

# Value-Based Health Care Delivery

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Harvard Business School

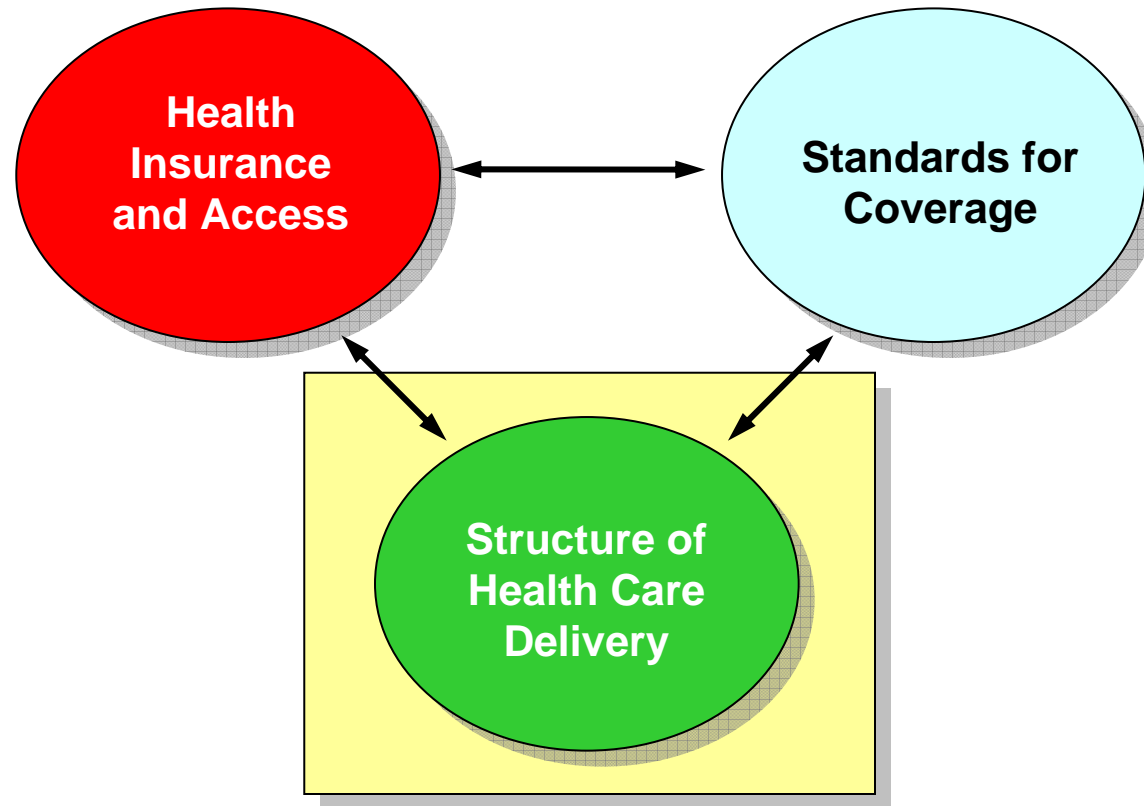
*HSM Inspiring Ideas  
São Paulo, Brazil  
November 5, 2007*

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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, 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>. Version 2:15pm, November 4, 2007

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# 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 outcomes per dollar spent



- How to design a health care system that **dramatically improves value**
  - Ownership of entities is secondary (e.g. government vs. non-profit vs. for profit)
- How to create a **dynamic system** that keeps rapidly improving

# Creating a Value-Based Health Care System

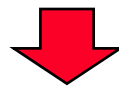
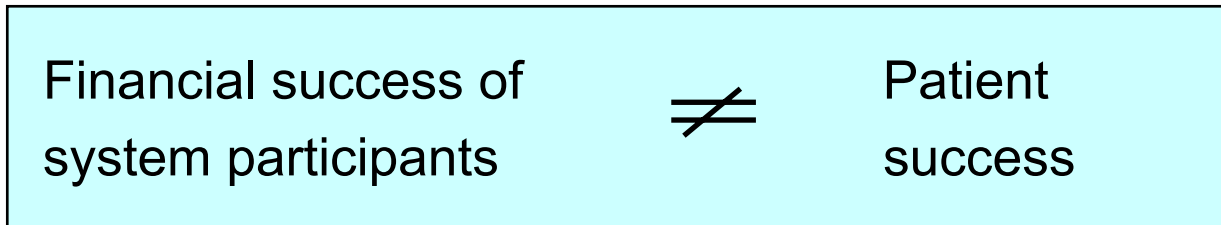
- Significant improvement in value will require **fundamental restructuring of health care delivery**, not incremental improvements

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 improvement, 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**



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

# Zero-Sum Competition in Health Care

## Bad Competition

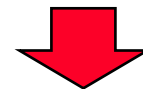
- Competition to **shift costs** or **capture a bigger share of revenue**
- Competition to **increase bargaining power**
- Competition to **capture patients** and **limit choice**
- Competition to **restrict services** in order to maximize revenue per visit or reduce costs



Zero or Negative Sum

## Good Competition

- Competition to **increase value for patients**



Positive Sum

# Principles of Value-Based Competition

1. The goal should be **value for patients**, not lowering costs or serving the community
  - Health **outcomes** are objective outcomes, not patient perceptions alone
  - The costs of achieving outcomes are the **total costs**, not the costs borne by any one party
  - Improving value will require going **beyond waste reduction** and **administrative savings**

# Principles of Value-Based Competition

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

Quality = Health outcomes

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



# Principles of Value-Based Competition

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

$$\text{Value: } \frac{\text{Patient health outcomes}}{\text{Total cost of achieving those outcomes}}$$

