

# Value-Based Health Care Delivery

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*Madrid, Spain  
June 4, 2008*

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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>.

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# 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

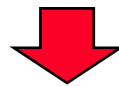
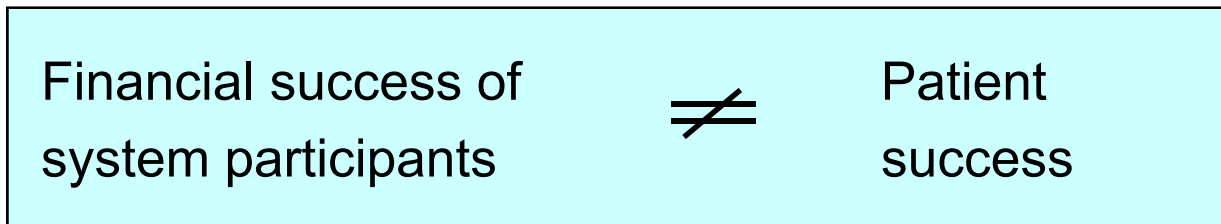
- Significant improvement in value will require **fundamental restructuring of health care delivery**, not incremental improvements

Today, 21<sup>st</sup> century medical technology is delivered with 19<sup>th</sup> 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**



- Creating **competition on value** is a central challenge in health care reform

# Zero-Sum Competition in U.S. Health Care

## Bad Competition

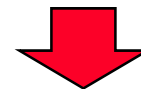
- Competition to **shift costs** or **capture more revenue**
- Competition to **increase bargaining power**
- Competition to **capture patients** and **restrict choice**
- Competition to **restrict services** in order to maximize revenue per visit or reduce costs



Zero or Negative Sum

## Good Competition

- Competition to **increase value for patients**



Positive Sum

# Principles of Value-Based Health Care Delivery

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



- Improving value will require going **beyond waste reduction** and **administrative savings**

# 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



- 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

- There must be **competition for patients** based on **value**
    - Not supply control, 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 organizations
  - **Grow the excellent organizations** by reallocating capacity and expanding across locations



# Principles of Value-Based Health Care Delivery

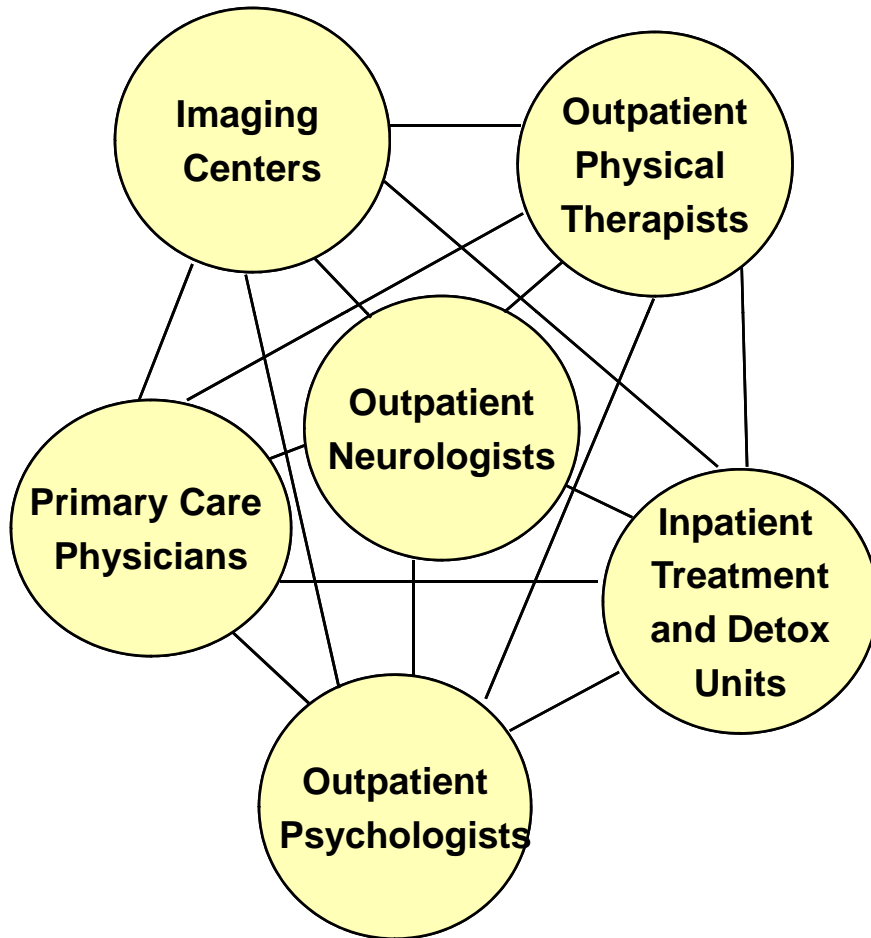
1. The goal must be **value for patients**, not lowering costs
2. Health care delivery should be organized around **medical conditions** over the **full cycle of care**

