Value-Based Health Care Delivery

Professor Michael E. Porter Harvard Business School

American Surgical Association April 25, 2008

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 is 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
- Consumers cannot fix the dysfunctional structure of the current system

Creating a Value-Based Health Care System

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

Financial success of system participants

Patient success



Creating competition on 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 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



Good Competition

 Competition to increase value for patients



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



 Improving value will require going beyond waste reduction and administrative savings

- 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
- Fewer delays in the care delivery process
- 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

- Better health is inherently less expensive than poor health
- Better health is the goal, not more treatment

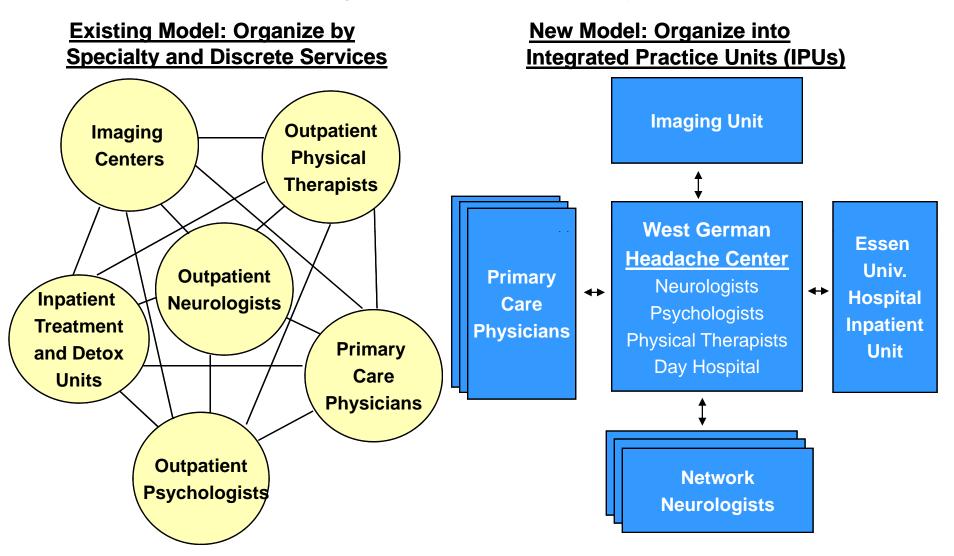
- 1. The goal must be value for patients, not lowering costs
 - There must be competition for patients based on value
 - Not process compliance or administrative oversight



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

- 1. The goal must be value for patients, not lowering costs
- 2. Health care delivery should 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
 - Involving multiple specialties and services
 - Includes the most common co-occurring conditions
 - Examples
 - Diabetes (including vascular disease, hypertension, others)
 - Migraine
 - Breast Cancer
 - Stroke
 - Asthma
 - Congestive Heart Failure

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



Source: Porter, Michael E., Clemens Guth, and Elisa Dannemiller, *The West German Headache Center: Integrated Migraine Care*, Harvard Business School Case 9-707-559, September 13, 2007