- 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

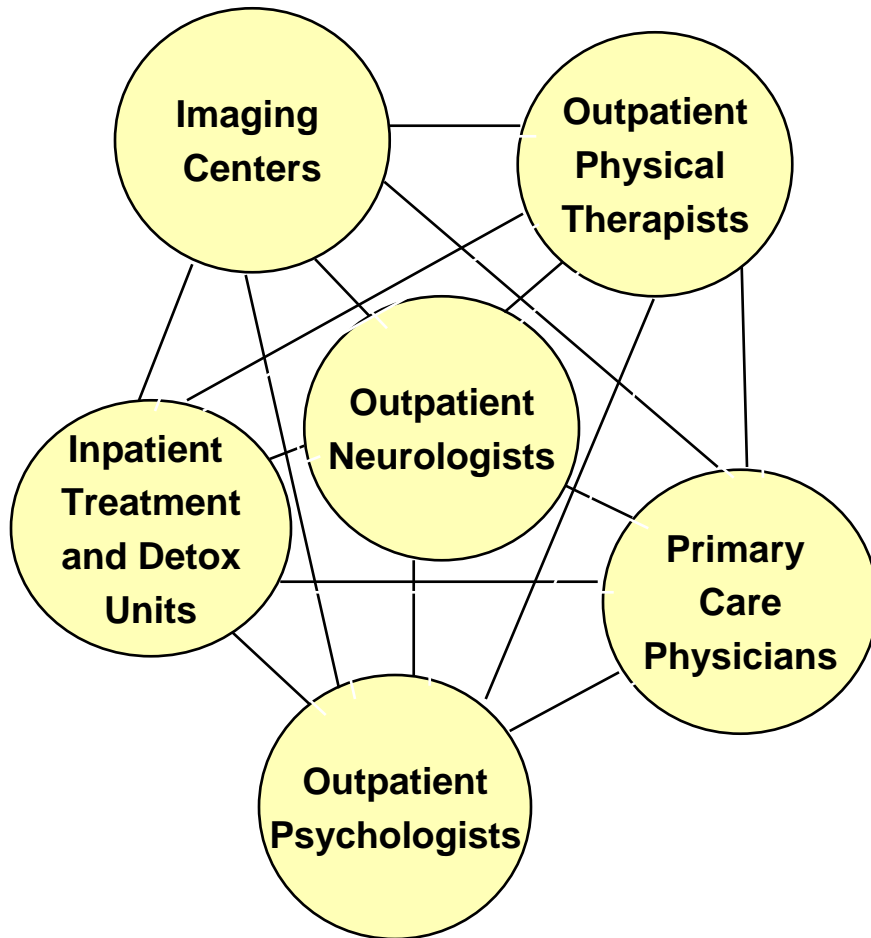
# Principles of Value-Based Competition

1. The goal should be **value for patients**, not lowering costs or serving the community
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4. Competition should center on **medical conditions** over the **full cycle of care**

