the cycle of care
- There are multiple outcomes for every medical condition
- Outcomes are as important for physicians as for consumers and health plans



- The feasibility of universal outcome measurement at the medical condition level has been conclusively demonstrated
- Providers and health plans must measure outcomes (and costs) for every patient

- The goal should be value for patients, not community service or lowering costs
- 2. The best way to contain costs is to drive improvement in quality
- 3. There must be unrestricted competition based on results
- Competition should center on medical conditions over the full cycle of care
- 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. Results must be universally measured and reported
- 8. Reimbursement should be aligned with **value** and reward innovation
 - Reimbursement for care cycles, not per diem or for discrete treatments or services
 - Reimbursement for prevention and screening, not just treatment

Organ Transplantation Care Cycle





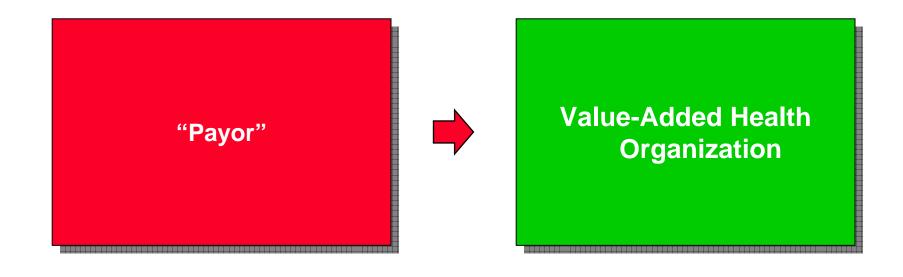
Leading transplantation centers quote a single price

- 1. The goal should be **value for patients**, not community service or lowering costs
- 2. The best way to contain costs is to drive improvement in quality
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- Competition should center on medical conditions over the full cycle of care
- 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. Results must be universally measured and reported
- 8. Reimbursement should be aligned with **value** and reward innovation
- 9. **Information technology** is an **enabler** of restructuring care delivery and measuring results, **not a solution itself**
 - Common data definitions
 - Interoperability standards
 - Patient-centered database
 - Full care cycle

Moving to Value-Based Competition Implications for Providers

- Organize around integrated practice units (IPUs) for each medical condition
- Choose the appropriate scope of services in each facility based on excellence in patient value
- IPUs should integrate services for each medical condition across geographic locations
- Employ formal partnerships and alliances with outside entities involved in the care cycle to integrate care and improve capabilities
- Measure results by medical condition
- Expand high-performance IPUs across geography using an integrated model
 - Instead of merging broad line, stand-alone facilities
- Lead the development of new contracting models with health plans based on care cycle delivery structures and bundled reimbursement

Moving to Value-Based Competition Health Plans



Moving to Value-Based Competition Value-Adding Roles of Health Plans

- 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 full care cycle and across medical conditions
- Provide for comprehensive prevention and chronic disease management services to all members
- Design new reimbursement models for care cycles
- Assemble and manage the total medical records of members
- Measure and report overall health results for members

How Will Redefining Health Care Begin?

- It is already happening
- Providers, as well as health plans and employers, can take voluntary steps in these directions, and will benefit irrespective of other changes
- The changes will be mutually reinforcing
- Once competition begins working, value improvement will no longer be discretionary or optional
- Those organizations that move early will gain major benefits



Providers can and should take the lead