

Value-Based Health Care Delivery

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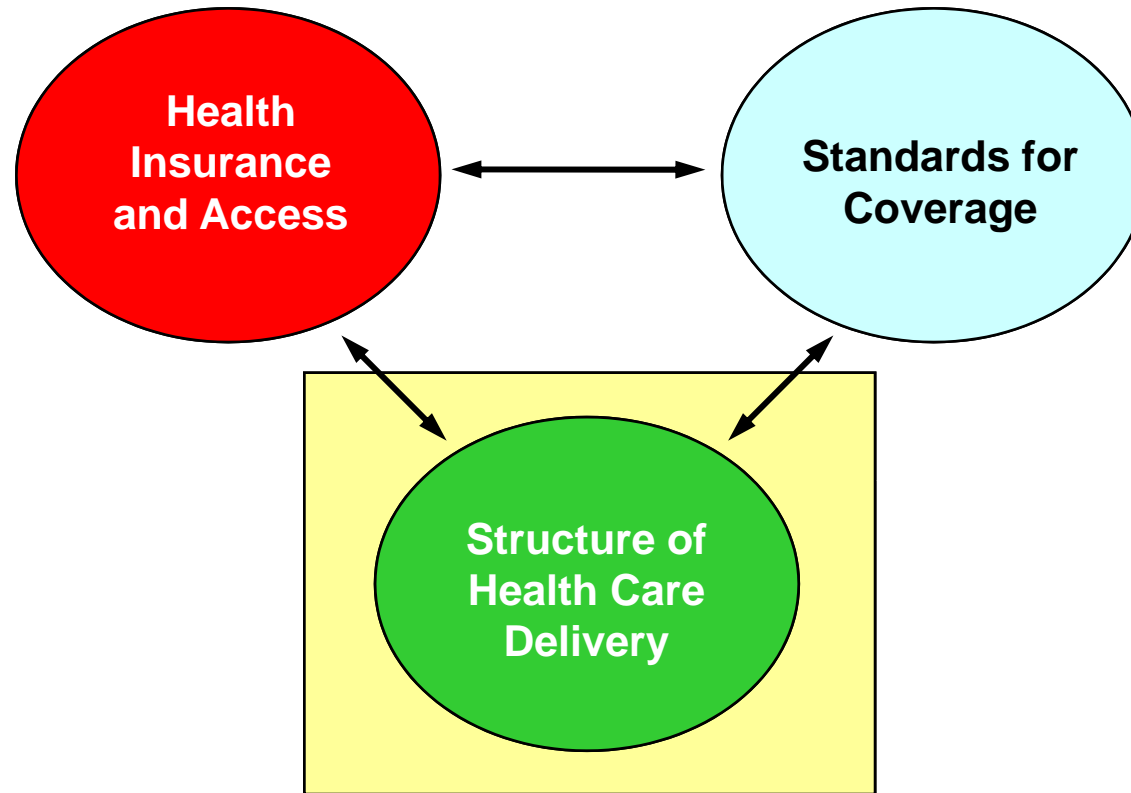
Princeton University
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This presentation draws on Michael E. Porter and Elizabeth Olmsted Teisberg: *Redefining Health Care: Creating Value-Based Competition on Results*, Harvard Business School Press, May 2006, and “How Physicians Can Change the Future 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>.

Proposals for Reform

- Single Payer System
- Consumer-Driven Health Care
- Pay for Performance
- Electronic Medical Records
- Integrated Payer-Provider Systems

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. government vs. non-profit vs. for profit)
- How to create a **dynamic system** that keeps rapidly improving

Creating a Value-Based Health Care System

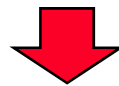
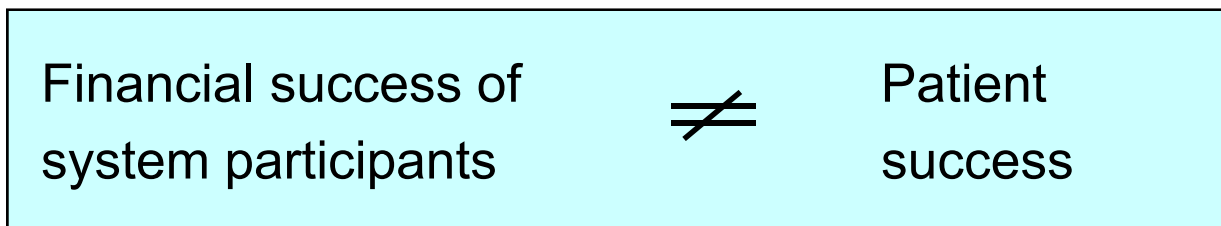
- Significant improvement in value will require **fundamental restructuring of health care delivery**, not incremental improvements

Today, 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**
 - For patients
 - For health plan subscribers
- 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 U.S. Health Care

Bad Competition

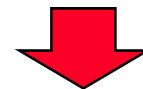
- Competition to **shift costs** or **capture a bigger share of revenue**
- Competition to **increase bargaining power**
- Competition to **capture patients** and **restrict choice**
- Competition to **restrict services** in order to maximize revenue per visit or reduce costs



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 just lowering costs
 - 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 just lowering costs
2. The best way to **contain costs** is to **improve 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 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

Principles of Value-Based Competition

1. The goal should be **value for patients**, not just lowering costs
2. The best way to contain costs is to drive improvement in **quality**
3. There must be **competition for patients** 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