- 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

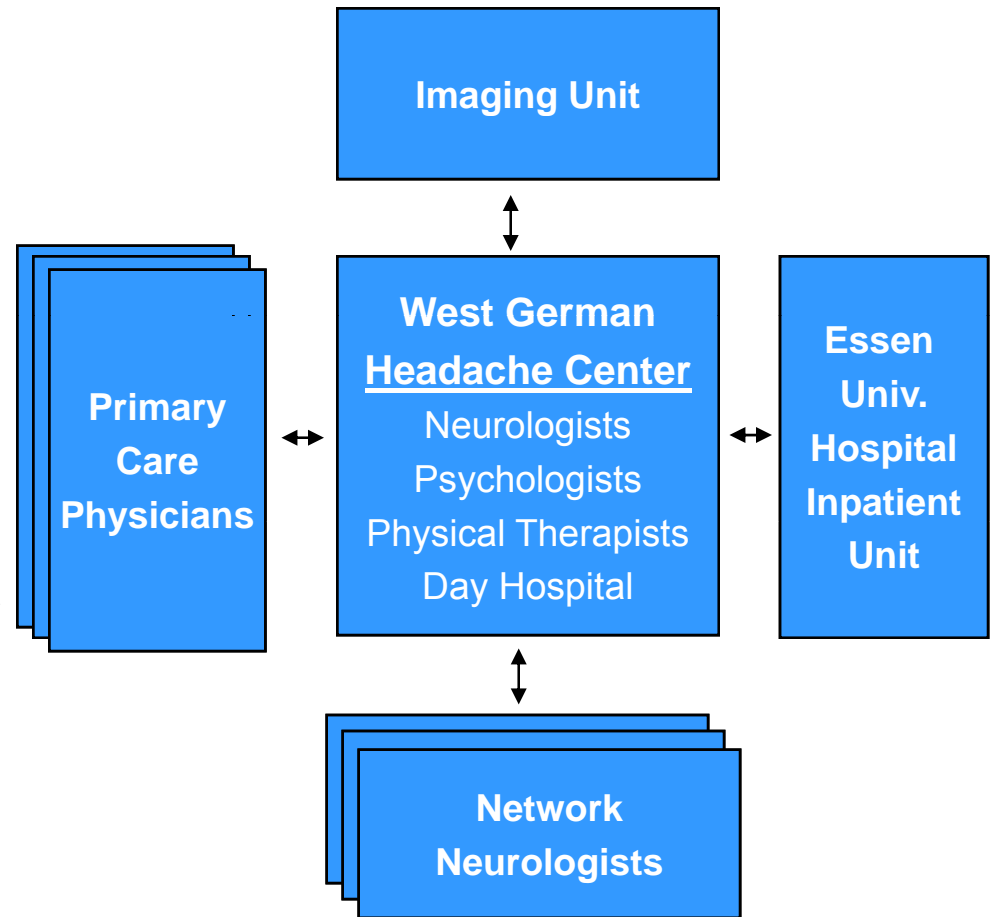
# Restructuring Health Care Delivery

## Migraine Care in Germany

### Existing Model: Organize by Specialty and Discrete Services



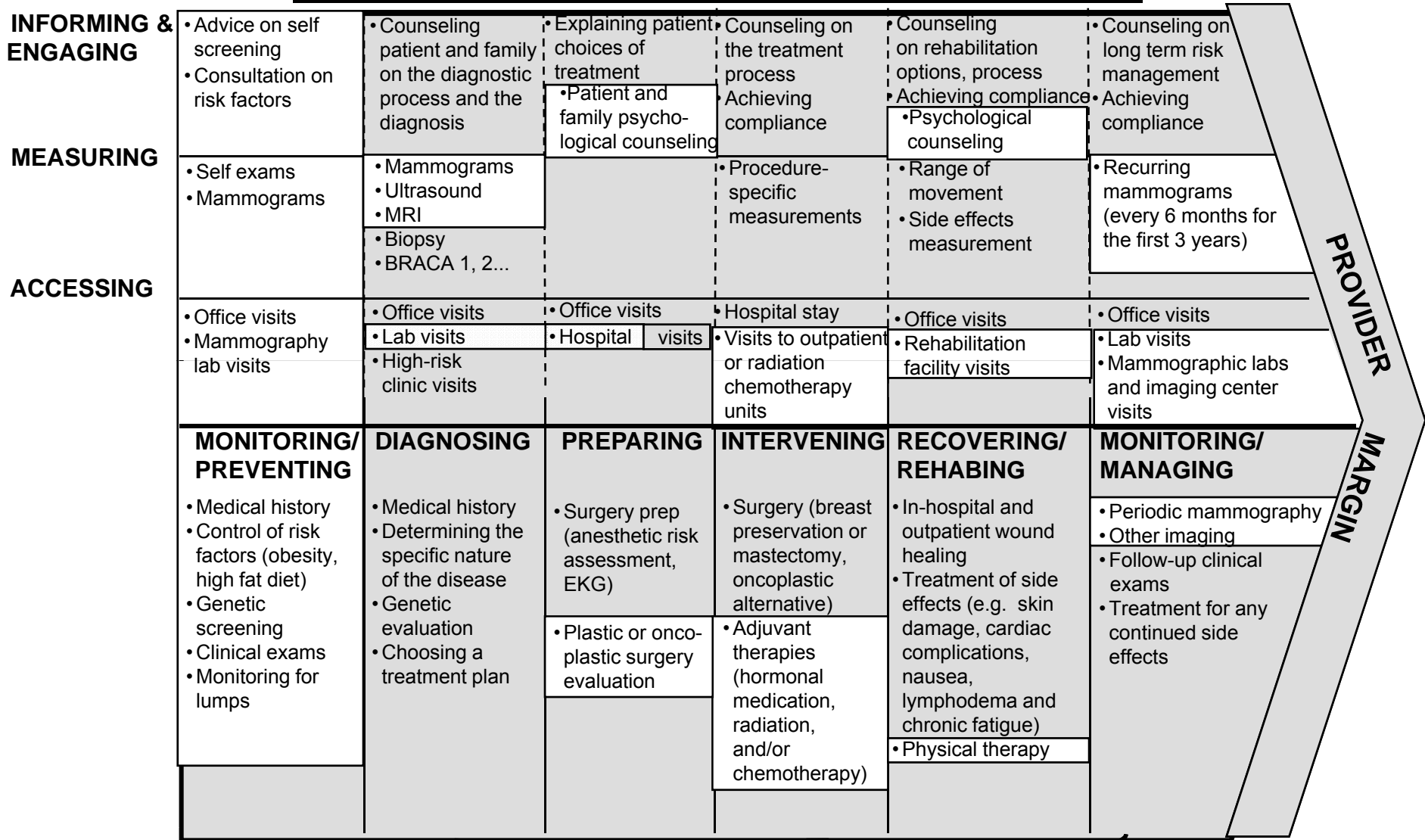
### New Model: Organize into Integrated Practice Units (IPUs)



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



- **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

<input checked="" type="checkbox"/>	Breast Cancer Specialist
<input type="checkbox"/>	Other Provider Entities

# Integrated Cancer Care

## MD Anderson Head and Neck Center

Staff	
Head and Neck Center	Shared
<p><b><u>Dedicated MDs</u></b></p> <ul style="list-style-type: none"> <li>-Medical Oncologists</li> <li>-Surgical Oncologists</li> <li>-Radiation Oncologists</li> <li>-Dentists</li> <li>-Diagnostic Radiologist</li> <li>-Pathologist</li> <li>-Ophthalmologists</li> </ul> <p><b><u>Dedicated Skilled Staff</u></b></p> <ul style="list-style-type: none"> <li>-Nurses</li> <li>-Audiologist</li> <li>-Patient Advocate</li> </ul>	<p><b><u>Shared MDs</u></b></p> <ul style="list-style-type: none"> <li>-Endocrinologists</li> <li>-Other specialists as needed (cardiologists, plastic surgeons, etc.)</li> </ul> <p><b><u>Shared Skilled Staff</u></b></p> <ul style="list-style-type: none"> <li>-Nutritionists</li> <li>-Social Workers</li> </ul>
Facilities	
Head and Neck Center	Shared
<ul style="list-style-type: none"> <li>-Dedicated Outpatient Unit</li> </ul>	<ul style="list-style-type: none"> <li>-Radiation Therapy</li> <li>-Pathology Lab</li> <li>-Ambulatory Chemo Center</li> <li>-Inpatient Wards                             <ul style="list-style-type: none"> <li>→ Medical Wards</li> <li>→ Surgical Wards</li> </ul> </li> </ul>

Source: Jain, Sachin H. and Michael E. Porter, *The University of Texas MD Anderson Cancer Center: Interdisciplinary Cancer Care*,

