

Value-Based Health Care Delivery

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Forces of Change
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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>.

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

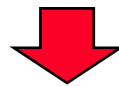
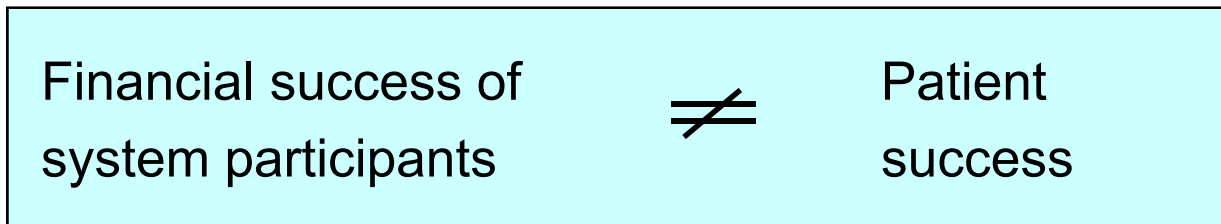
- Significant improvement in value will require **fundamental restructuring of health care delivery**, not incremental improvements

Today, 21st century medical technology is delivered with 19th century organization structures, management practices, and pricing models

- TQM, process improvements, 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

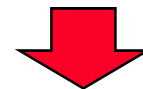
- Competition to **shift costs** or **capture a bigger share of revenue**
- Competition to **increase bargaining power**
- Competition to **capture patients** and **restrict choice**
- Competition to **restrict services** in order to maximize revenue per visit or reduce costs



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 of the service experience
 - 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 and timely 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 **value** 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