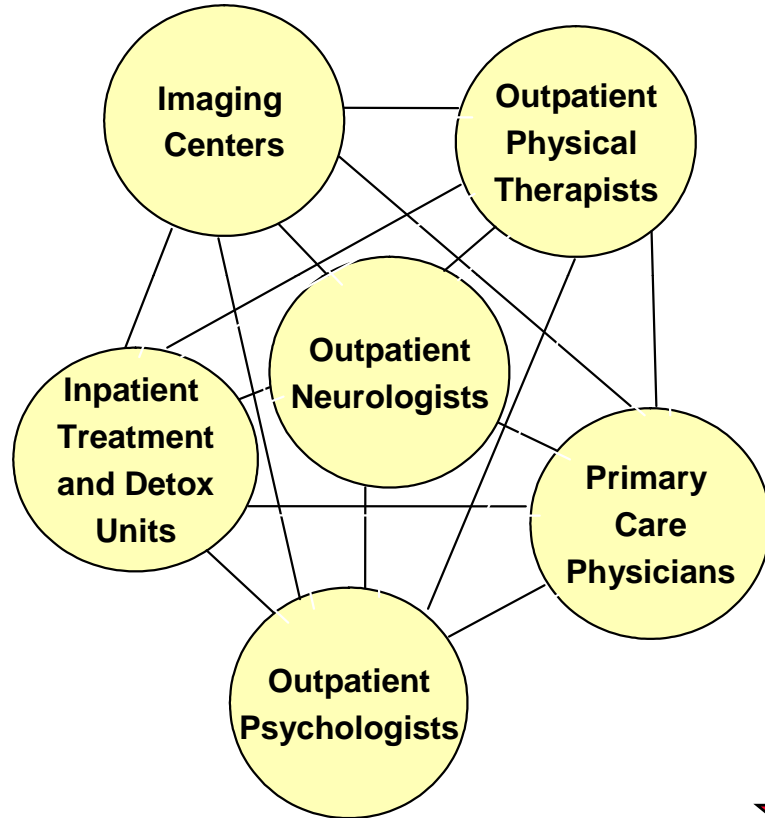
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1. The goal should be **value for patients**, not just lowering costs
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4. Competition should center on **medical conditions** over the **full cycle of care**

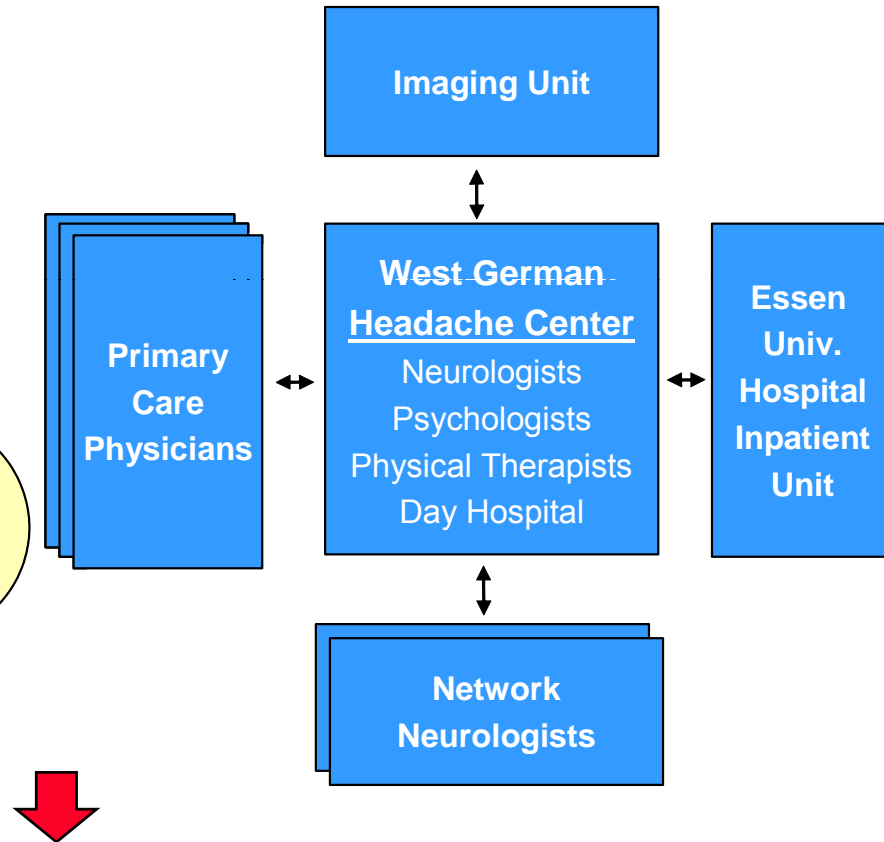
Restructuring Health Care Delivery

Migraine Care in Germany

Old Model: Organize by Specialty and Discrete Services




New Model: Organize into Integrated Practice Units (IPUs)



- **Organize around the patient over the care cycle**, not the specialist/intervention/department