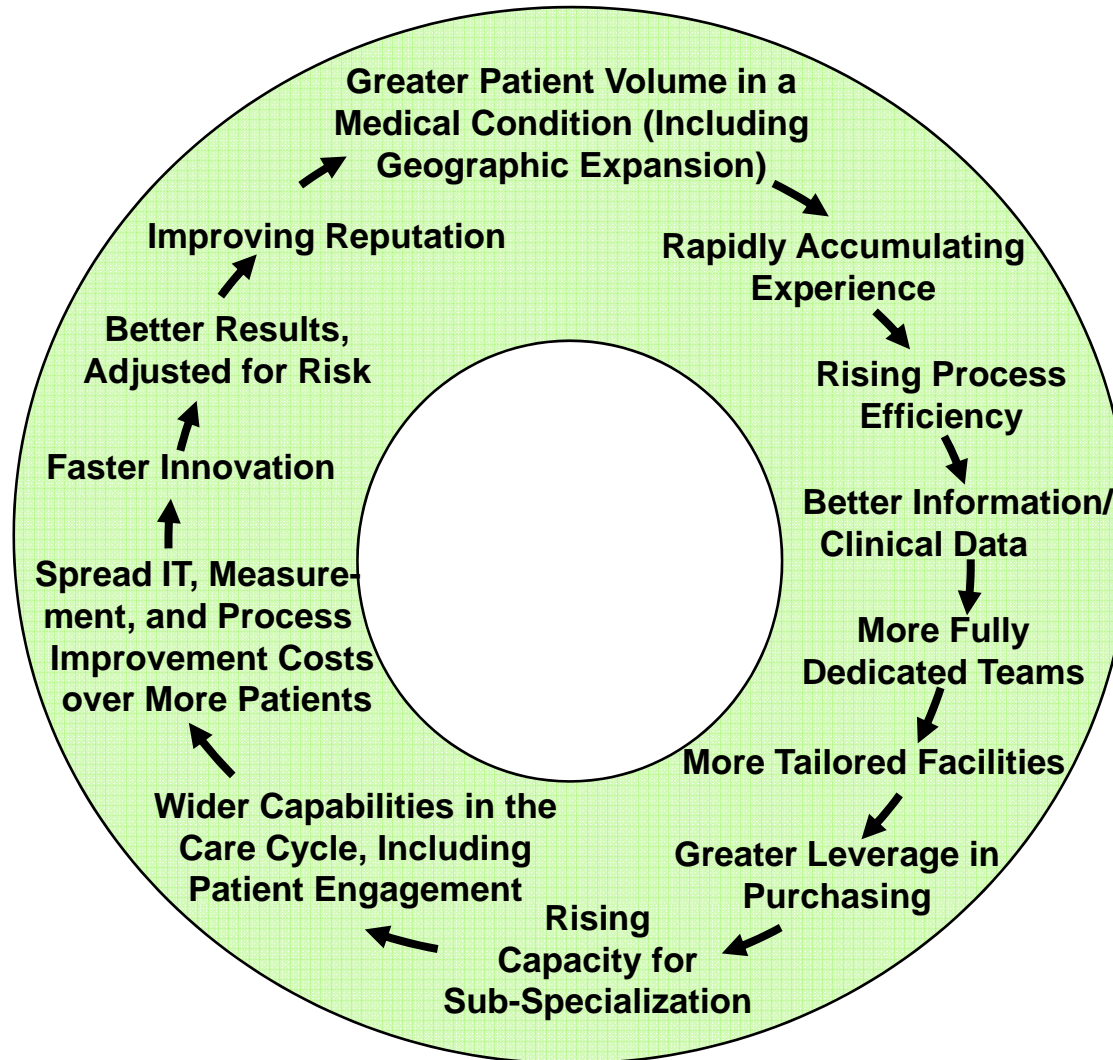
# What is Integrated Care?

