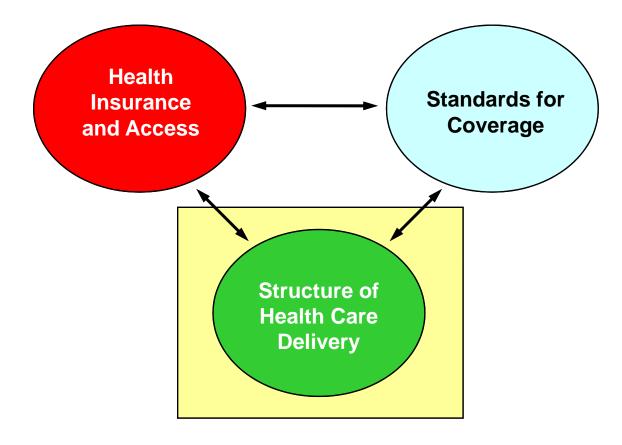
Value-Based Health Care Delivery

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China Senior Health Executive Education Harvard School of Public Health June 10, 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.

Issues in Health Care Reform



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, safety initiatives, pharmacy management, and disease management overlays 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 Patient system participants



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 more 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



1. The goal must be **value for patients**, not volume of services or lowering costs

- The goal must be value for patients, not volume of services or lowering costs
- 2. 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

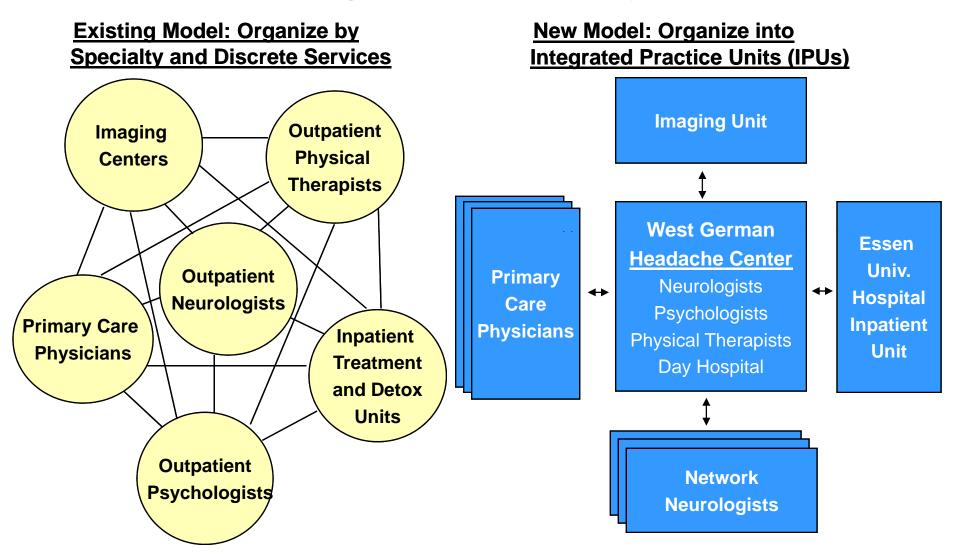
- Less invasive treatment methods
- Faster recovery
- More complete recovery
- Less disability
- Fewer relapses or acute episodes
- Slower disease progression
- Less need for long term care



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

- The goal should be value for patients, not volume of services or lowering costs
- 2. The best way to contain costs is to improve quality
- 3. Health care delivery should center on **medical conditions** over the **full cycle of care**

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

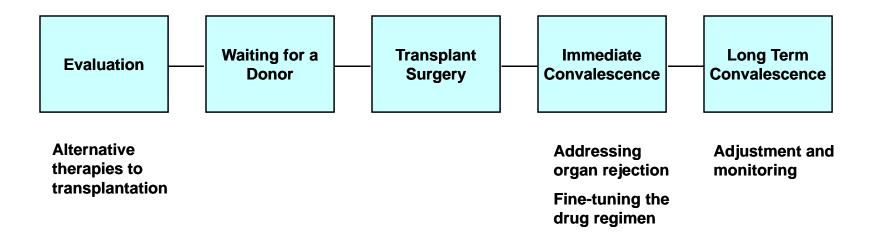
What is a Medical Condition?