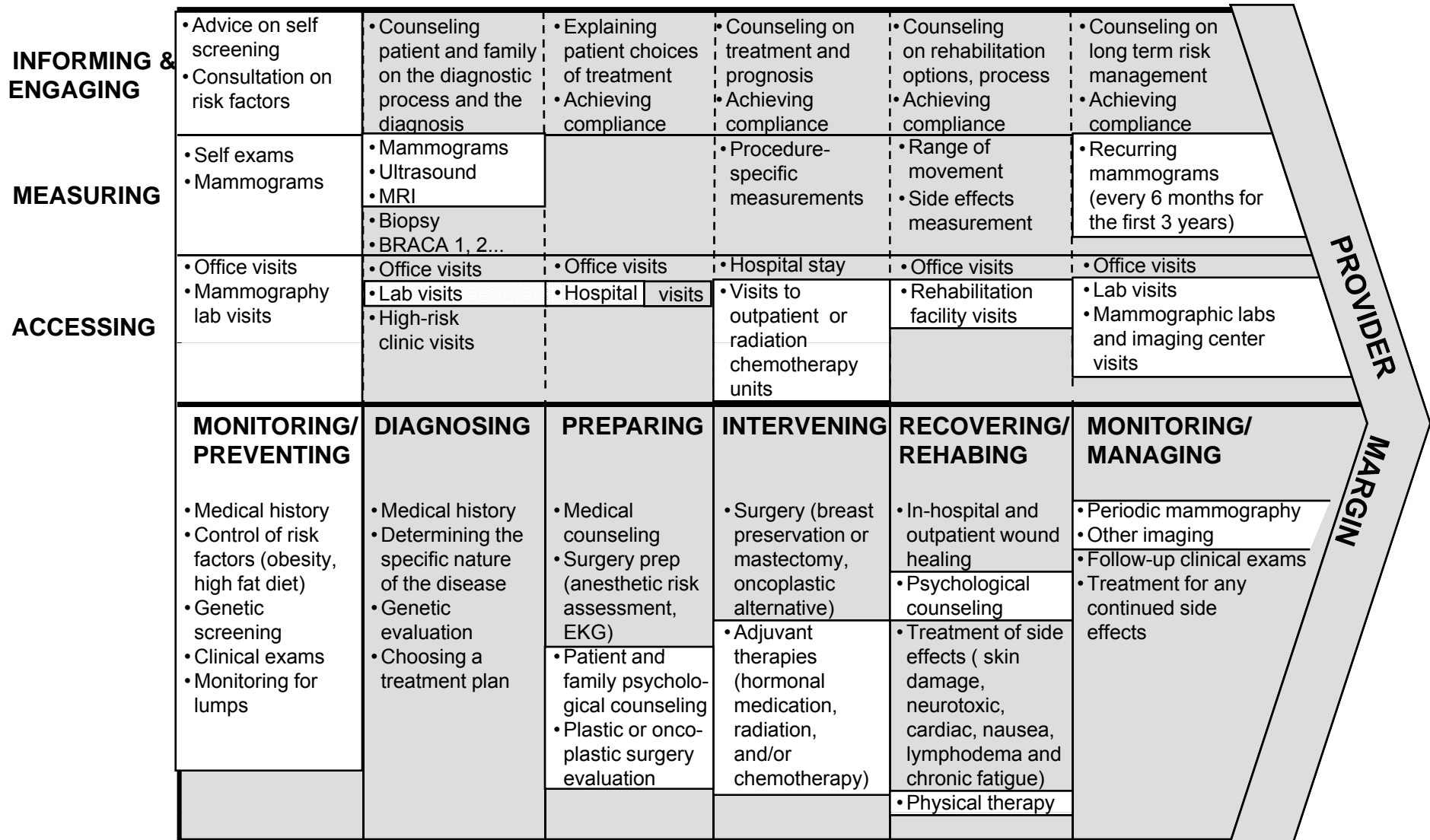
Source: Porter, Michael E., Clemens Guth, and Elisa Dannemiller, *The West German Headache Center: Integrated Migraine Care*, Harvard Business School Case 9-707-559, September 13, 2007

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

The Cycle of Care

Care Delivery Value Chain for Breast Cancer



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

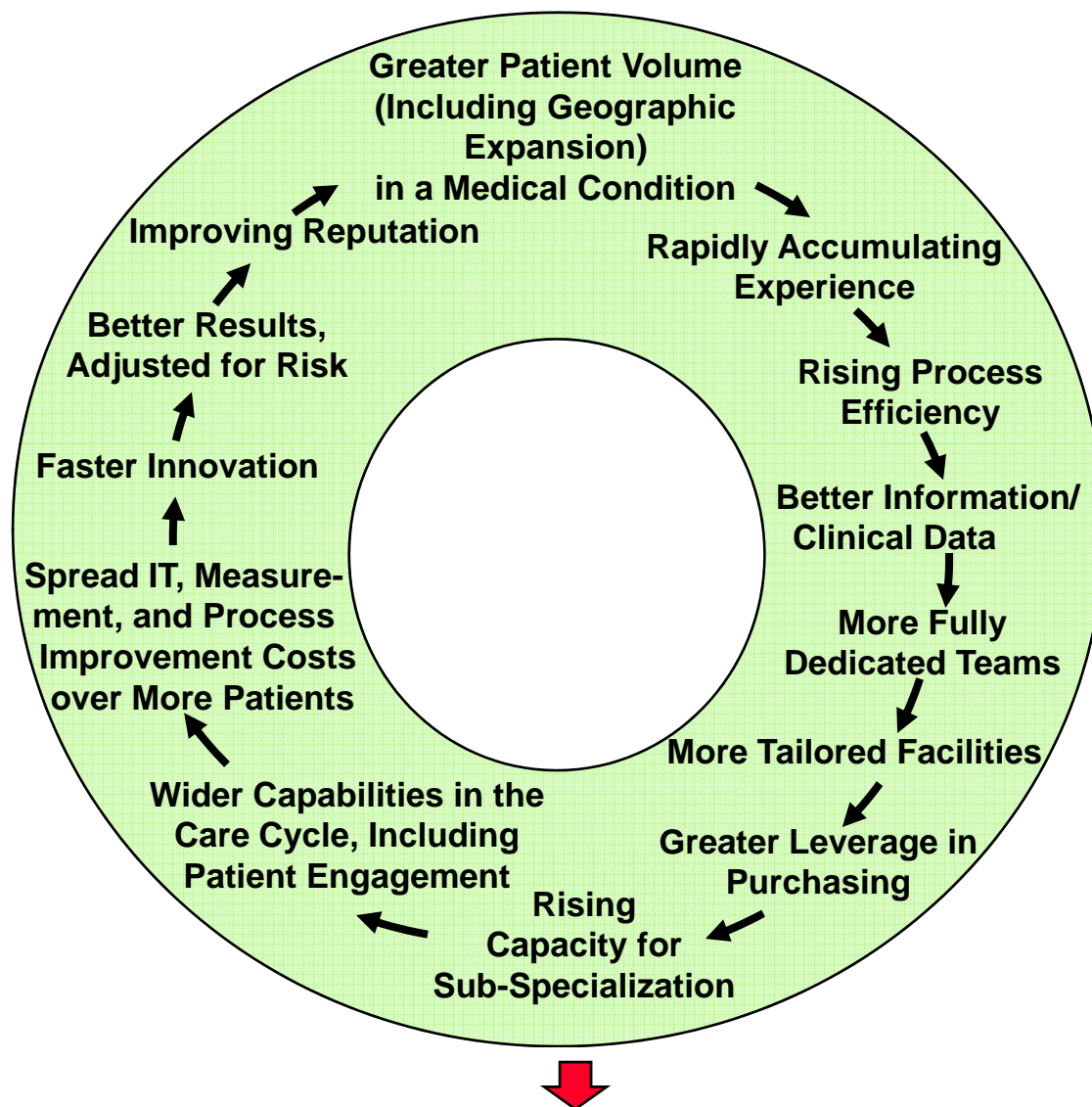
- Breast Cancer Specialist
- Other Provider Entities