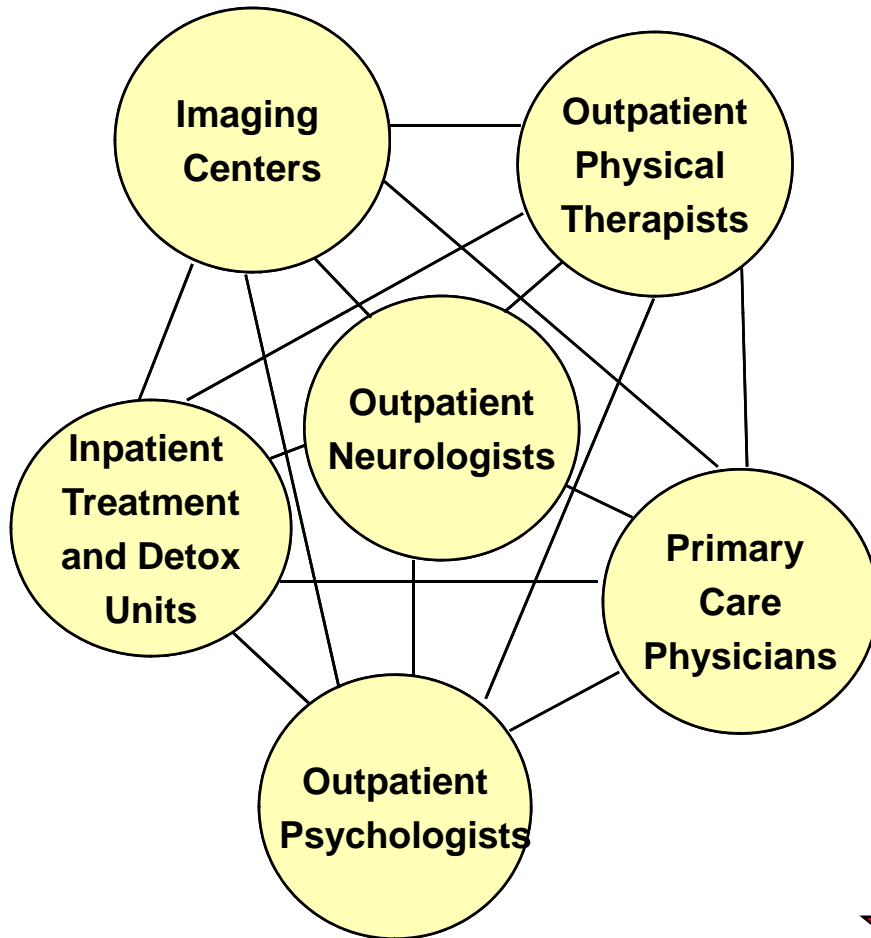
Principles of Value-Based Competition

1. The goal should be **value for patients**, not 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**

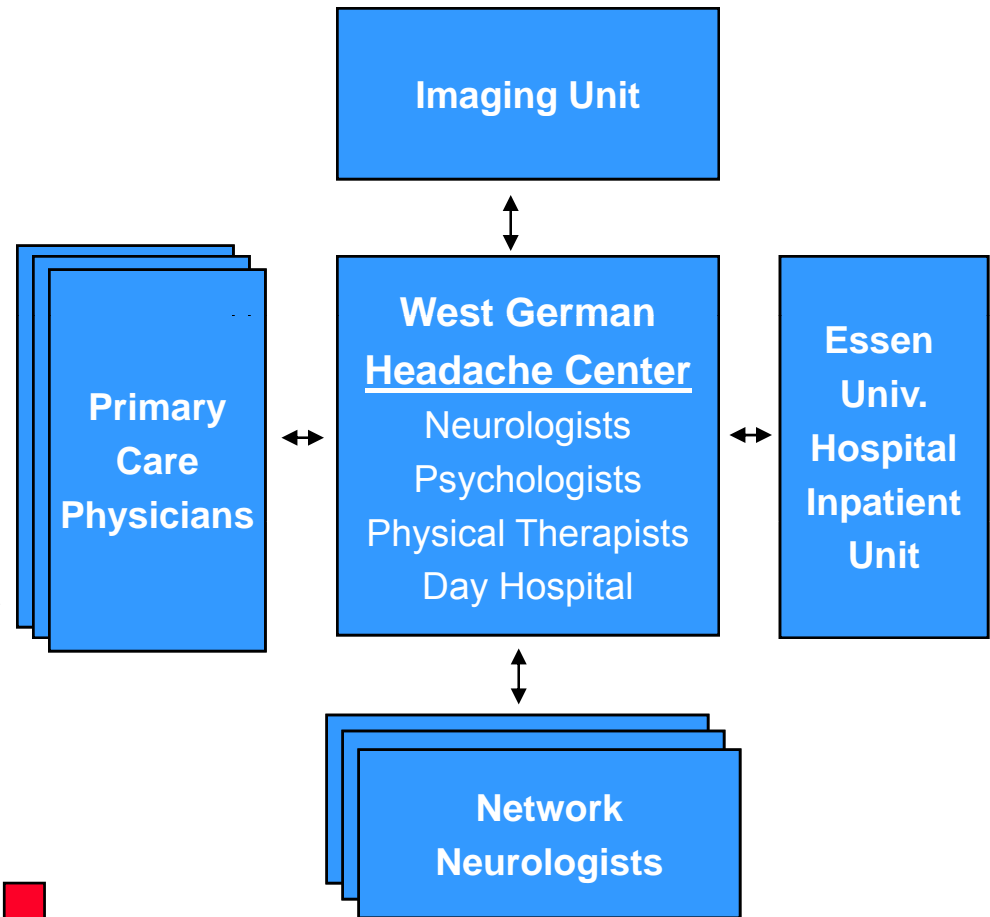
Restructuring Health Care Delivery

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 cycle of care**, not the specialist/intervention/department

What is a Medical Condition?