- 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
 - HIV/AIDS



- The medical condition is the unit of value creation in health care delivery
- Many providers will operate multiple IPUs

Organ Transplantation Care Cycle





Leading transplantation centers quote a single price

The Cycle of Care Care Delivery Value Chain for Breast Cancer

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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	Counseling on long term risk management Achieving compliance
MEASURING ACCESSING	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)
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Office visits Mammography lab visits	Lab visits High-risk clinic visits		 Hospital stay Visits to outpatient or radiation chemotherapy units 	facility visits	• Office visits • Lab visits • Mammographic labs and imaging center visits
	MONITORING/ PREVENTING	DIAGNOSING	PREPARING	INTERVENING	RECOVERING/ REHABING	MONITORING/ MANAGING • Periodic mammography • Other imaging
	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	Periodic mammography Other imaging Follow-up clinical exams Treatment for any continued side effects
						Breast Cancer Specialist

- 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

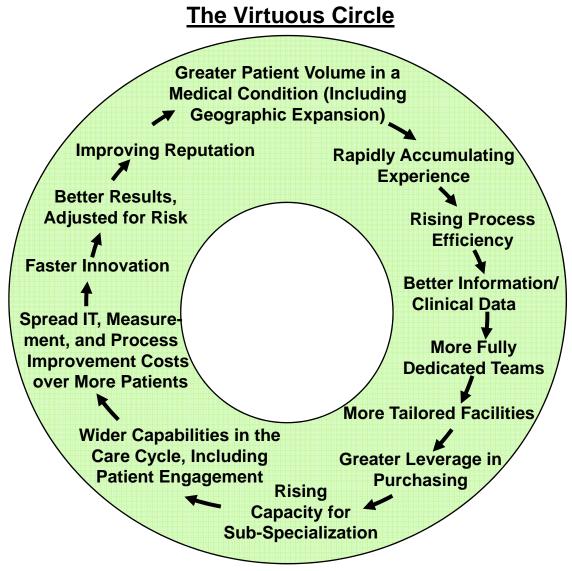
Analyzing the Care Delivery Value Chain

- 1. Are the **set of activities** and the **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** (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?

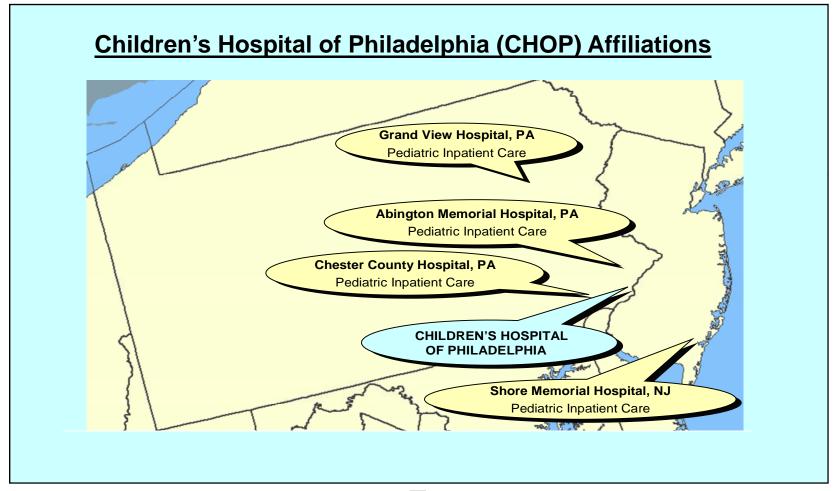
What is Integrated Care?