Principles of Value-Based Competition

1. The goal should be **value for patients**, not just lowering costs
2. The best way to contain costs is to drive improvement in **quality**
3. There must be **competition for patients** based on **results**
4. Competition should center on **medical conditions** over the **full cycle of care**
5. Value is driven by provider **experience**, **scale**, and **learning** at the medical condition level

Experience, Scale, and Value in Health Care Delivery

The Virtuous Circle in a Medical Condition



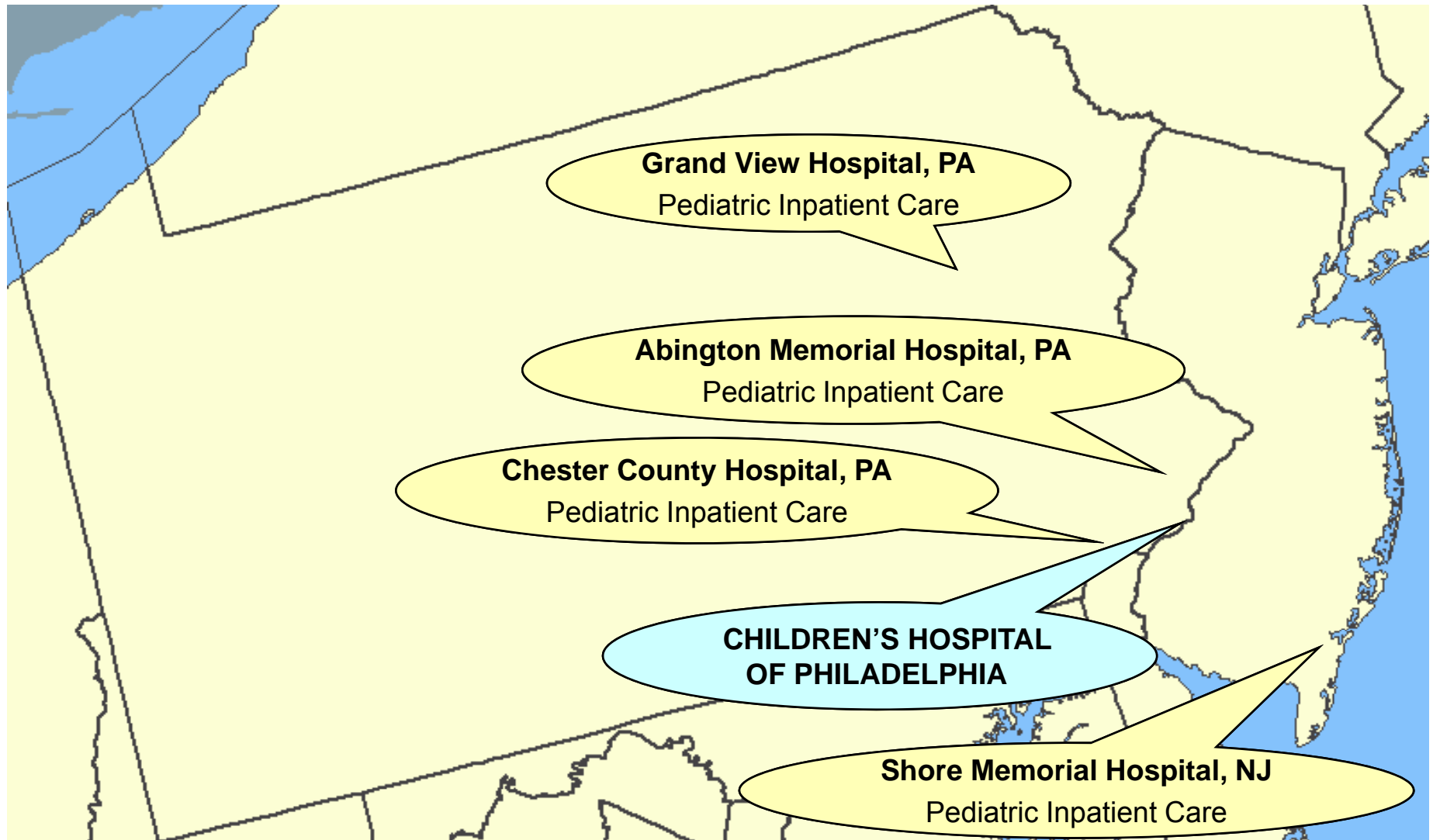
- The virtuous cycle **extends across geography** within medically integrated organizations