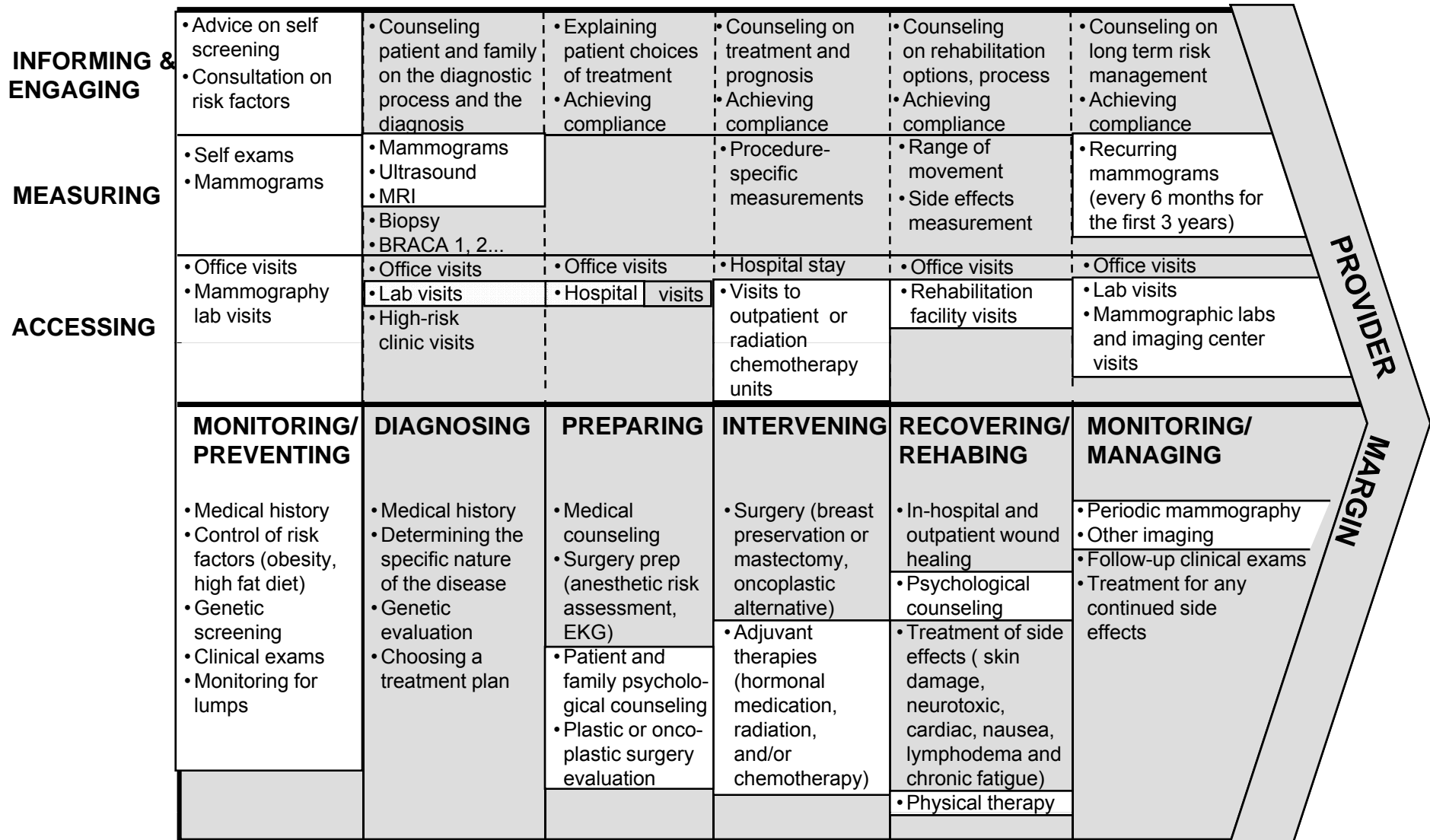
- A medical condition is **an interrelated set of patient medical circumstances best addressed in an integrated way**
 - Defined from the **patient's** perspective
 - Involves **multiple** specialties and services
- **Includes** the most common co-occurring conditions
- Examples
 - Diabetes (including 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
- Many providers will operate **multiple IPU**s