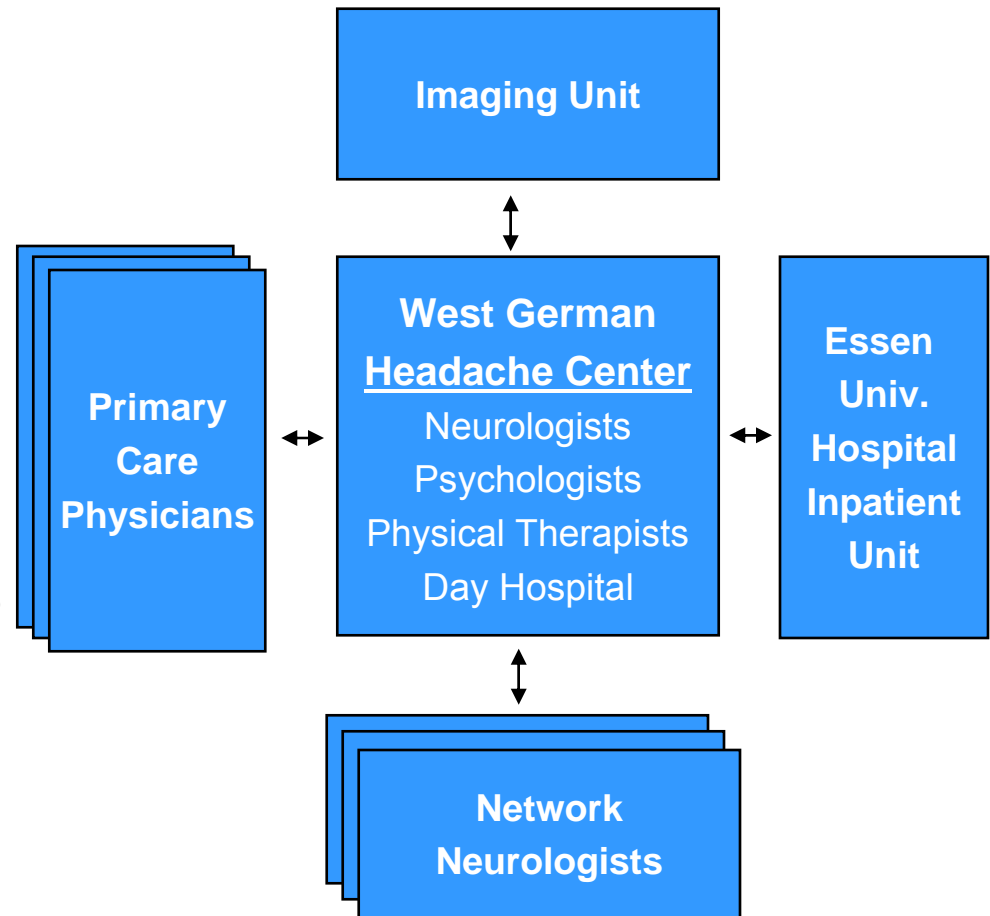
# Restructuring Health Care Delivery

## Migraine Care in Germany

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




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



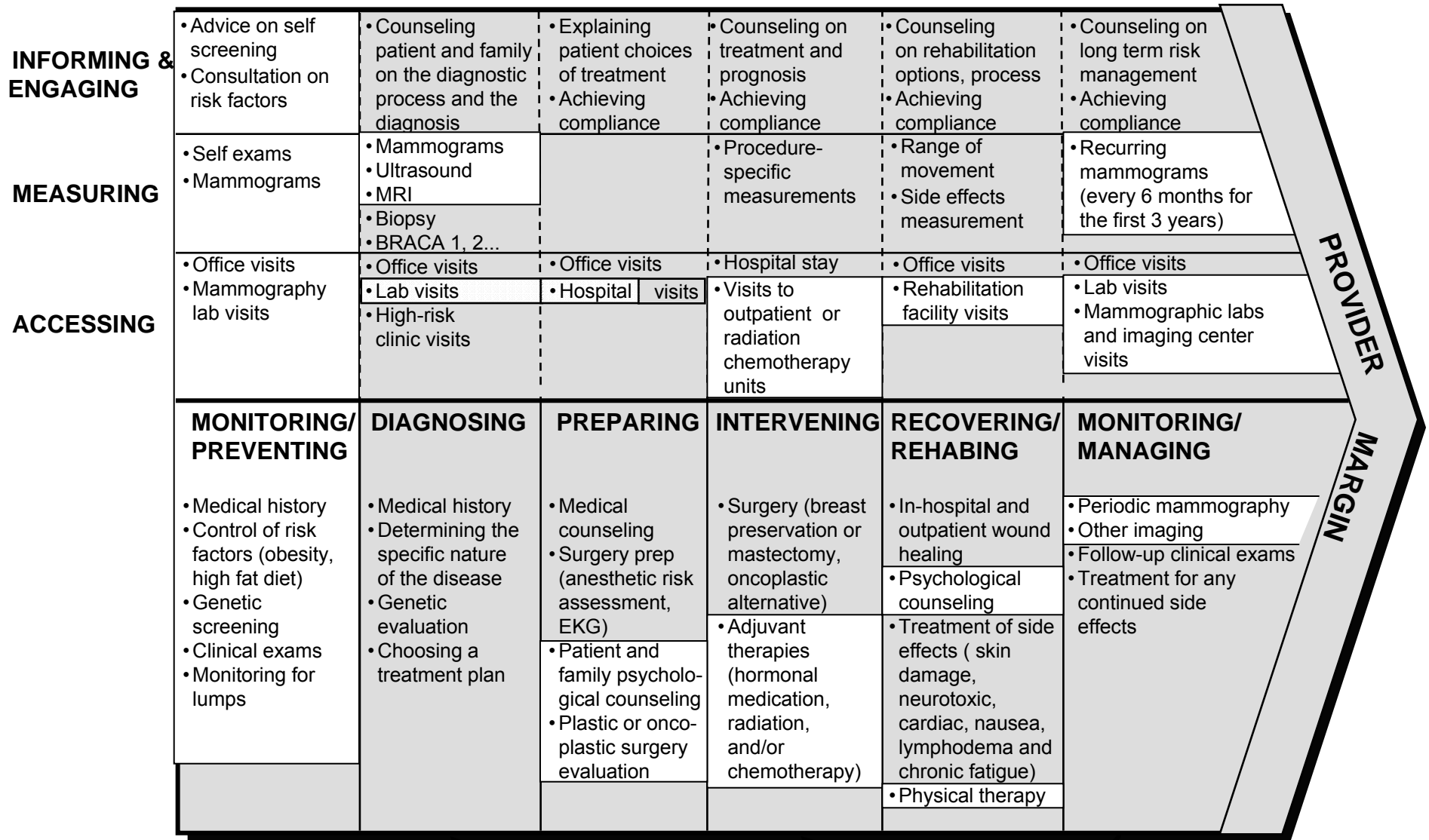
Source: KKH, Westdeutsches Kopfschmerzzentrum

# 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
    - HIV / AIDS
- 
- The medical condition is the **unit of value creation** in health care delivery