Principles of Value-Based Competition

1. The goal should be **value for patients**, not just lowering costs
2. The best way to contain costs is to drive improvement in **quality**
3. There must be **unrestricted competition** based on **results**
4. Competition should center on **medical conditions** over the **full cycle of care**
5. Value is driven by provider **experience**, **scale**, and **learning** at the medical condition level
6. Competition should be **regional** and **national**, not just local
 - Patients select excellent providers in the region for their medical condition, rather than the closest provider for all services
 - Excellent providers manage delivery **across multiple geographies**
 - Utilize partnerships to integrate care across separate institutions

Managing Care Across Geography

The Children's Hospital of Philadelphia (CHOP) Affiliations



Principles of Value-Based Competition

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3. There must be **competition for patients** based on **results**
4. Competition should center on **medical conditions** over the **full cycle of care**
5. Value is driven by provider **experience**, **scale**, and **learning** at the medical condition level
6. Competition should be **regional** and **national**, not just local
7. **Results** must be universally measured and reported

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

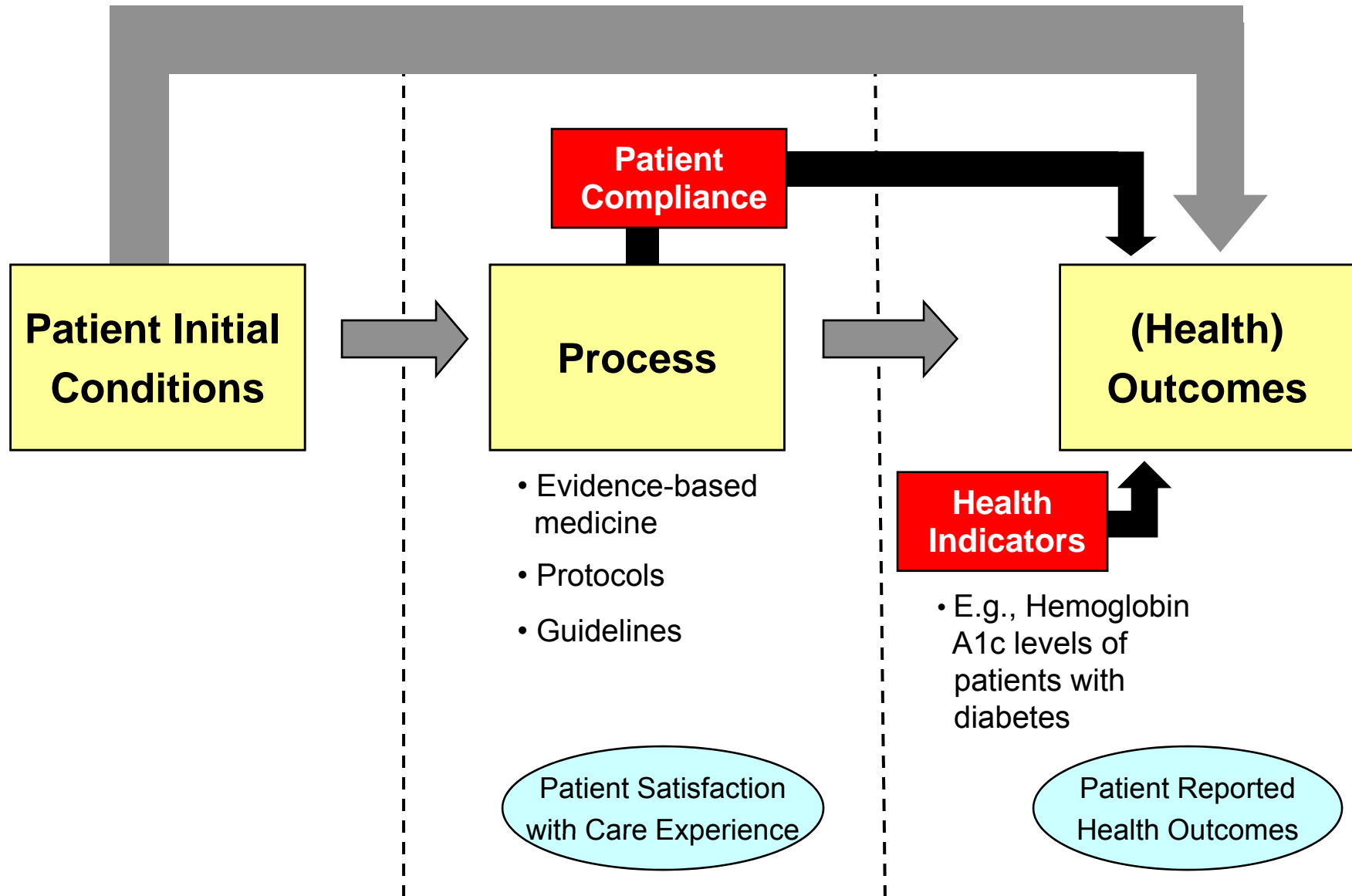
Measuring Value: Unit of Analysis

- The **appropriate unit for measuring value** must align with **how value is created for patients**
 - Across services
 - Across time
- Value should be measured for **medical conditions** over the **cycle of care**
 - vs. for hospitals, practices, clinics, or departments
 - vs. types of service (e.g. inpatient, outpatient, tests, rehabilitation)
 - vs. for interventions or short episodes