The Cycle of Care

Care Delivery Value Chain for Breast Cancer



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

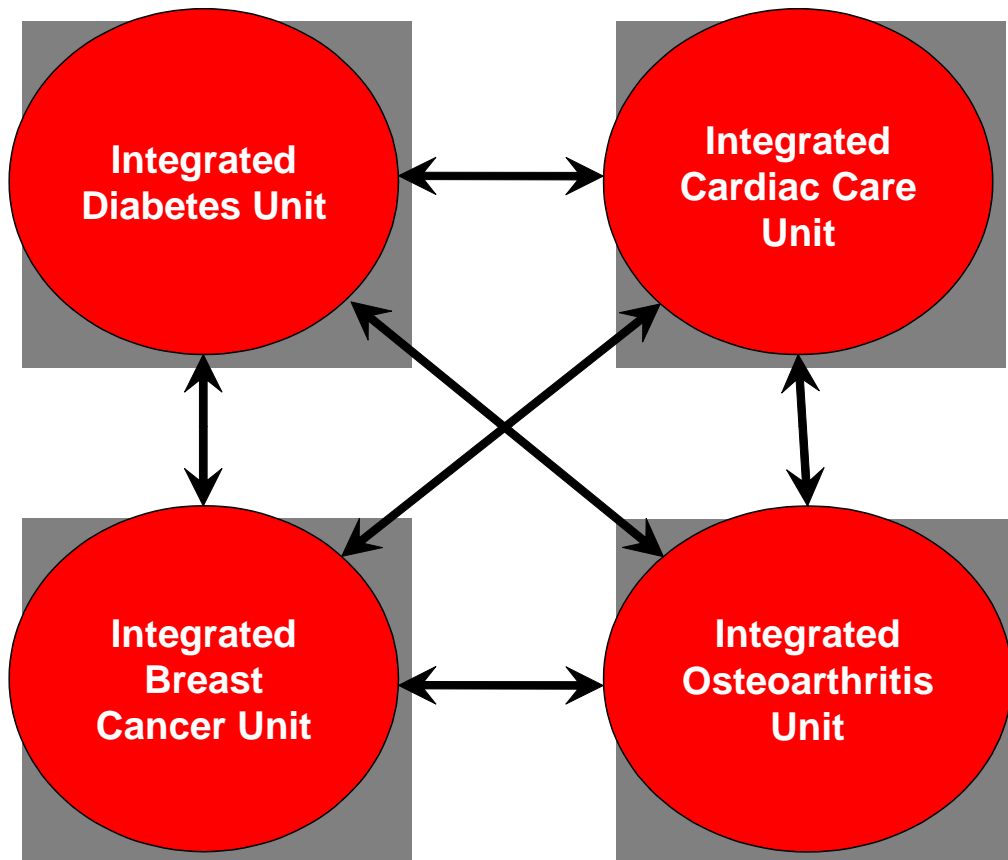
- Breast Cancer Specialist
- Other Provider Entities

What is Integrated Care?

- Integration **across specialties and services** in addressing a medical condition
- Integration **over the care cycle** for a medical condition
- For some patients, integration **across medical conditions**
 - A patient can be cared for by more than one IPU
- Integrated care is **not**:
 - A multispecialty group practice
 - Co-location
 - Care delivered by the same organization
 - Hyper-specialization
 - Freestanding focused factories
 - A Center or Institute
 - Vertically integrated health plan/provider systems