- 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


# Principles of Value-Based Health Care Delivery

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

## The Virtuous Circle



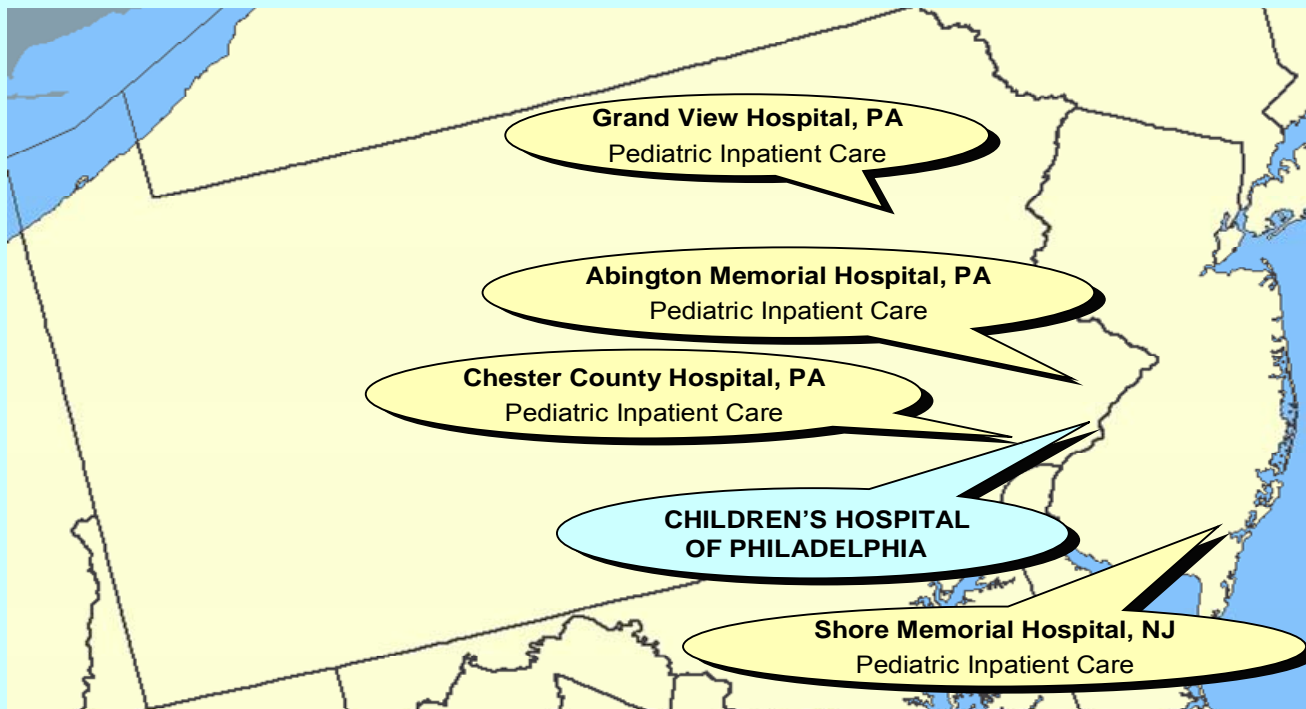
# Consequences of Service Fragmentation

- Health care delivery in every country is **highly fragmented**
    - Extreme duplication of services
    - Low volume of patients per medical condition per provider
    - Duplication and fragmentation are present **even within affiliated hospitals or systems**
  - Most providers **lack the scale and experience** to justify dedicated facilities, dedicated teams, and integrated care over the cycle
  - Fragmentation drives organizations into **shared units**
    - Specialties
    - Imaging
    - Procedures
- 
- Patient value suffers

# 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

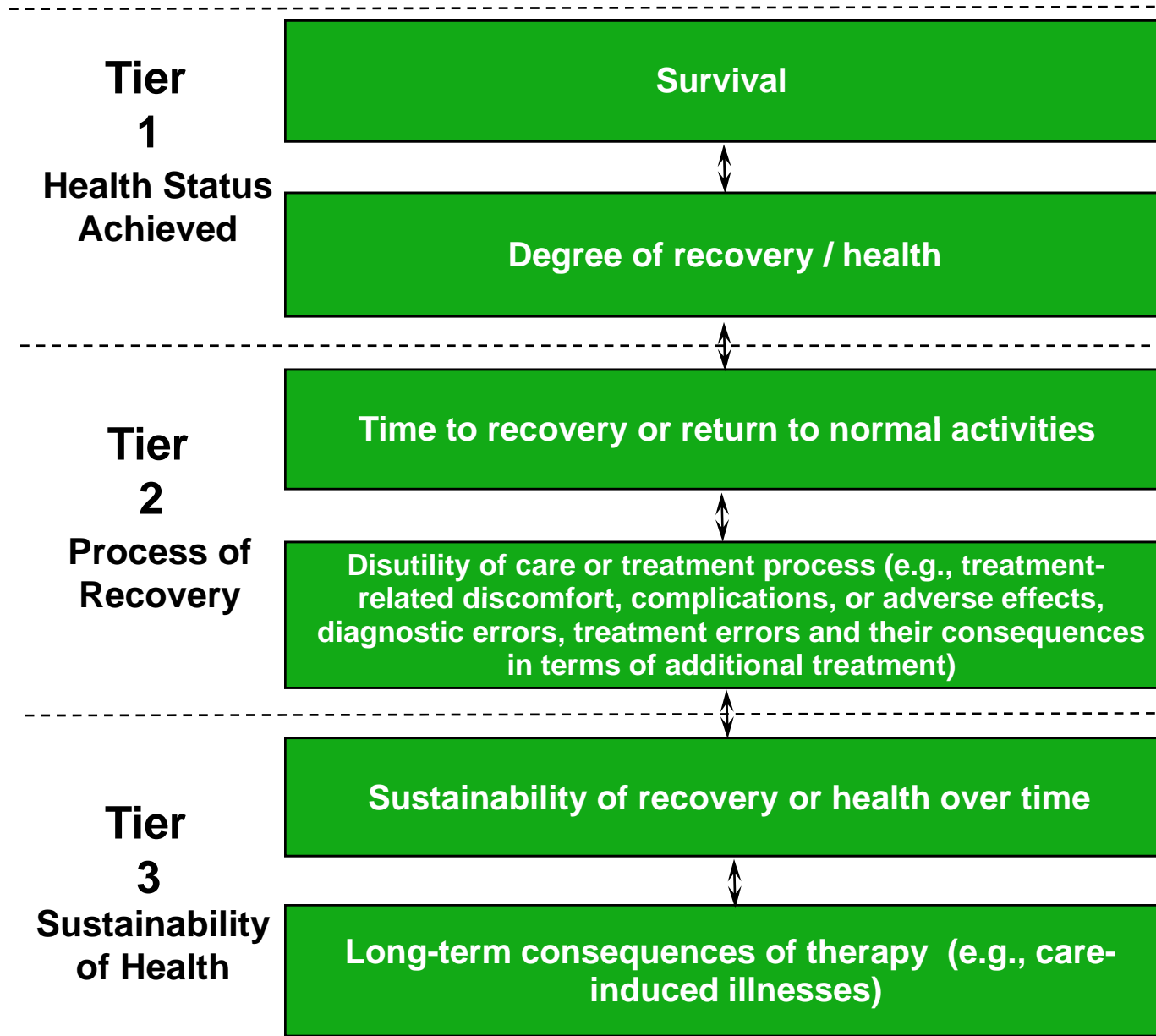
1. The goal must be **value for patients**, not lowering costs
2. Health care delivery should be organized around **medical conditions** over the **full cycle of care**
3. **Value** must be universally measured and reported