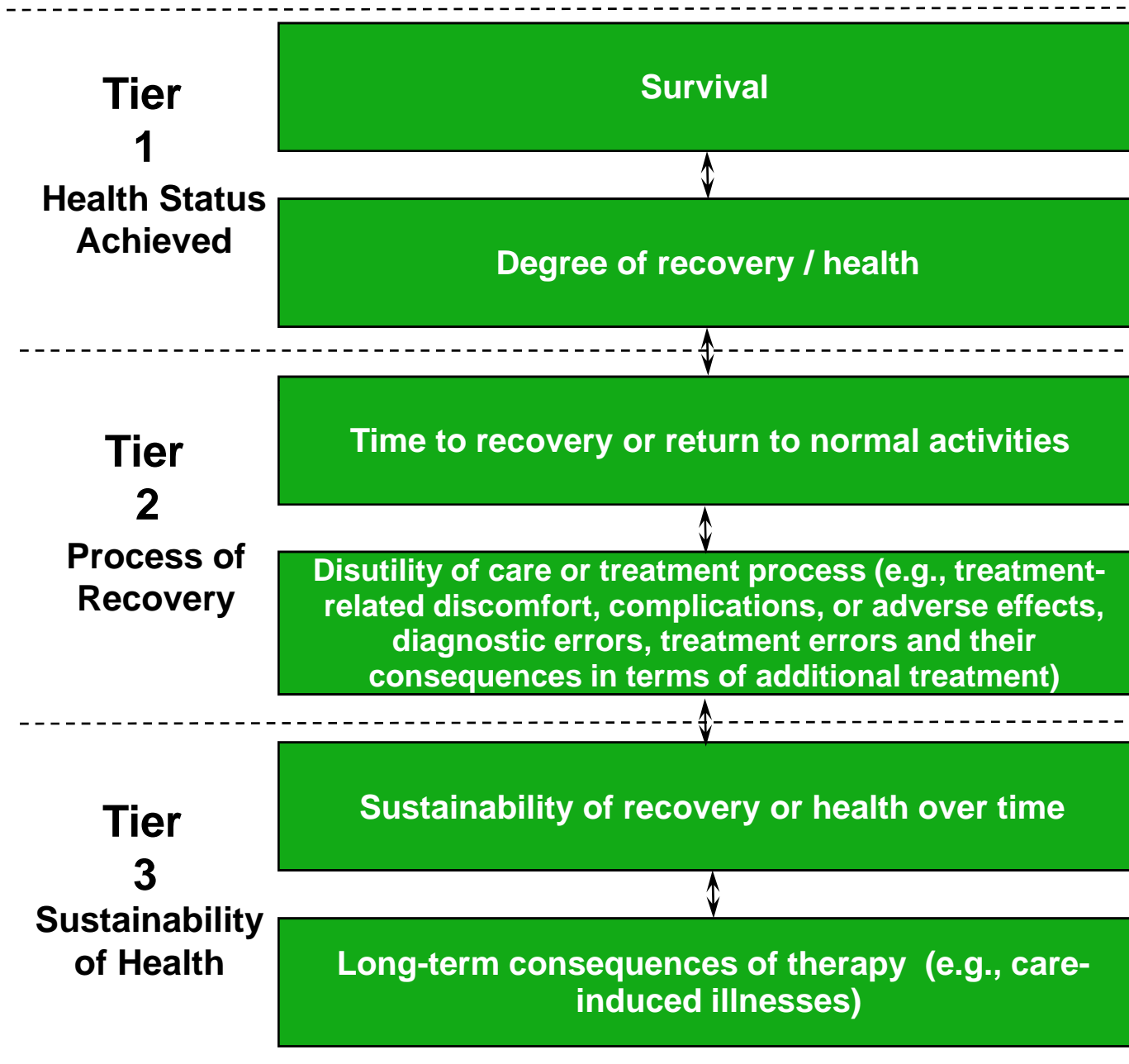


- Current efforts suffer from measuring value at **differing/inappropriate levels**

