Introduction to 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 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.

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, 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 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



Zero or Negative Sum

Good Competition

 Competition to increase value for patients



- 1. Set the goal as value for patients, not containing cost
 - Improve outcomes at equal or lower cost
 - Maintain outcomes at lower cost
 - Lower overall cost, not the cost of individual interventions or services
 - Spend more on some areas to lower costs elsewhere
 - Reduce the inherent need for services and administrative costs

- Set the goal as value for patients, not containing costs
- 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 Faster recovery
 - Right treatment to the right patients
 - Treatment earlier in the causal chain of disease
 - with fewer delays
 - Less invasive treatment methods

- Fewer complications
- Fewer mistakes and repeats in treatment
- More complete recovery
- Less disability
- Fewer relapses or acute episodes
- Rapid care delivery process Slower disease progression
 - Less need for long term care
 - Less care induced illness



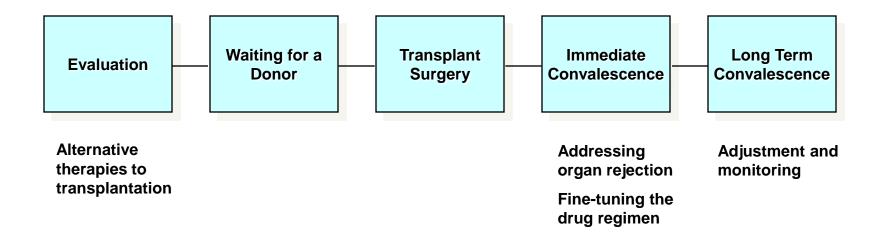
- Better health is the goal, not more treatment
- Better health is inherently less expensive than poor health

- 1. Set the goal as value for patients, not containing costs
- The best way to contain cost is to improve quality, where quality is health outcomes
- Reorganize health care delivery 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

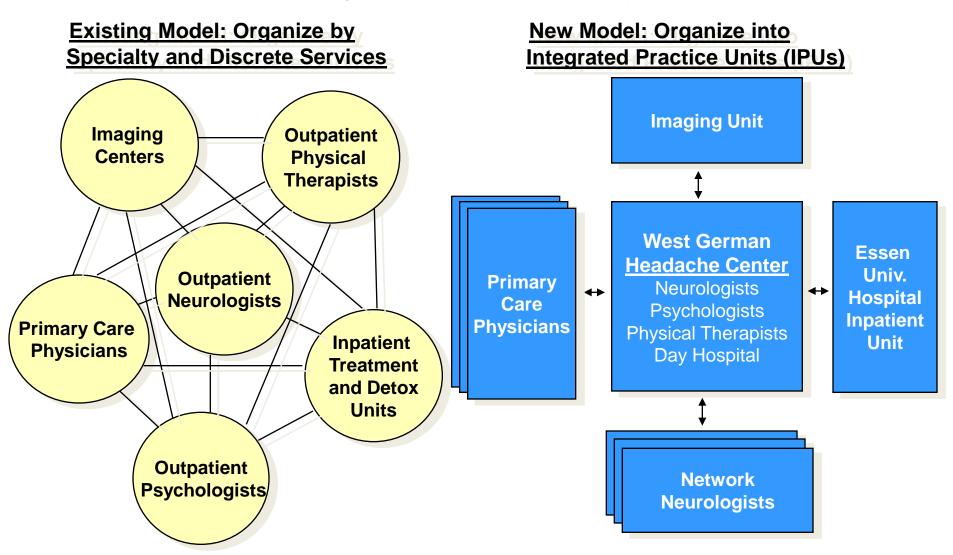


 The medical condition is the unit of value creation in health care delivery

The Cycle of Care Organ Transplantation



Restructuring 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

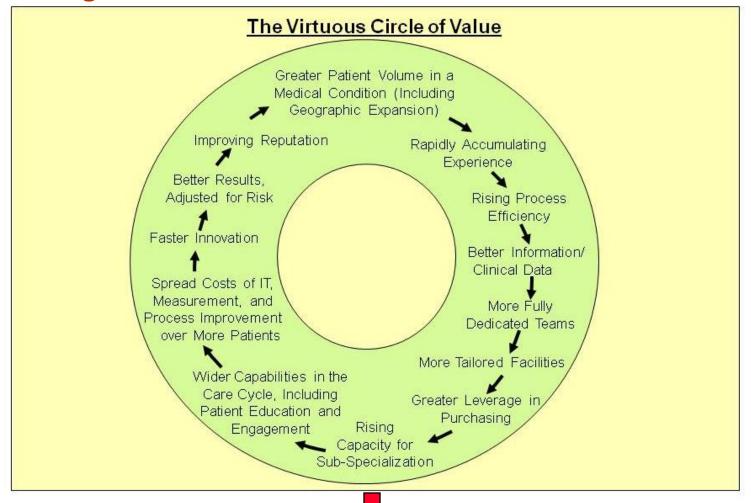
The Care Delivery Value Chain Breast Cancer