# The Cycle of Care

## Care Delivery Value Chain for Breast Cancer

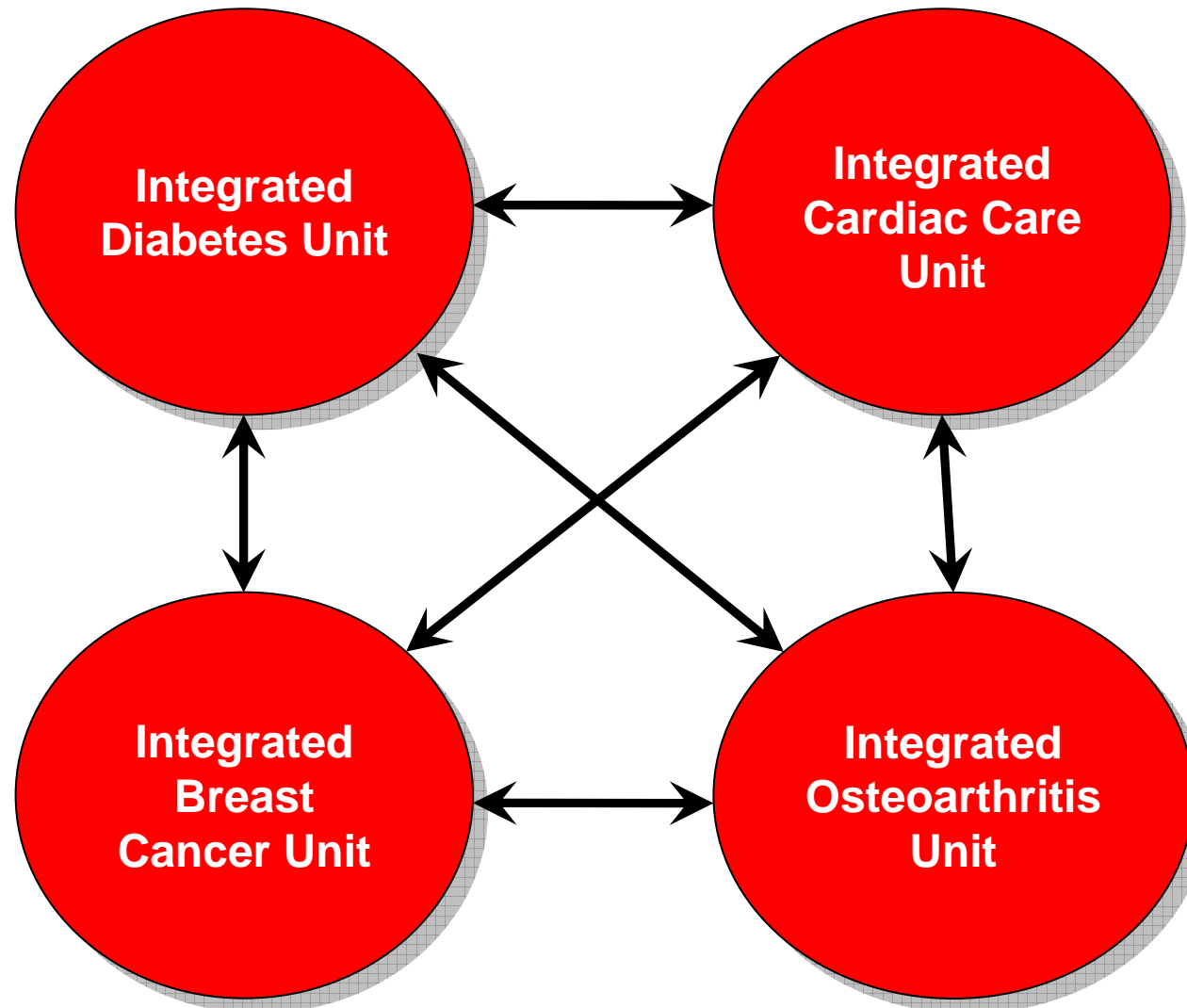


PROVIDER MARGIN

- **Primary care providers** are often the beginning and end of care cycles

- Breast Cancer Specialist
- Other Provider Entities

## Patients with Multiple Medical Conditions Integrating Care Across IPUs



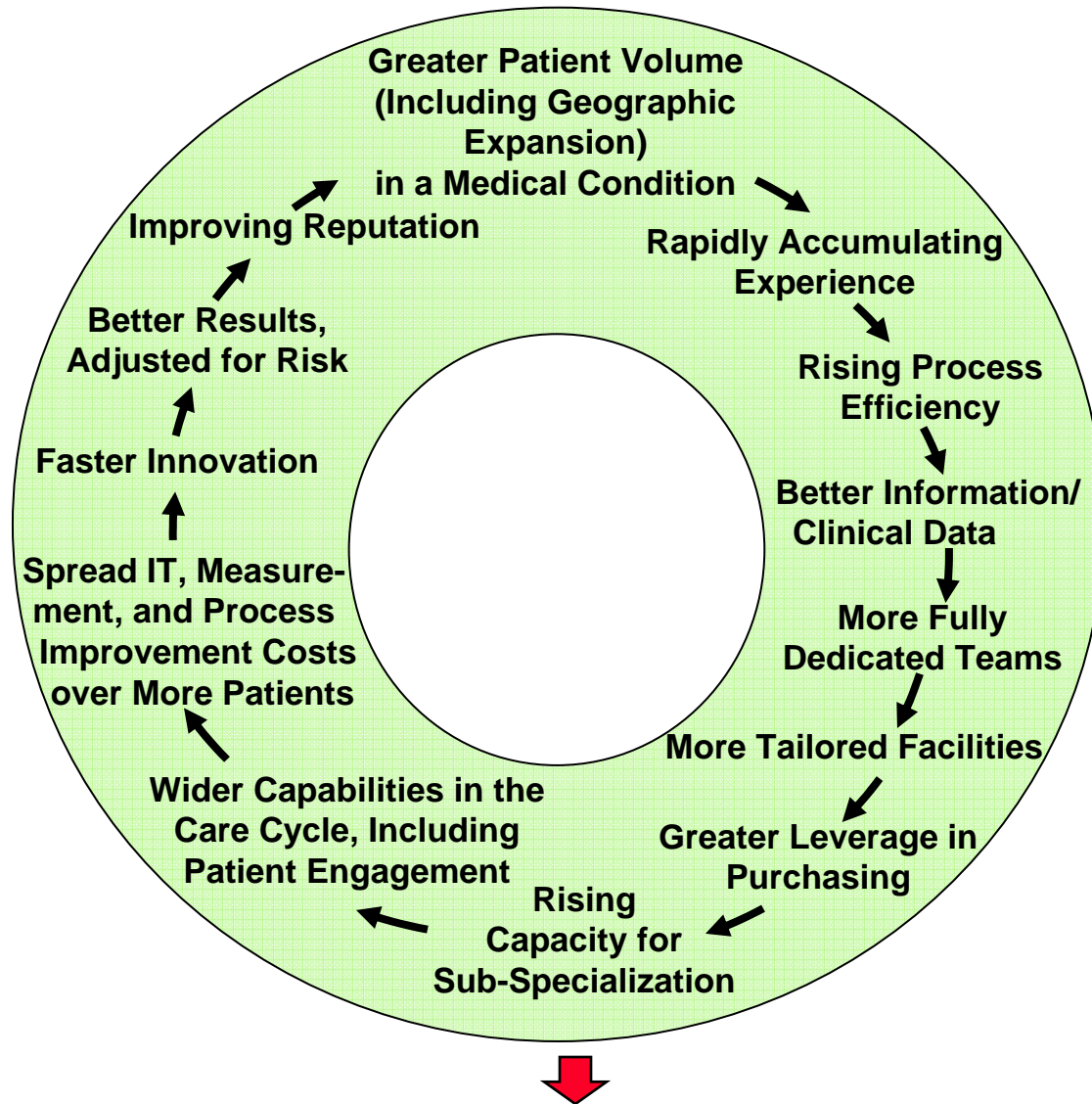
- The primary organization of care delivery should be around the integration required for **every patient**. This will greatly simplify the coordination of care for patients with multiple medical conditions.