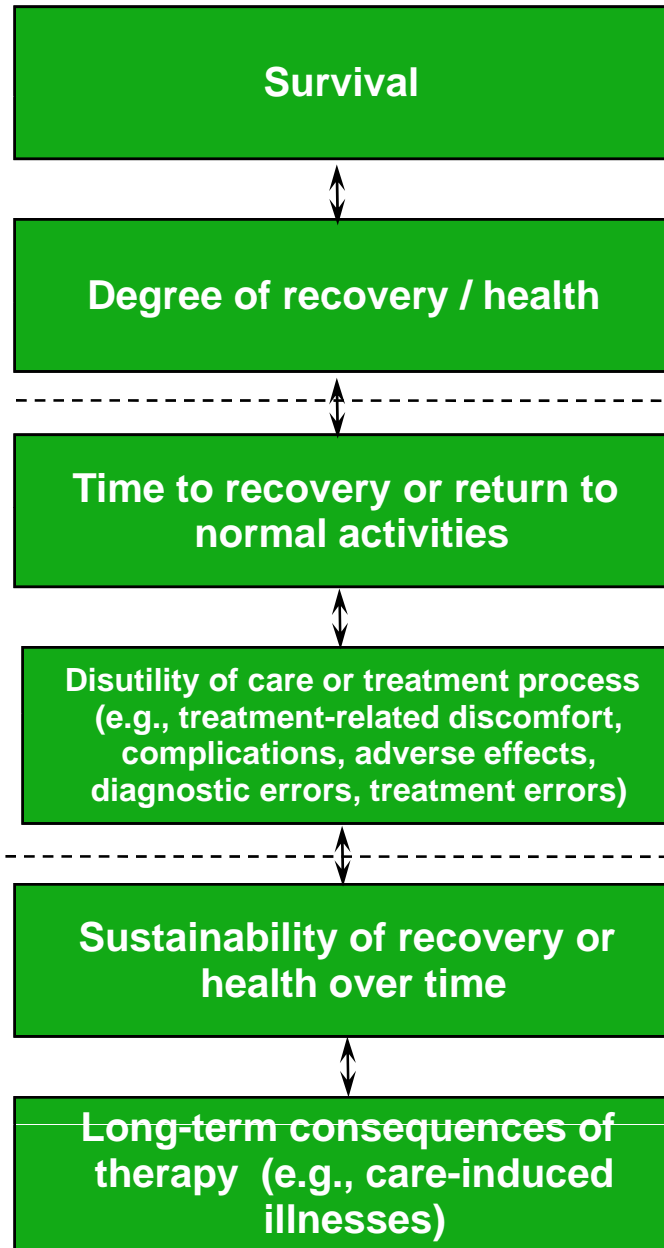
Measuring Value in Health Care



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 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**

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**

Principles of Value-Based Competition

1. The goal should be **value for patients**, not just **lowering costs**
2. The best way to contain costs is to drive improvement in **quality**
3. There must be **competition for patients** based on **results**
4. Competition should center on **medical conditions** over the **full cycle of care**
5. Value is driven by provider **experience**, **scale**, and **learning** at the medical condition level
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 discrete treatments or services
 - Reimbursement for **prevention and screening**, not just treatment
 - Reimbursement for **overall management of chronic conditions**
 - Most DRG systems are **too narrow**

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9. **Information technology** will **enable** restructuring of care delivery and **measuring results**, but is **not a solution by itself**
 - Common data definitions
 - Interoperability standards
 - Include all types of data (e.g. notes, images)
 - Patient-centered database
 - Cover the full care cycle, including referring entities

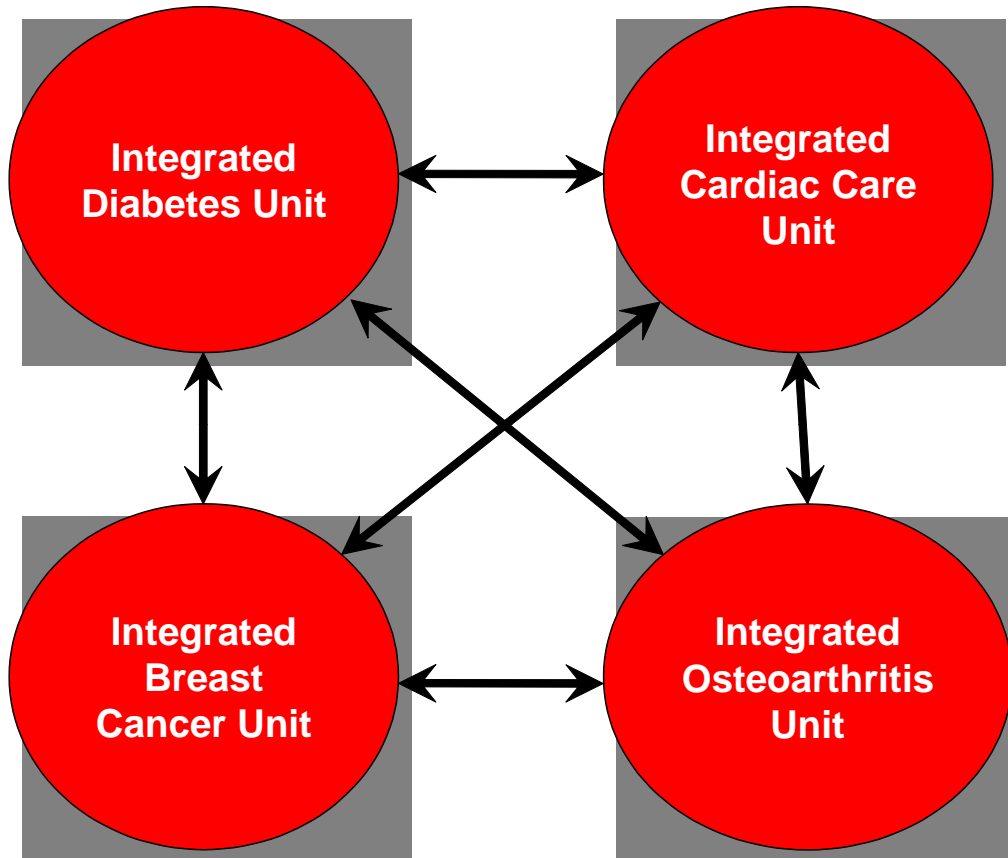
Moving to Value-Based Competition

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**
 - Scale
- **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 over the full care cycle
- 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 bundled reimbursement for care cycles
- Expand high-performance IPUs **across geography** using an integrated model
 - Instead of a federation of broad line, stand-alone facilities