- **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)

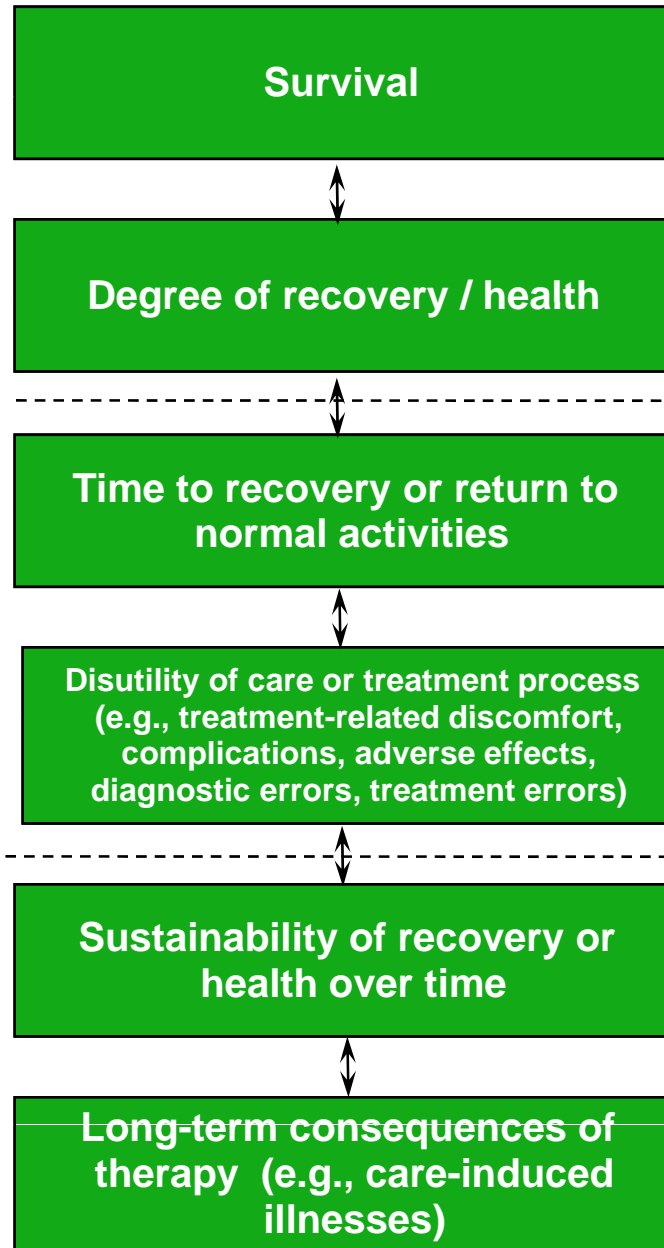


- Results must be measured at the **level at which value is created** for patients

# The Outcome Measures Hierarchy



# Measuring Breast Cancer Outcomes



- **Survival rate**  
(One year, three year, five year, longer)

- **Remission**
- **Functional status**

- **Breast conservation outcome**

- **Time to remission**

- **Time to achieve functional status**

Disutility of care or treatment process  
(e.g., treatment-related discomfort, complications, adverse effects, diagnostic errors, treatment errors)

- **Nosocomial infection**
- **Nausea**
- **Vomiting**

- **Febrile neutropenia**
- **Limitation of motion**
- **Depression**

**Sustainability of recovery or health over time**

- **Cancer recurrence**

- **Sustainability of functional status**

**Long-term consequences of therapy (e.g., care-induced illnesses)**

- **Incidence of secondary cancers**
- **Brachial plexopathy**

- **Premature osteoporosis**

# Measuring Value: Essential Principles

- **Physicians** need to measure results in order to drive value improvement
- Outcomes should be **adjusted for patient initial conditions**
- Outcome measurement should not wait for perfection: Measures and risk adjustment methods 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

# Principles of Value-Based Health Care Delivery

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**

- 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 or government

# Principles of Value-Based Health Care Delivery

1. The goal must be **value for patients**, not lowering costs
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4. Reimbursement should be aligned with **value** and reward **innovation**
5. 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