The Cycle of Care Care Delivery Value Chain for Breast Cancer

<u> </u>	O Donvoi	Value C	mann ioi E	Frouot Out	1001
Advice on self screening Consultation on risk factors	on the diagnostic process and the diagnosis	• Explaining patient choices of treatment • Achieving compliance	the treatment process Achieving compliance	on rehabilitation options, process Achieving compliance	Counseling on long term risk management Achieving compliance
Self exams Mammograms	Ultrasound MRI Biopsy BRACA 1, 2		specific measurements	movement Side effects measurement	• Recurring mammograms (every 6 months for the first 3 years)
Office visits Mammography lab visits	Office visits Lab visits High-risk clinic visits	Office visits Hospital visits	Nospital stay Visits to outpatient or radiation chemotherapy units	Office visits Rehabilitation facility visits	Office visits Lab visits Mammographic labs and imaging center visits
MONITORING/ PREVENTING	DIAGNOSING	PREPARING	INTERVENING	RECOVERING/ REHABING	MONITORING/ MANAGING
Medical history Control of risk factors (obesity, high fat diet) Genetic	 Medical history Determining the specific nature of the disease Genetic 	• Surgery prep (anesthetic risk assessment, EKG)	Surgery (breast preservation or mastectomy, oncoplastic alternative)	In-hospital and outpatient wound healing Psychological counseling	• Periodic mammography • Other imaging • Follow-up clinical exams • Treatment for any continued side
screening • Clinical exams • Monitoring for lumps	evaluation • Choosing a treatment plan	Patient and family psychological counseling Plastic or oncoplastic surgery evaluation	• Adjuvant therapies (hormonal medication, radiation, and/or chemotherapy)	• Treatment of side effects (e.g. skin damage, cardiac complications, nausea, lymphodema and chronic fatigue)	effects
				Physical therapy] / /
	Advice on self screening Consultation on risk factors Self exams Mammograms Office visits Mammography lab visits Medical history Control of risk factors (obesity, high fat diet) Genetic screening Clinical exams Monitoring for	screening Consultation on risk factors Self exams Mammograms Magnostic process and the diagnostic process and the diagnosis Mammograms Mammograms Magnograms Magnograms	• Advice on self screening • Consultation on risk factors • Self exams • Mammograms • Office visits • Mammography lab visits • Medical history • Control of risk factors (obesity, high fat diet) • Genetic screening • Clinical exams • Monitoring for lumps	• Advice on self screening • Consultation on risk factors • Self exams • Mammograms • Mill ab visits • Monitoring for lumps • Advice on self screening • Counseling patient choices of treatment process and the diagnostic process and the diagnosis • Self exams • Mammograms • Mammograms • Ultrasound • MRI • Biopsy • BRACA 1, 2 • Office visits • Lab visits • High-risk clinic visits • Medical history • Control of risk factors (obesity, high fat diet) • Genetic screening • Clounseling patient choices of treatment plan • Achieving compliance • Procedure-specific measurements • Office visits • Hospital visits • Visits to outpatient or radiation or radiation chemotherapy units • Surgery prep (anesthetic risk assessment, EKG) • Patient and family psychological counseling • Plastic or oncoplastic oncoplastic surgery evaluation • Patient and family psychological counseling • Achieving compliance • Procedure-specific measurements • Hospital visits • Hospital visits • Visits to outpatient or radiation or mastectomy, oncoplastic alternative) • Surgery (breast preservation or mastectomy, oncoplastic alternative) • Patient and family psychological counseling on the treatment plan • Achieving compliance	*Advice on self screening patient and family on the diagnostic process and the diagnostic process and the diagnosis on the diagnosis of treatment on the diagnosis of treatment plan on the diagnosis on the diagnosis of treatment plan on the diagnosis on the diag

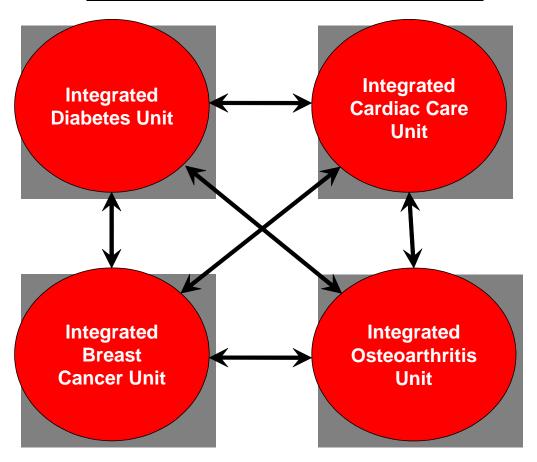
- Primary care providers are often the beginning and end of the care cycle
- The medical condition is the unit of value creation in health care delivery

☐Breast Cancer Specialist☐Other Provider Entities

What is Integrated Care?

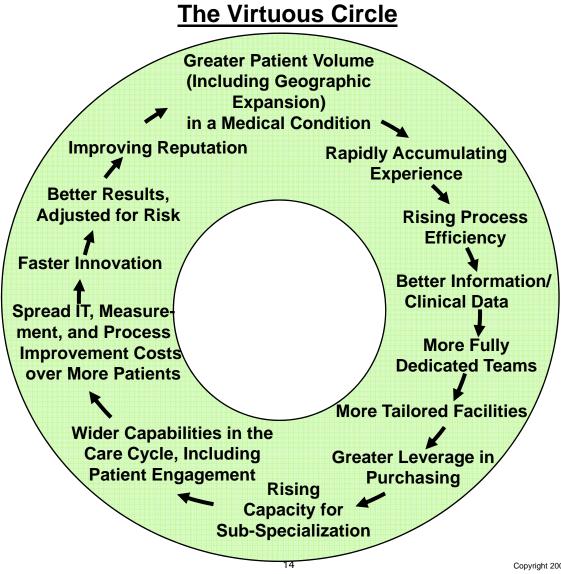
- Integration of specialties and services over the care cycle for a medical condition (IPU)
 - Many providers will operate multiple IPUs
- For some patients, coordination of care across medical conditions
 - A patient can be cared for by more than one IPU
- Integrated care is not:
 - Co-location of care
 - Care delivered by the same organization
 - A multispecialty group practice
 - Freestanding focused factories
 - A Center or an Institute
 - A health plan/provider system