Patients with Multiple Medical Conditions

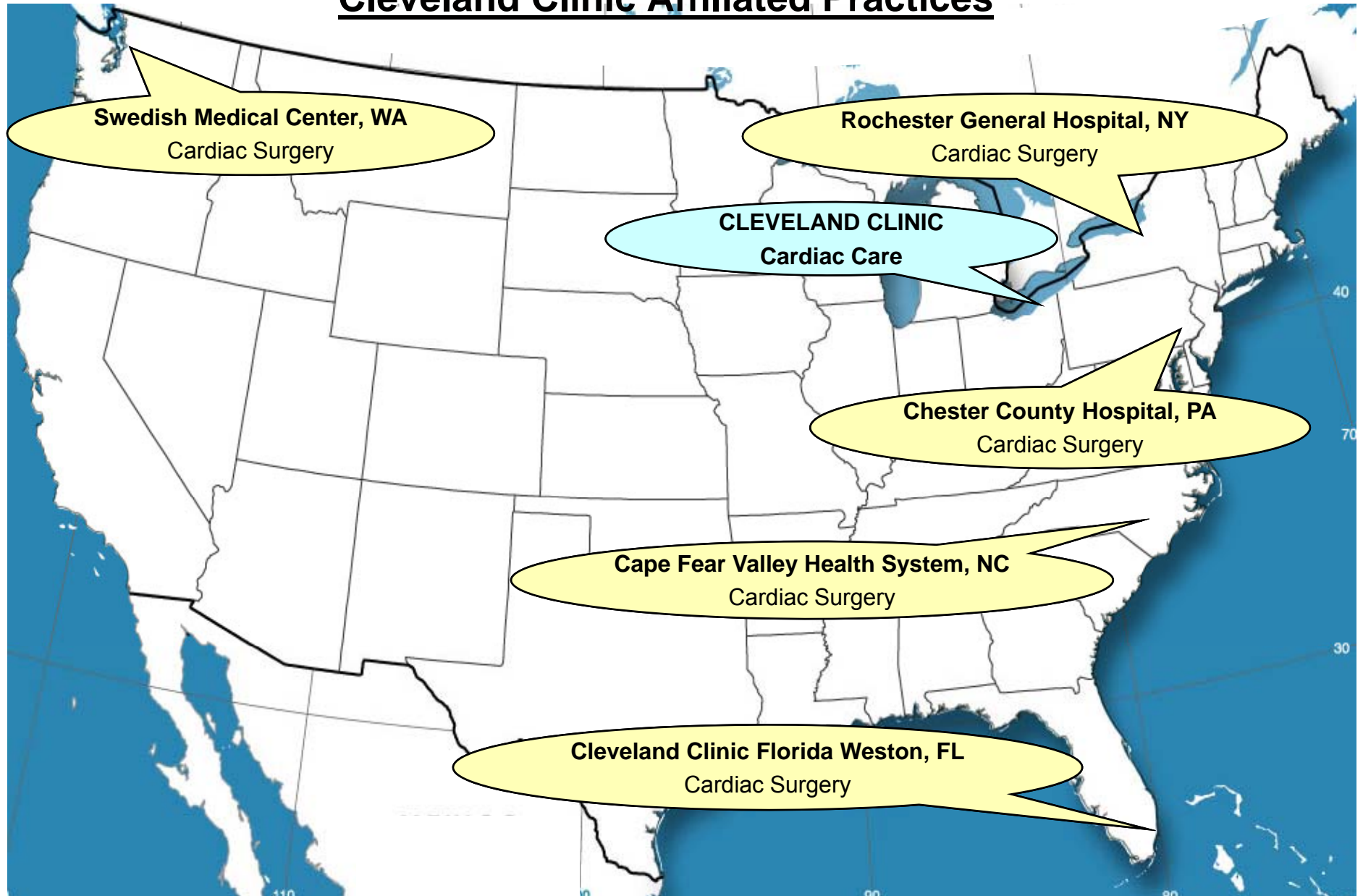
Integrating Care Across IPUs



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

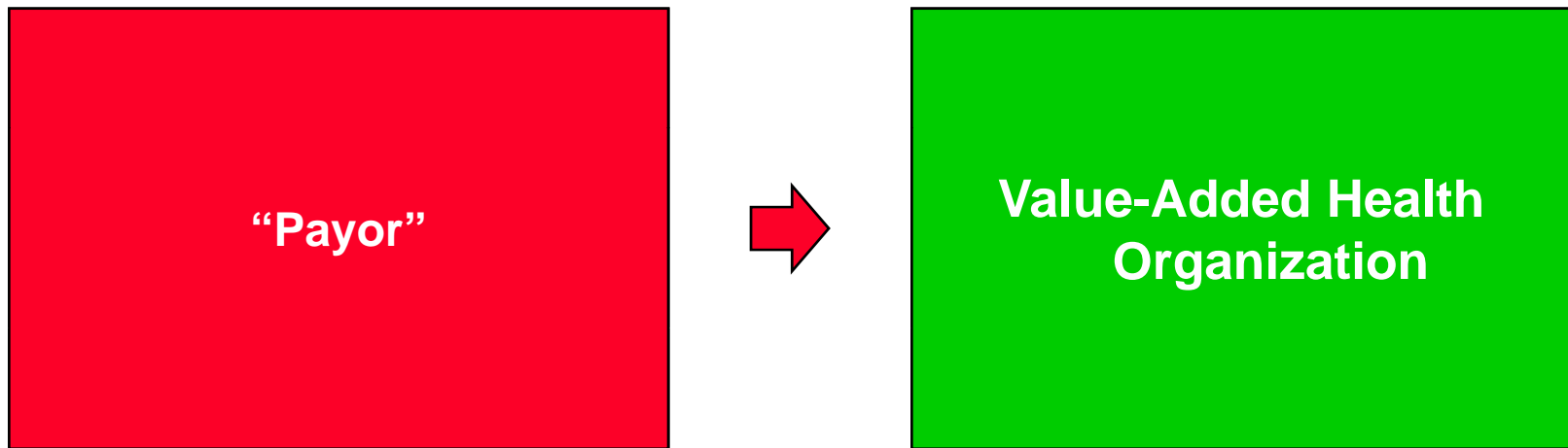
Managing Care Across Geography

Cleveland Clinic Affiliated 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
 - 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: 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
- **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

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