# Principles of Value-Based Competition

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

# Driving Value Improvement

## The Virtuous Circle in a Medical Condition



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

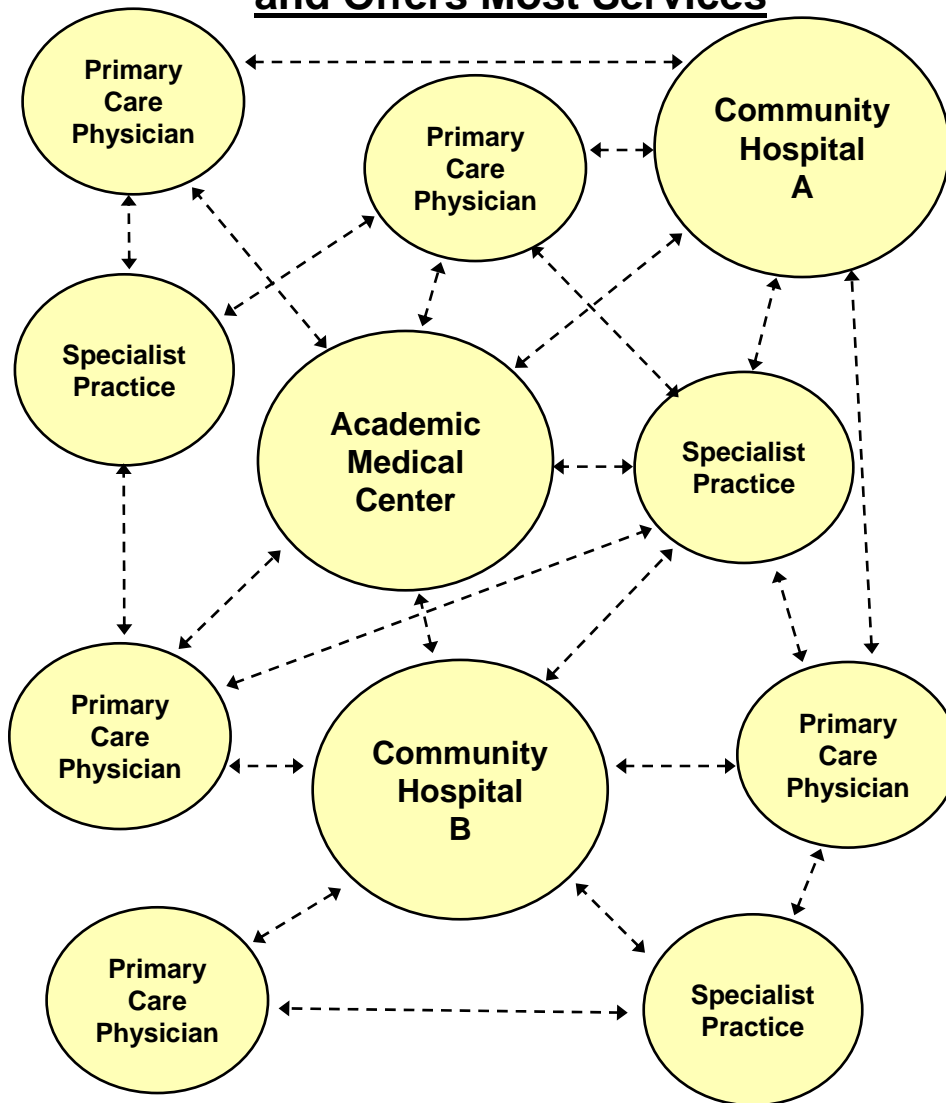


# Principles of Value-Based Competition

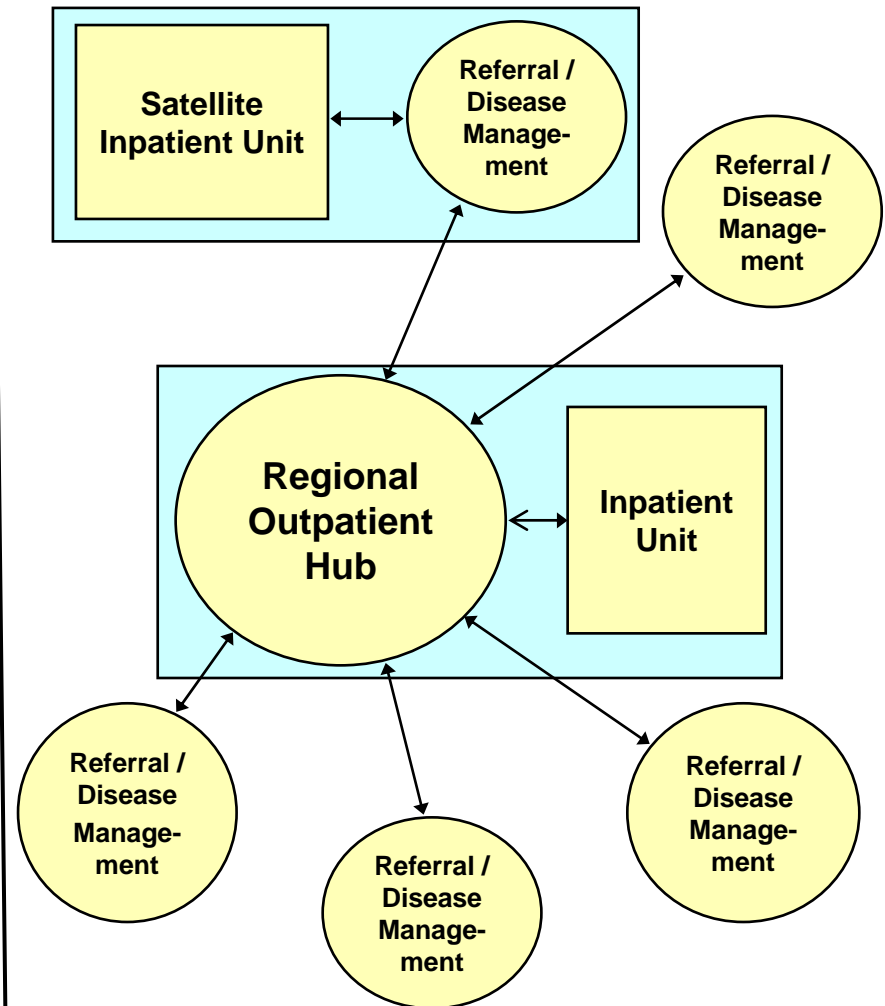
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6. Competition should be **regional** and **national**, not just local
  - Manage integrated care **across geography**
  - Utilize partnerships and inter-organizational integration among separate institutions

# Integrating Services Across Geography

## Current Model: Each Unit is Stand Alone and Offers Most Services



## New Model: Care is Organized and Integrated Across Geographic Units By Medical Conditions



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7. **Results** must be universally measured and reported

Value: 
$$\frac{\text{Patient health outcomes over the care cycle}}{\text{Total cost of achieving those outcomes}}$$