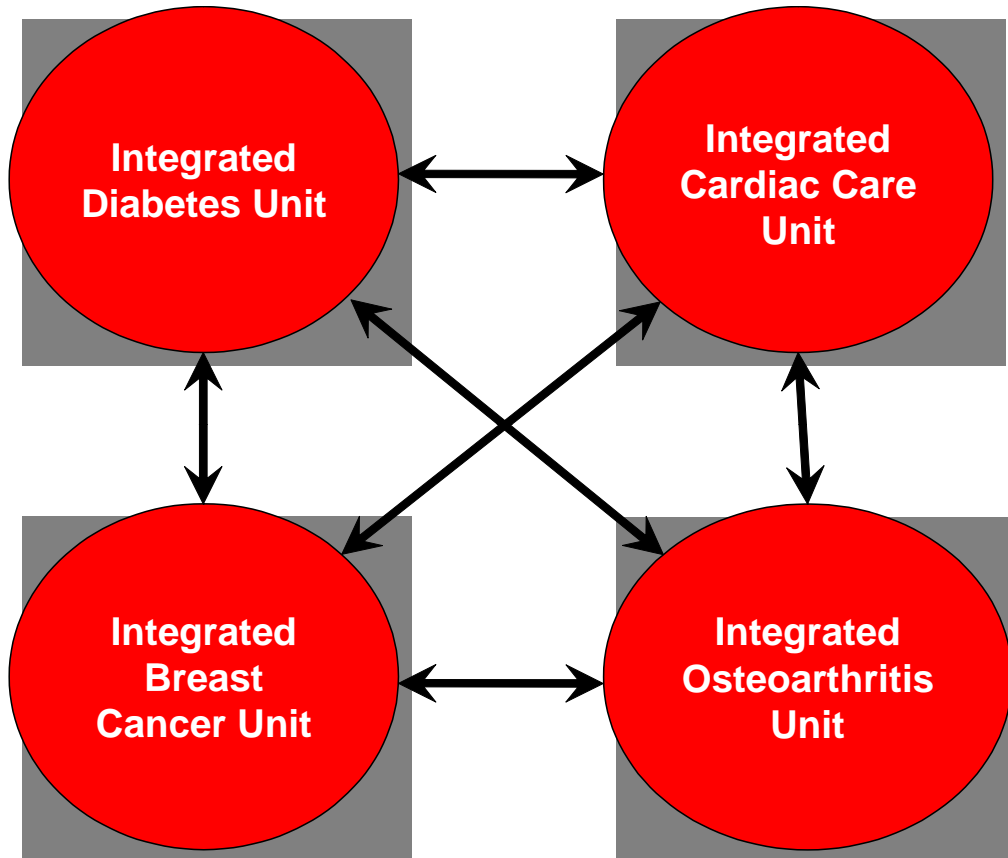
# Principles of Value-Based Health Care Delivery