Patients with Multiple Medial Conditions Coordinating Care Across IPUs

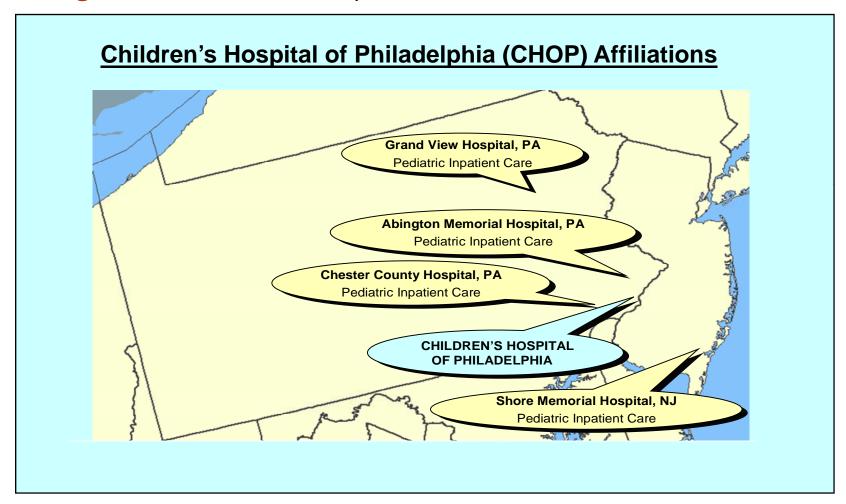


- The primary organization of care delivery should be around the integration required for every patient
- IPUs will also greatly simplify coordination of care for patients with multiple medical conditions
- The patient with multiple conditions will be better off in an IPU model

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



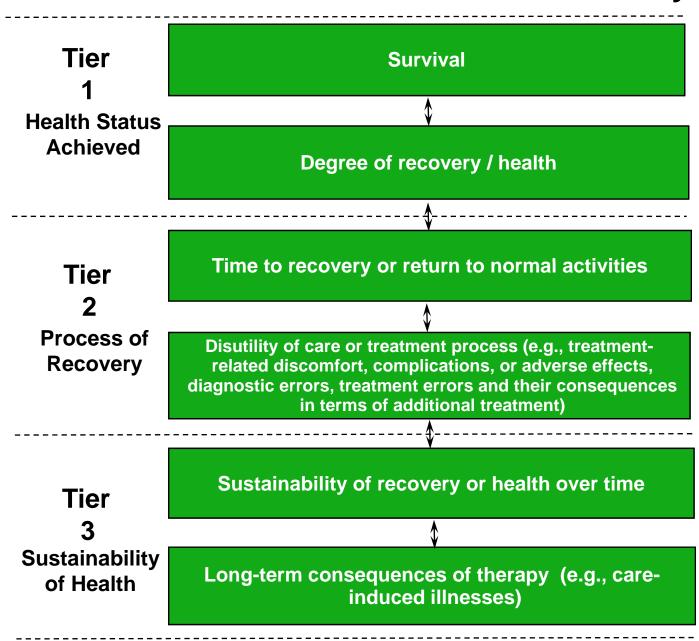
 Health care delivery should be integrated across facilities and regions, rather than take place in stand-alone units