Patients with Multiple Medical Conditions

Coordinating Care Across IPUs



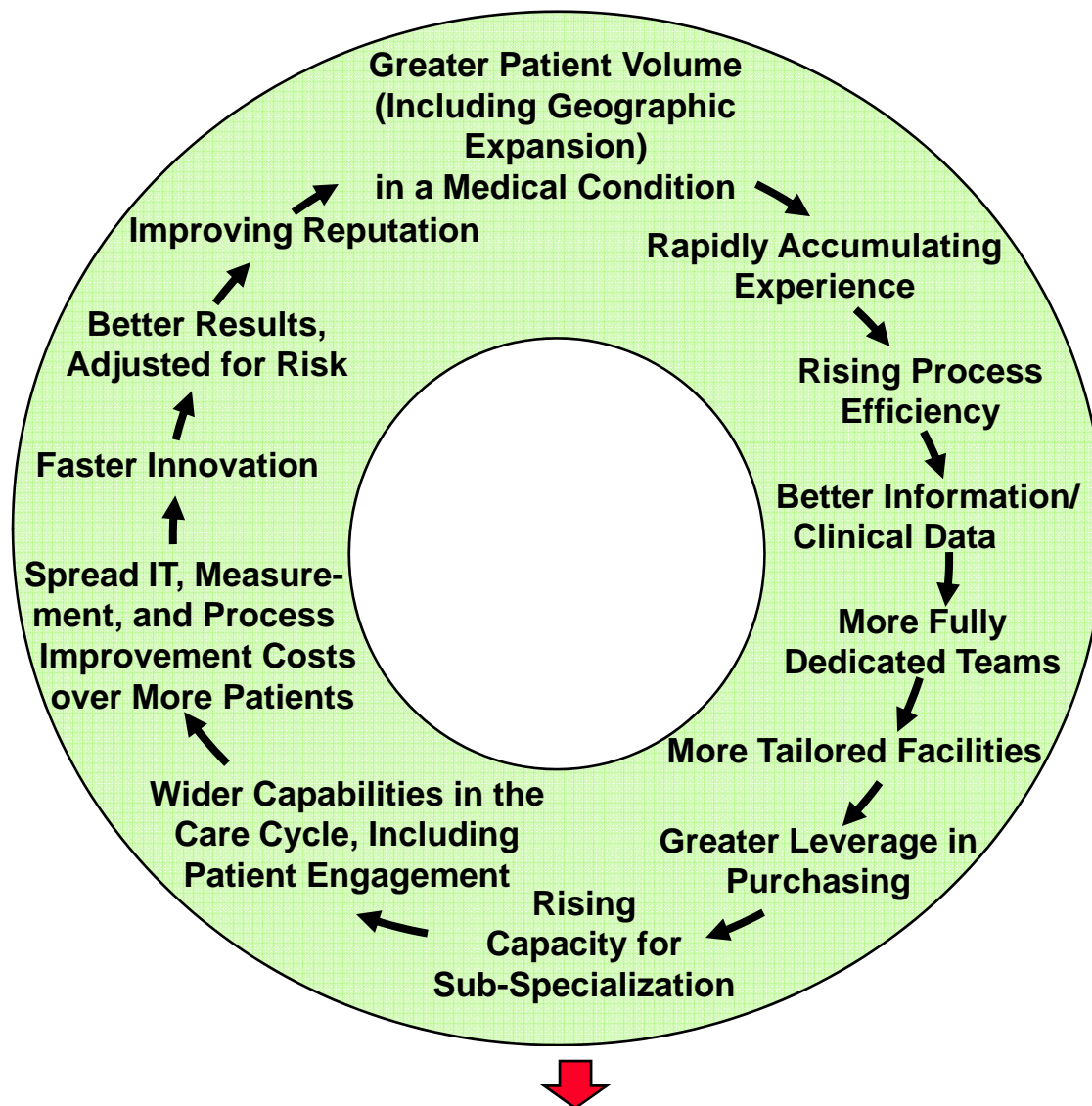
- The primary organization of care delivery should be around the integration required for **every patient**
- IPUs will greatly simplify coordination of care for patients with multiple medical conditions
- The patient with multiple conditions will be **better off** in an IPU model

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** when care for a medical condition is integrated across locations