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

 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





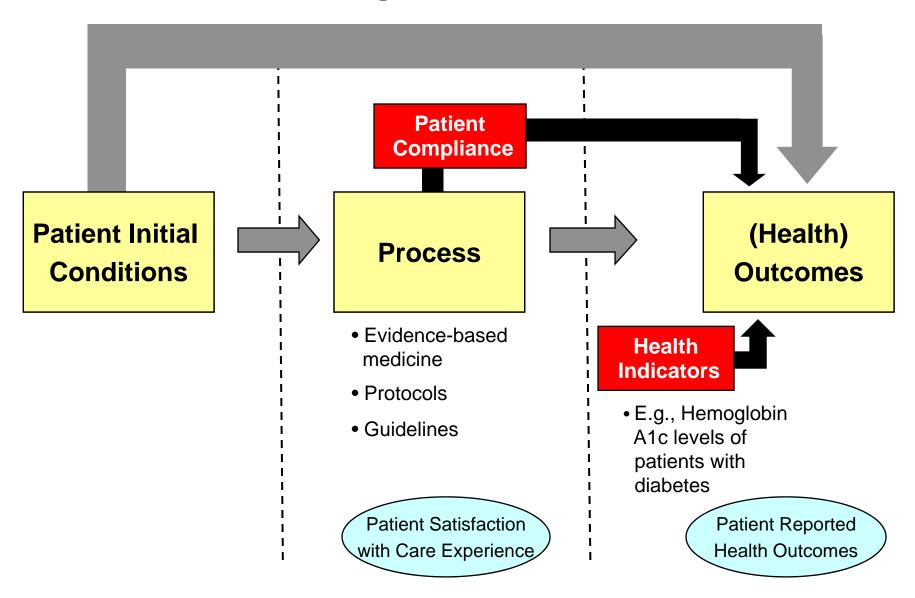
Excellent providers can manage care delivery across multiple geographies 20080610 HSPH China .ppr

- The goal must be value for patients, not volume of services or lowering costs
- 2. The best way to contain costs is to improve quality
- Health care delivery should center on medical conditions over the full cycle of care
- 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)



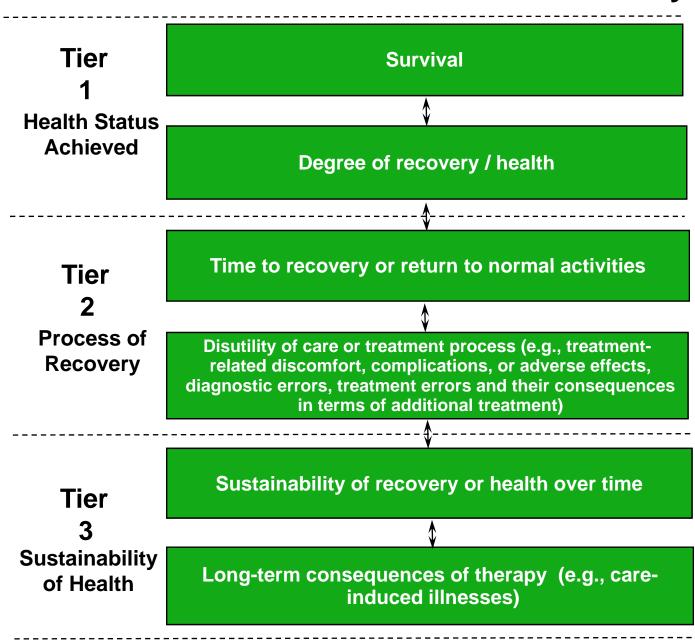
 Results must be measured at the level at which value is created for patients