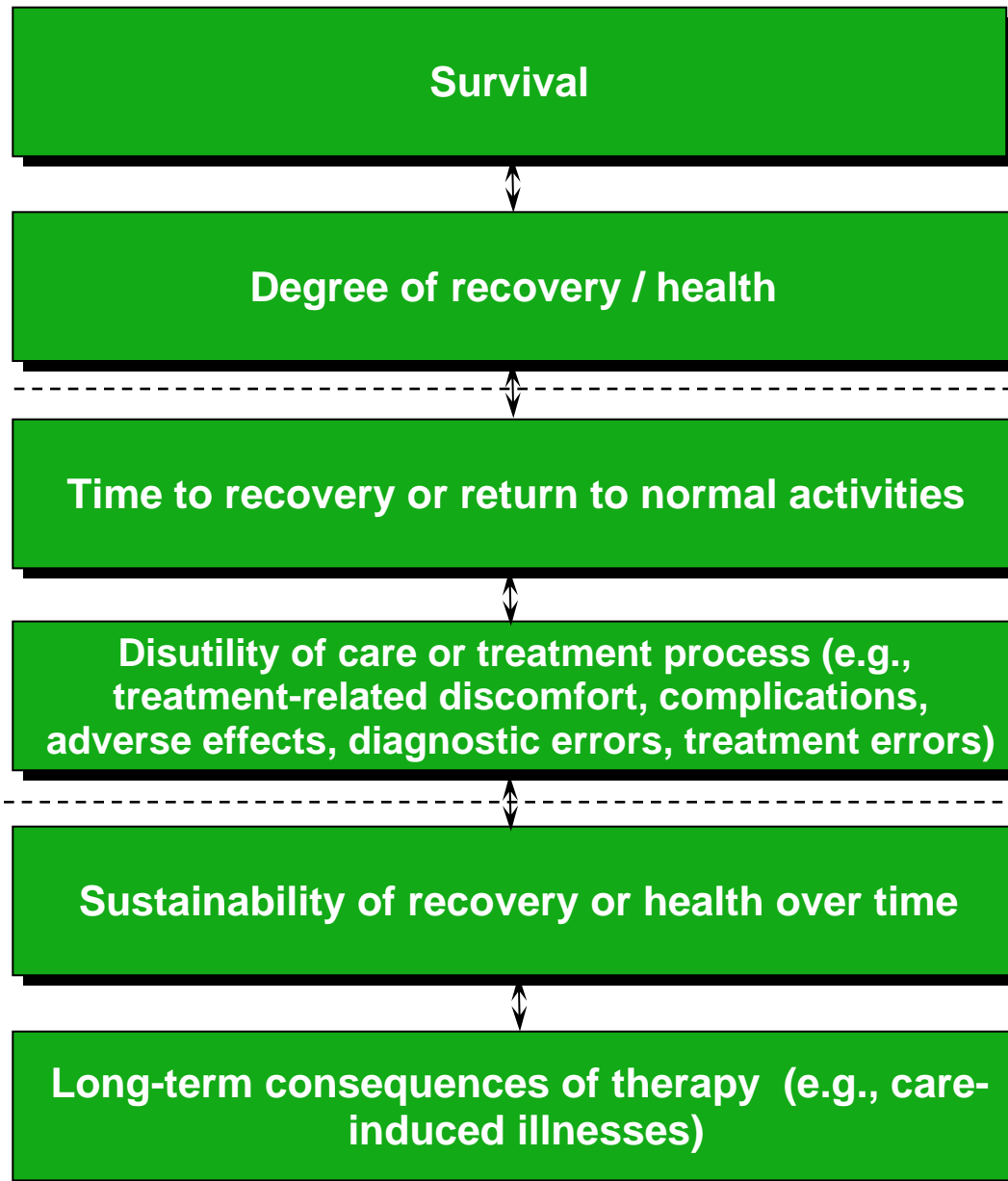
# Measuring Results

## Fundamentals

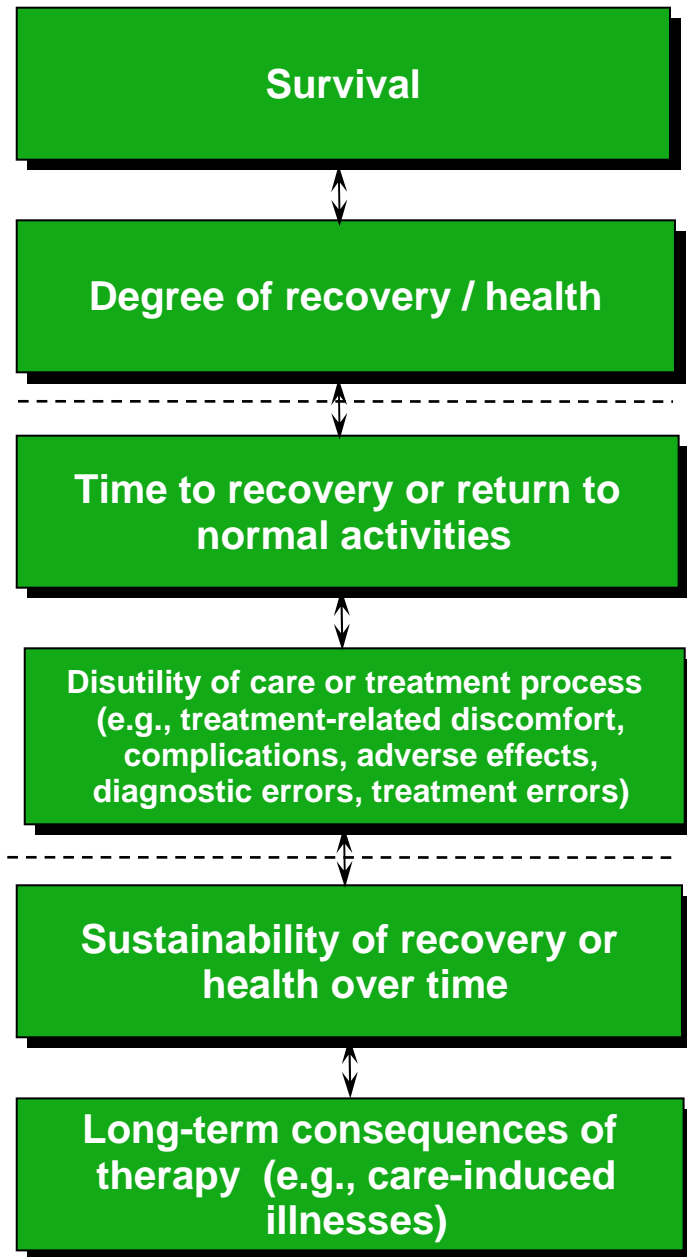
- Measure **outcomes** versus processes of care
- Outcome measurement should take place:
  - At the **medical condition** level
  - Over the **cycle of care**
- There are **multiple outcomes** for every medical condition

# Measuring Outcomes

## The Outcome Measures Hierarchy



# Measuring Breast Cancer Outcomes



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

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

- **Breast conservation surgery 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 Results

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- Outcomes must be **adjusted for risk/patient initial circumstances**

# 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 that once affected outcomes will **decline in importance**



# Measuring Results

## Fundamentals

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

- Outcomes are as important for **physicians** as for consumers and health plans

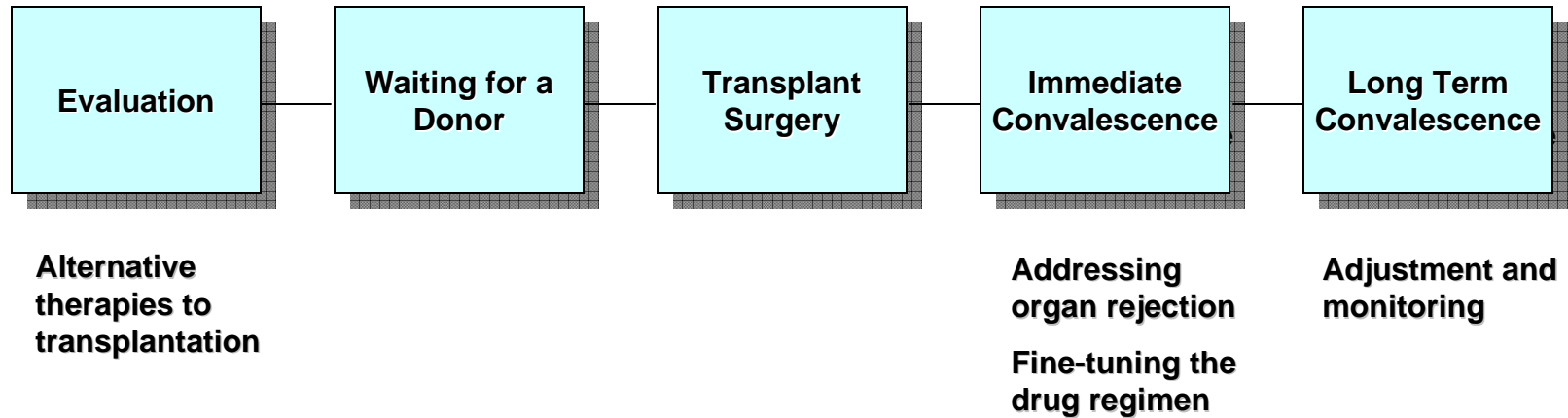


- The feasibility of universal outcome measurement at the medical condition level has been **conclusively demonstrated**
- Providers and health plans must **measure outcomes** (and costs) for every patient