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



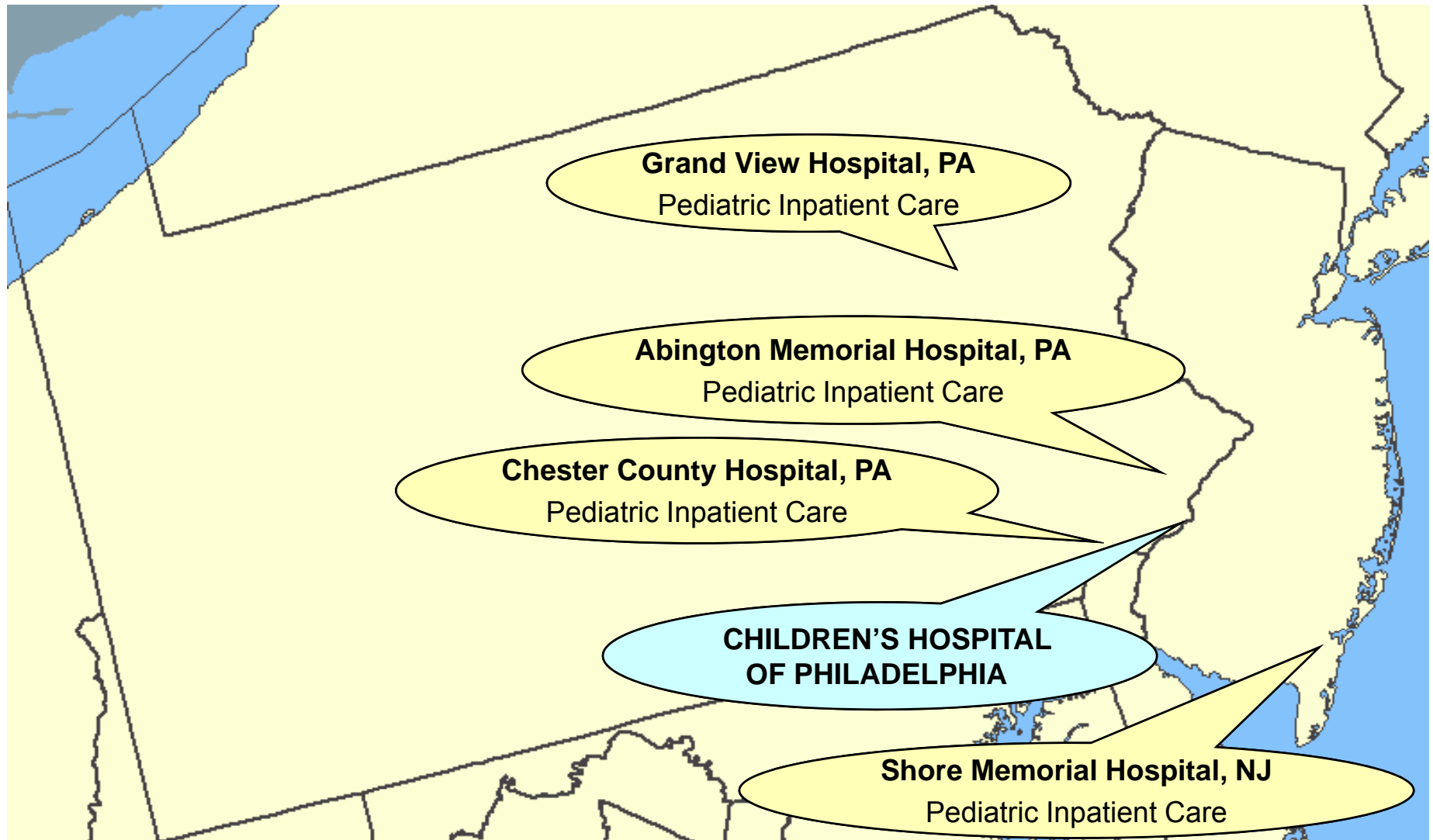
- Patient value suffers

Principles of Value-Based 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
 - Providers should be selected based on excellence in a medical condition, rather than because they are the most convenient
 - Excellent providers can manage care delivery **across multiple geographies**