INFORMING & ENGAGING	Advice on self screening Consultation on risk factors	patient and family on the diagnostic process and the diagnosis	Explaining patient choices of treatment Patient and family psychological counseling	the treatment process Achieving compliance	Counseling on rehabilitation options, process Achieving compliance •Psychological counseling	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	Office visits Lab visits High-risk clinic visits	The state of the s	Hospital 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 • 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	PREPARING Surgery prep (anesthetic risk assessment, EKG) Plastic or onco- plastic 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 Treatment of side effects (e.g. skin damage, cardiac complications, nausea, lymphodema and chronic fatigue) Physical therapy	MONITORING/ MANAGING Periodic mammography Other imaging Follow-up clinical exams Treatment for any continued side effects Breast Cancer Specialist Other Provider Entities

Analyzing the Care Delivery Value Chain

- 1. Are the **set of activities** and the **sequence of activities** in the CDVC aligned with value?
- 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 (optimize overall allocation of effort) 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?

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



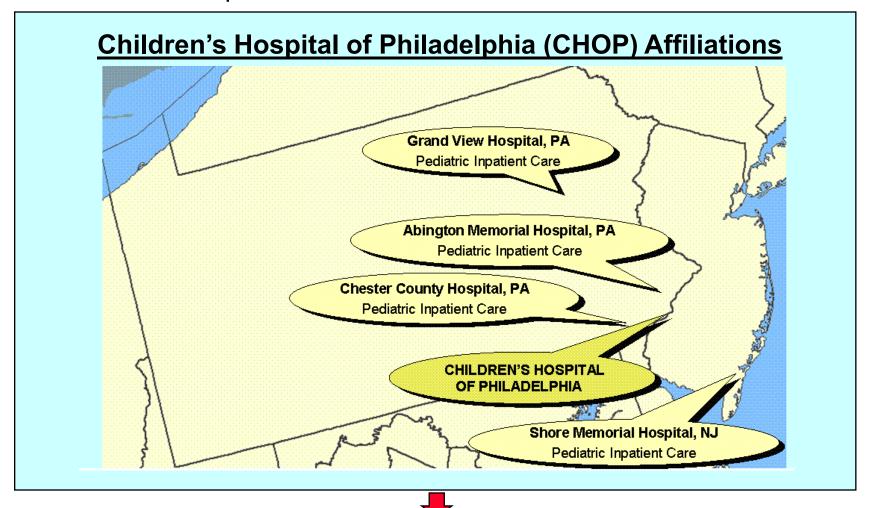
• The virtuous cycle **extends across geography** when care for a medical condition is integrated across locations

Fragmentation of Hospital Services <u>Sweden</u>

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

Source: Compiled from The National Board of Health and Welfare Statistical Databases – DRG Statistics, Accessed September 27, 2007.

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



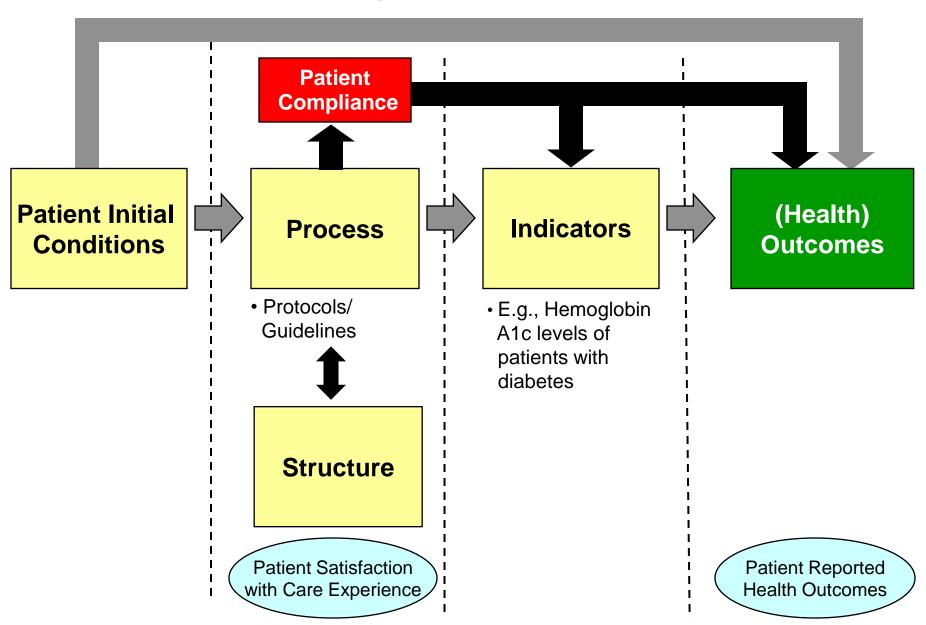
Excellent providers can manage care delivery across multiple geographies