# Principles of Value-Based Competition

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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 for discrete treatments, services, or per diem
  - Reimbursement for **prevention and screening**, not just treatment

# Organ Transplantation Care Cycle



- Leading transplantation centers quote a **single price**

# Principles of Value-Based Competition

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9. **Information technology** is an **essential enabler** of restructuring care delivery and measuring results, but **not a solution by itself**
  - Common data definitions
  - Interoperability standards
  - Patient-centered database
  - Full care cycle

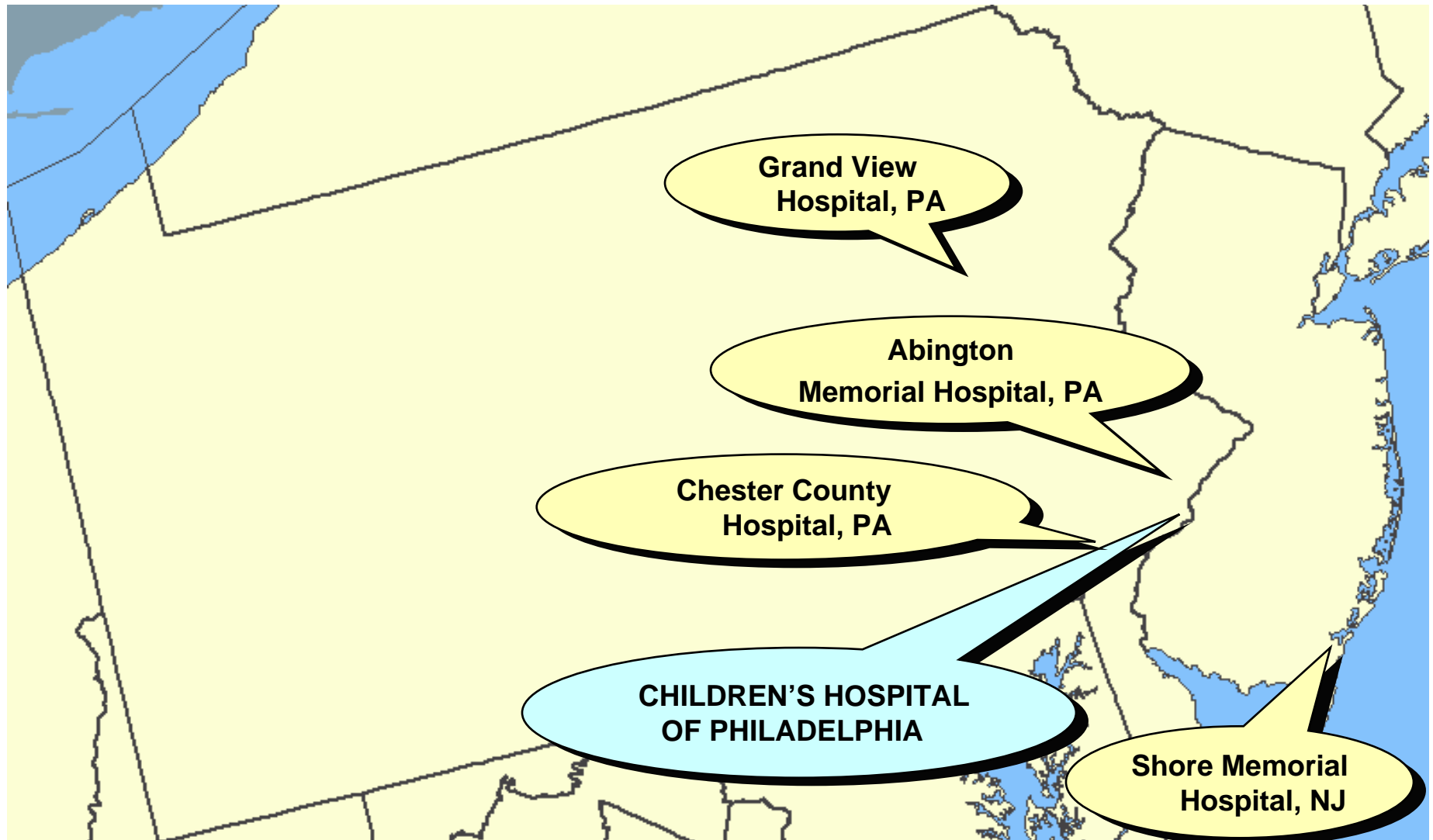
# Moving to Value-Based Competition

## 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**
- **Integrate services** for each IPU / medical condition **across geographic locations**
- Employ formal **partnerships** and **alliances** with independent practices involved in the care cycle to integrate care, improve capabilities, and/or obtain consultations
- Measure **outcomes** and **costs** for every medical condition
- Implement a **single, integrated, patient centric electronic medical record system** which is utilized by every unit and accessible to partners, referring physicians, and patients
- Lead the development of **new contracting models** with health plans based on care cycle delivery structures and bundled reimbursement
- Expand high-performance IPUs **across geography** using an integrated model
  - Instead of merging broad line, stand-alone facilities