Measuring Value in Health Care

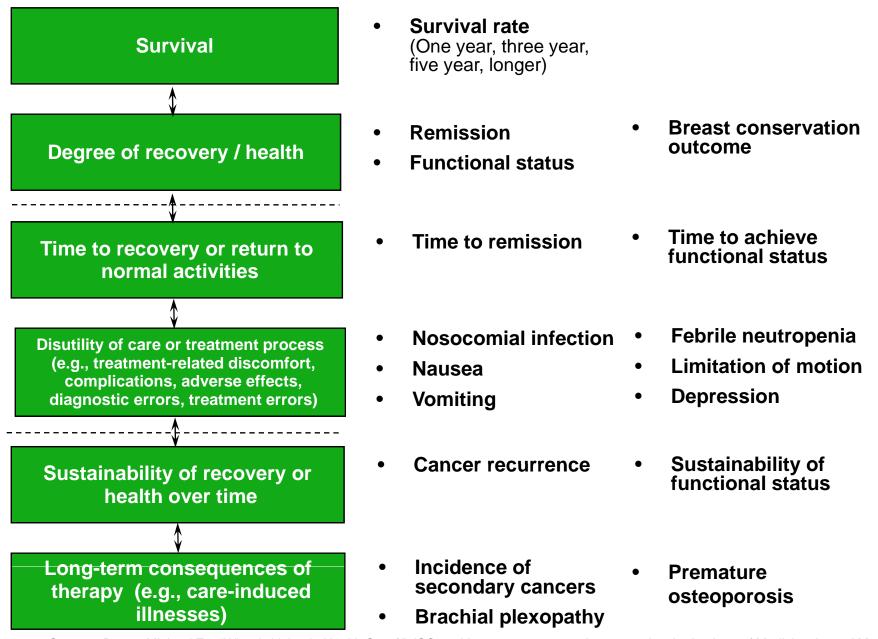


• The primary goal is value, not access

The Outcome Measures Hierarchy



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, 20080610 HSPH China.pptOctober 8, 2007, with assistance from Dr. Andrew Huang, Su211Yat-Sen Cancer Center, and Dr. Jason Wangp Boston University Jacob Holling Control of the Con

Measuring Initial Conditions Breast Cancer

- 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 that once affected outcomes will decline in importance

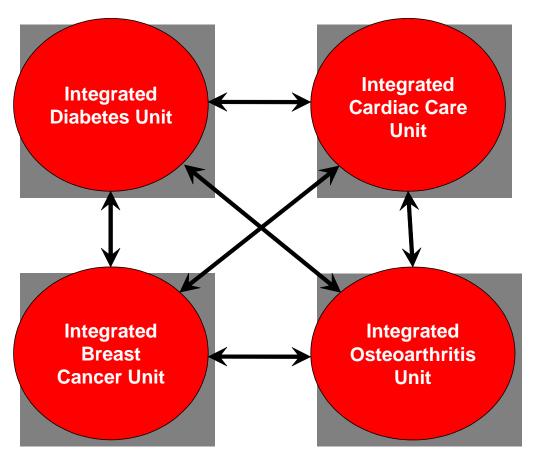
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- 4. Value must be universally measured and reported
- Reimbursement should be aligned with value and reward innovation
 - Bundled reimbursement for care cycles, not payment for discrete treatments, services, or drugs
 - Most DRG systems are too narrow
 - Reimbursement for prevention and screening, not just treatment
 - Reimbursement for overall management of chronic conditions
 - Reimbursement adjusted for patient complexity

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- 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
 - 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

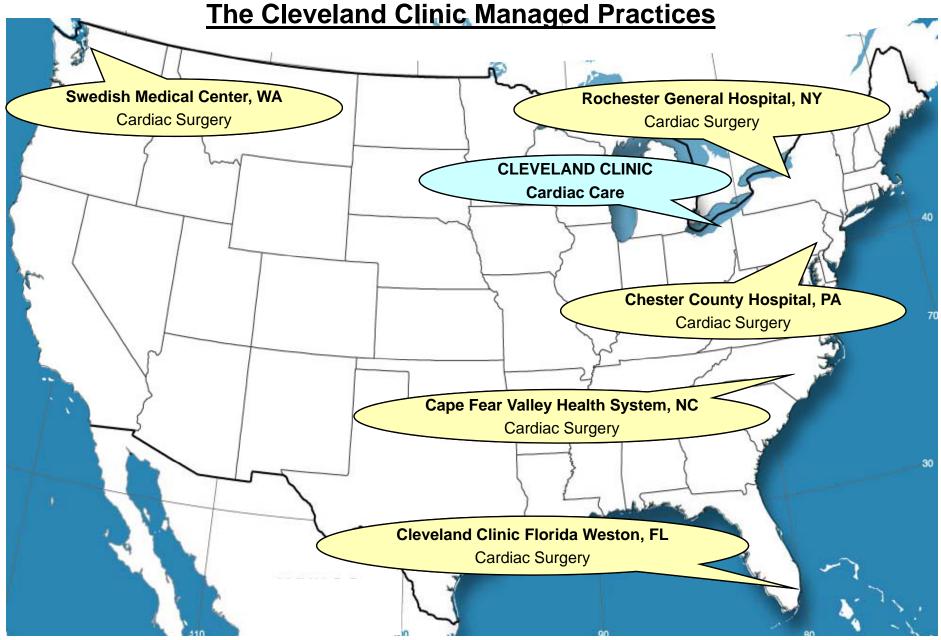
- Organize around integrated practice units (IPUs) for each medical condition
 - Make prevention and disease management integral to the IPU model
 - With mechanisms for cross-IPU coordination
- Choose the appropriate scope of services in each facility based on excellence in patient value
- Integrate services across geographic locations for each IPU / medical condition
- Employ formal partnerships and alliances with independent parties involved in the care cycle in order to integrate care
- Expand high-performance IPUs across geography using an integrated model
 - Instead of autonomous 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 or government 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