- 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. Integrate health care delivery across facilities and across regions, rather than duplicate services in stand-alone units
- 6. **Measure** and ultimately **report value** for every provider by medical condition
 - Results should be measured at the level at which value is created

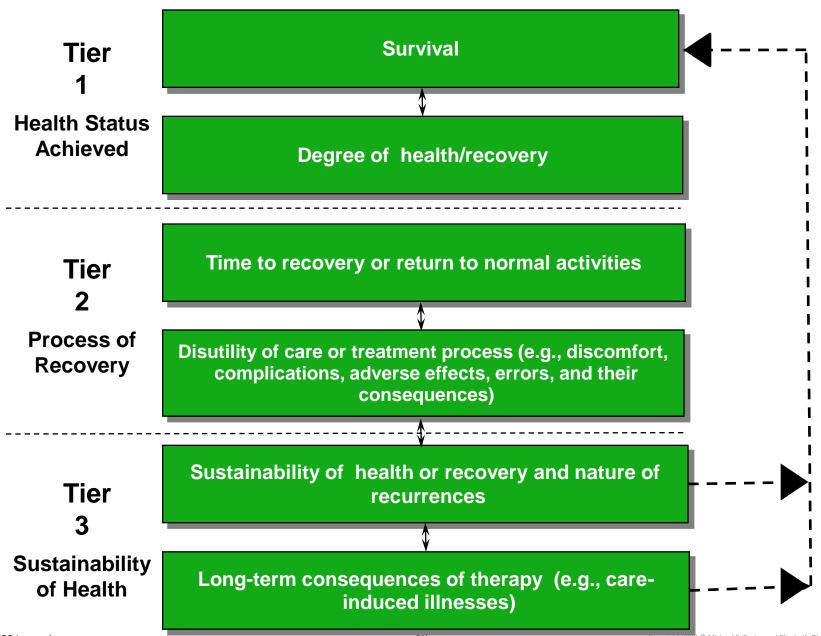


- For medical conditions over the cycle of care
 - Not for interventions or short episodes
 - Not for practices, departments, clinics, or hospitals
 - Not separately for types of service (e.g. inpatient, outpatient, tests, rehabilitation)

Measuring Value in Health Care



The Outcome Measures Hierarchy



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- 5. Integrate health care delivery **across facilities** and **across regions**, rather than duplicate services in stand-alone units
- 6. **Measure** and **report value** for every provider by medical condition
- 7. Align reimbursement 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



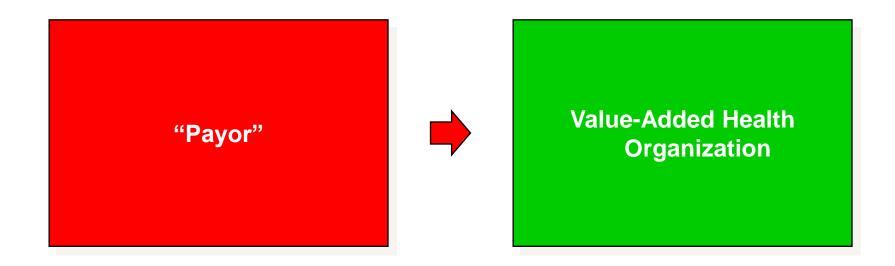
 Providers must be proactive in driving new reimbursement models, not wait for health plans

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- 7. Align reimbursement with value and reward innovation
- 8. Employ information technology to enable **restructuring of care delivery** and **measuring results**, not as 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
 - IPU templates

Value-Based Health Care Delivery: Implications for Providers

- Organize around integrated practice units (IPUs)
 - Integrate care for each IPU across geographic locations
 - Employ formal partnerships and alliances with other organizations involved in the care cycle
- Measure outcomes and costs for every patient
- Lead the development of new IPU reimbursement models
- Specialize and integrate health systems
- Grow high-performance practices across regions
- Develop an integrated electronic medical record system to support these functions

Value-Based Healthcare Delivery: Implications for Health Plans



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

Value-Based Health Care Delivery: Implications for Suppliers

- Compete on delivering unique value measured over the full care cycle
- Demonstrate value based on careful study of long term outcomes and costs versus alternative approaches
- Ensure that the products are used by the right patients
- Ensure that drugs/devices are embedded in the right care delivery processes
- Market based on value, information, and customer support
- Offer support services that contribute to value rather than reinforce cost shifting
- Move to value-based pricing

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
- Limit provider price discrimination across patients based on group membership
- Encourage greater responsibility of individuals for their health and their health care

How Will Redefining Health Care Begin?

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



Providers can and should take the lead