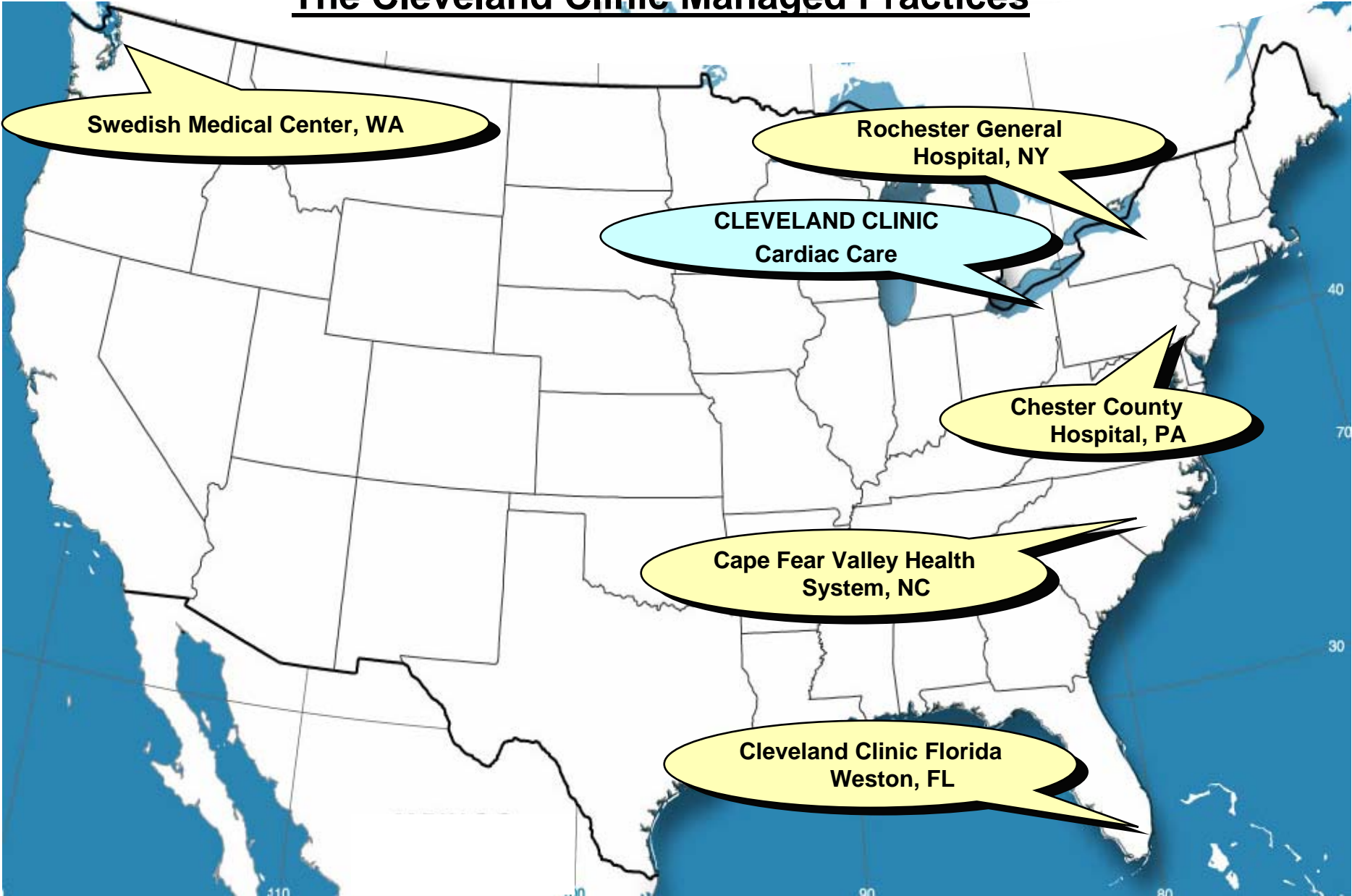
# Managing Care Across Geography

## The Children's Hospital of Philadelphia (CHOP) Affiliations



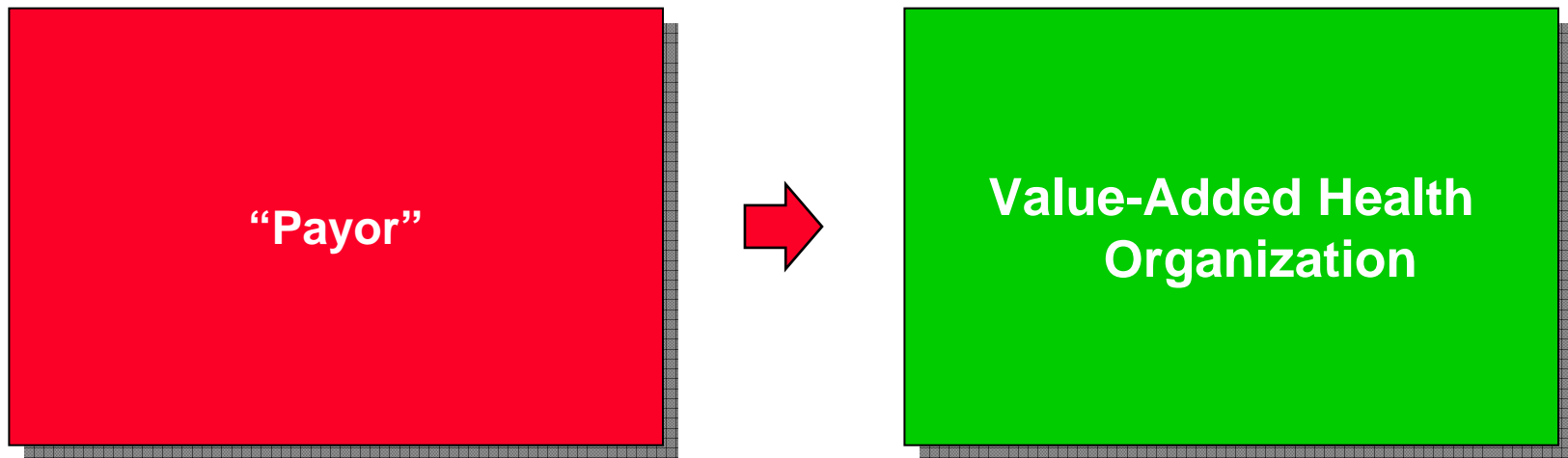
# Managing Care Across Geography

## The Cleveland Clinic Managed Practices



# Moving to Value-Based Competition

## Health Plans





# Moving to Value-Based Competition

## Value-Adding Roles of Health Plans

- Assemble, analyze and manage the **total medical records** of 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**
- Provide for comprehensive **prevention, screening, and chronic disease management** services to all members
- 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 versus other plans

# Creating a High-Value Health Care System: Roles and Responsibilities

## 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: Roles and Responsibilities

## 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
- Get informed and **comply** with care
- 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

# Moving to Value-Based Competition

## 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
- 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

# Moving to Value-Based Competition

## Government, cont'd.

- Require health plans to measure and report **health outcomes** for members
- 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
- 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** and **health plans** can and should take the lead