Patients with Multiple Medial Conditions Coordinating Care Across IPUs

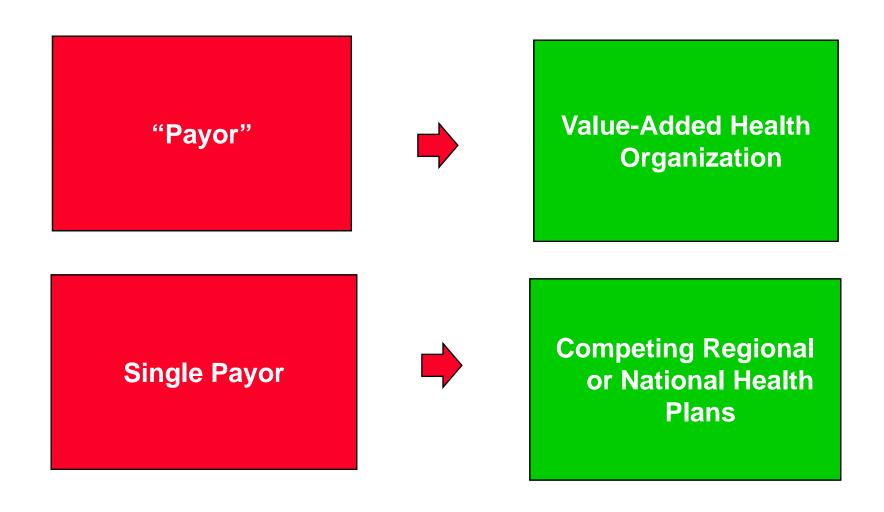


- The primary organization of care delivery should be around the integration required for every patient
- IPUs will also greatly simplify coordination of care for patients with multiple medical conditions
- The patient with multiple conditions will be better off in an IPU model

Managing Care Across Geography The Cleveland Clinic Managed Practices



Creating a High-Value Health Care System Health Plans



Value-Based Health Insurance Structure

- Competing health plans
 - Can be municipal, employer, or national plans
 - Ownership structure (e.g. non-profit, government, private) secondary to roles played
- Plans open to all subscribers
- Every health insurer offers a basic plan meeting minimum requirements
- Subscriber premiums that are the same for each plan design or based on income, not based on risk or pre-existing conditions
- Subsidies for low-income individuals
 - Versus cross subsidies across individuals through plans or providers
- Risk pooling system to reallocate premiums across plans based on age and morbidity
- Plans with supplemental benefits are offered in a competitive market



Compete on value, rather than selecting healthier or wealthier patients

Value-Adding Roles of Health 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
- Measure and report overall health results for members by medical condition versus other plans
- Health plans will require new capabilities and new types of staff to play these roles

Creating a High-Value Health Care System 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, including self-insured plans
 - Plans should assist subscribers in accessing excellent providers for their medical condition
 - Plans should contract for care cycles rather than discrete services
- 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

Creating a High-Value Health Care System Consumers

- Participate actively in managing personal health
- Expect relevant information and seek advice
- Make treatment and provider choices based on outcomes, not convenience or amenities
- Comply with treatment and preventative practices



 But "consumer-driven health care" is the wrong metaphor for reforming the system

Creating a High-Value Health Care System <u>Government</u>

- Establish universal measurement and reporting of health outcomes
- Create IT standards including data definitions, interoperability standards, and deadlines for implementation to enable the collection and exchange of medical information for every patient
- Remove obstacles to the restructuring of care delivery around the integrated care of medical conditions
- Shift reimbursement systems to bundled prices for cycles of care instead of payments for discrete treatments or services
- Move from a passive payor model to a health plan model in which the payor assists citizens in managing their health
- Base the share of contributions by the insured on income
- Open up competition among providers and across geography
- Encourage the 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
- Each system participant can take voluntary steps in these directions, and will benefit irrespective of other changes
- The changes will be mutually reinforcing
- Those organizations that move early will gain major benefits
- Appropriate government policy can speed up the process



There is no need to wait to get started