## 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 Medical Conditions

## Coordinating Care Across IPUs

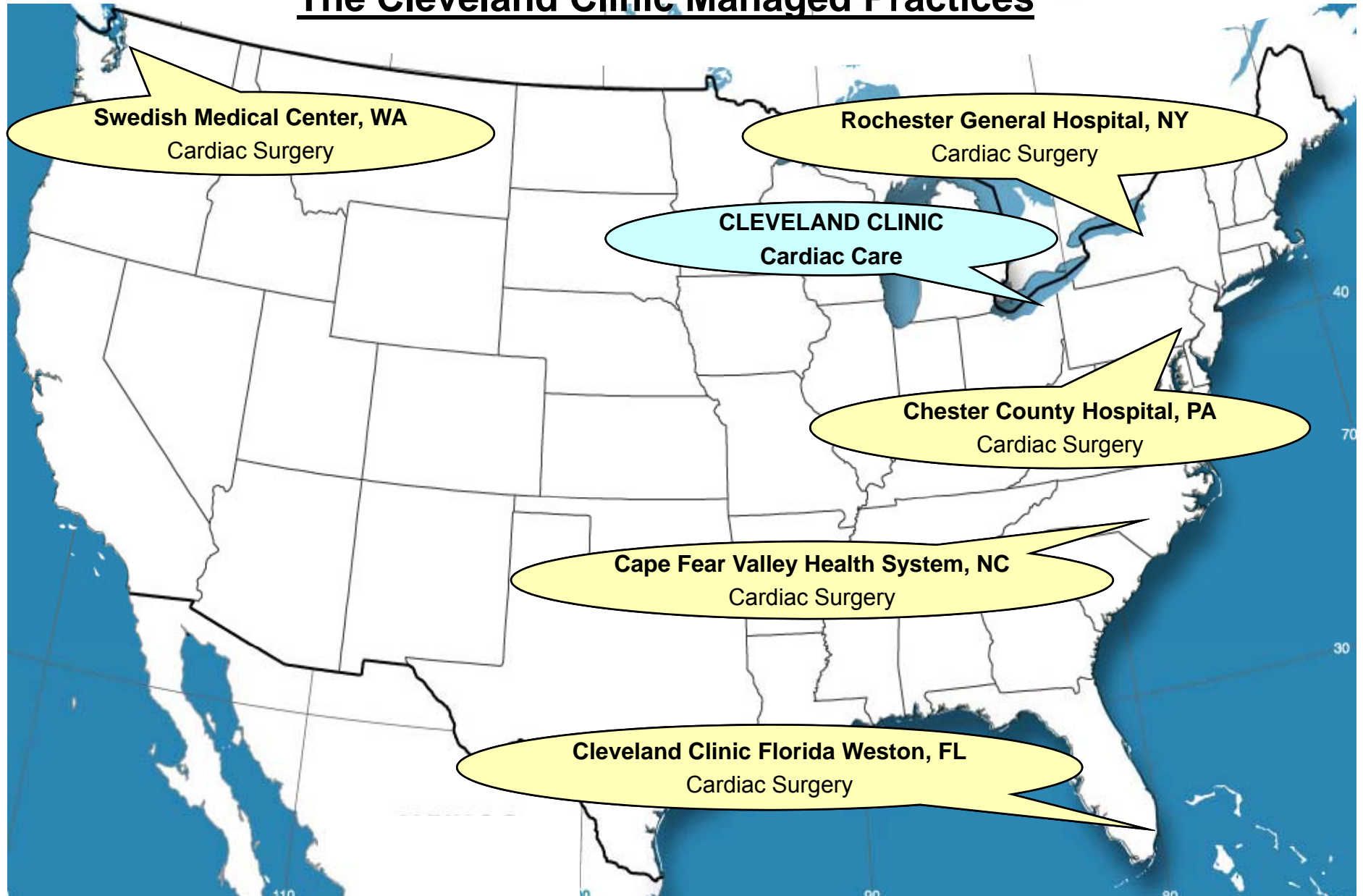


- The primary organization of care delivery should be around the integration required for **every patient**
- IPUs will also greatly simplify coordination of care for patients with multiple medical conditions
- The patient with multiple conditions will be **better off** in an IPU model



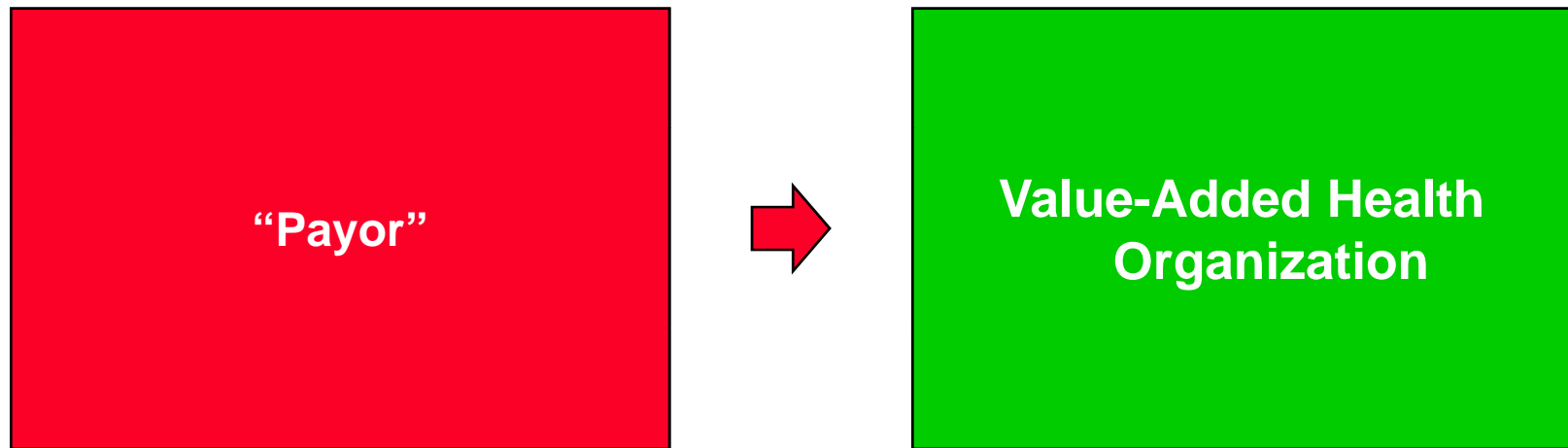
# Managing Care Across Geography

## The Cleveland Clinic Managed Practices




# Creating a High-Value Health Care System

## Health Plans




# Value-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
- Work with the health plan in **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

# Creating a High-Value Health Care System

## Government

- 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 health care delivery** around the integrated care of medical conditions
  - E.g. Stark Laws
- 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
- **Open up competition** among providers and across geography

# Creating a High-Value Health Care System

## Government, cont'd.

- Establish universal reporting by health plans of **health outcomes** for members
- Encourage the **responsibility of individuals** for their health and their health care

# Creating a High-Value Health Care System

## 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**



# 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