Excellent providers can manage care delivery across multiple geographies

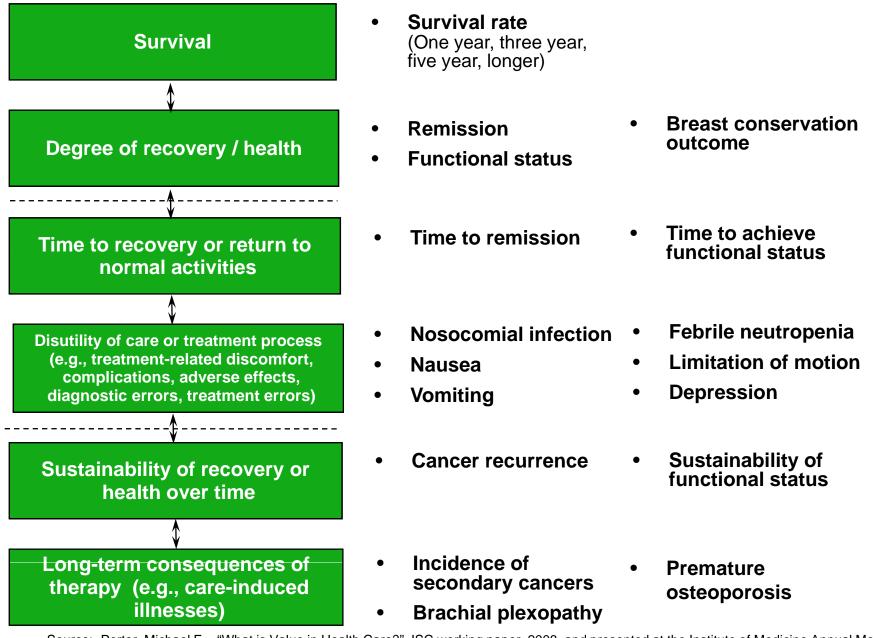
- 1. The goal must be value for patients, not lowering costs
- 2. Health care delivery should be organized around **medical** conditions over the full cycle of care
- 3. Value must be universally measured and reported
 - Results must be measured at the level at which value is created for patients
 - For medical conditions over the cycle of care
 - Not for interventions or short episodes
 - Not for hospitals, practices, clinics, or departments
 - Not for types of service (e.g. inpatient, outpatient, tests, rehabilitation)

The Outcome Measures Hierarchy



Source: Porter, Michael E., "What is Value in Health Care?" ISC working paper, 2008, and presented at the Institute of Medicine Annual Meeting, October 8, 2007

Measuring Breast Cancer Outcomes



Source: Porter, Michael E., "What is Value in Health Care?" ISC working paper, 2008, and presented at the Institute of Medicine Annual Meeting,

October 8, 2007

October 8, 2007

October 8, 2007

Measuring Value: Key Principles

- Physicians need results measures in order to drive value improvement
- Outcomes must be adjusted for patient initial conditions
- We cannot wait for perfection: outcome measures and risk adjustment will improve rapidly



- The feasibility of outcome measurement at the medical condition level has been conclusively demonstrated
- Failure to measure outcomes will invite further micromanagement of physician practice

- 1. The goal must be value for patients, not lowering costs
- 2. Health care delivery should be organized around **medical** conditions over the full cycle of care
- 3. Value must be universally measured and reported
- Reimbursement should 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
 - Reimbursement for prevention and screening, not just treatment
 - Reimbursement for overall management of chronic conditions
 - Reimbursement adjusted for patient complexity



 Providers should be proactive in moving to new reimbursement models, not wait for health plans and Medicare

- 1. The goal must be value for patients, not lowering costs
- 2. Health care delivery should be organized around **medical** conditions over the full cycle of care
- 3. Value must be universally measured and reported
- 4. Reimbursement should be aligned with **value** and reward innovation
- 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
 - Includes 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

- Organize around integrated practice units (IPUs) for each medical condition
 - With mechanisms for cross-IPU coordination
- Choose the appropriate scope of services in each facility based on excellence in patient value
- Integrate services for each IPU / medical condition across geographic locations
- Employ formal partnerships and alliances with independent practices involved in the care cycle in order to integrate care
- Expand high-performance IPUs across geography using an integrated model
 - Instead of federations of broad line, stand-alone facilities
- Measure outcomes and costs for every medical condition over the full care cycle
- Lead the development of new contracting models with health plans based on bundled reimbursement for care cycles
- Implement a single, integrated, patient centric electronic medical record system which is utilized by every unit and accessible to partners, referring physicians, and patients

How Will Redefining Health Care Begin?

- It is already happening in the U.S. and other countries
- 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