Managing Care Across Geography

The Children's Hospital of Philadelphia (CHOP) Affiliations

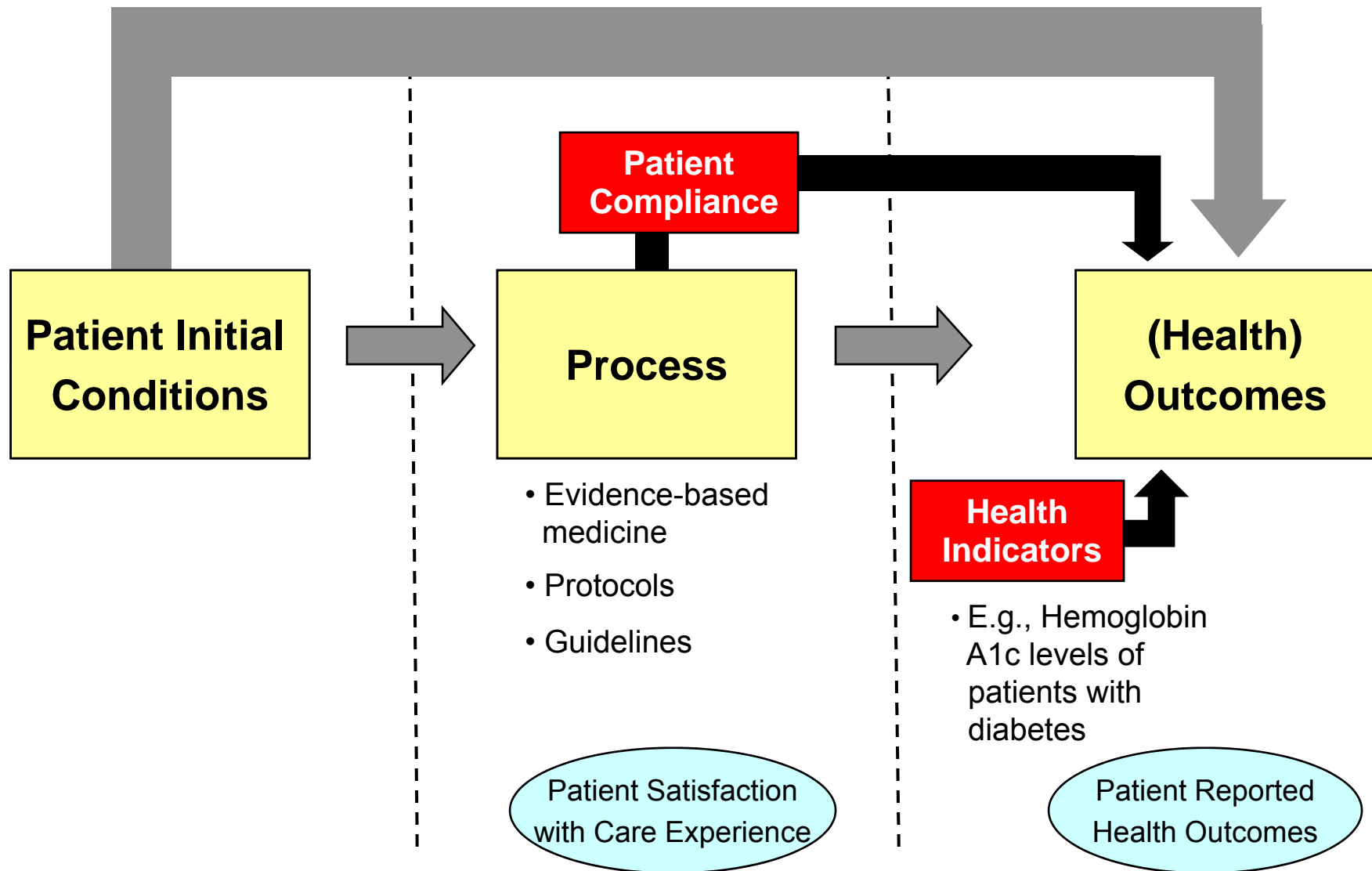


Principles of Value-Based Competition

1. The goal should be **value for patients**, not just lowering costs
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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 in Health Care

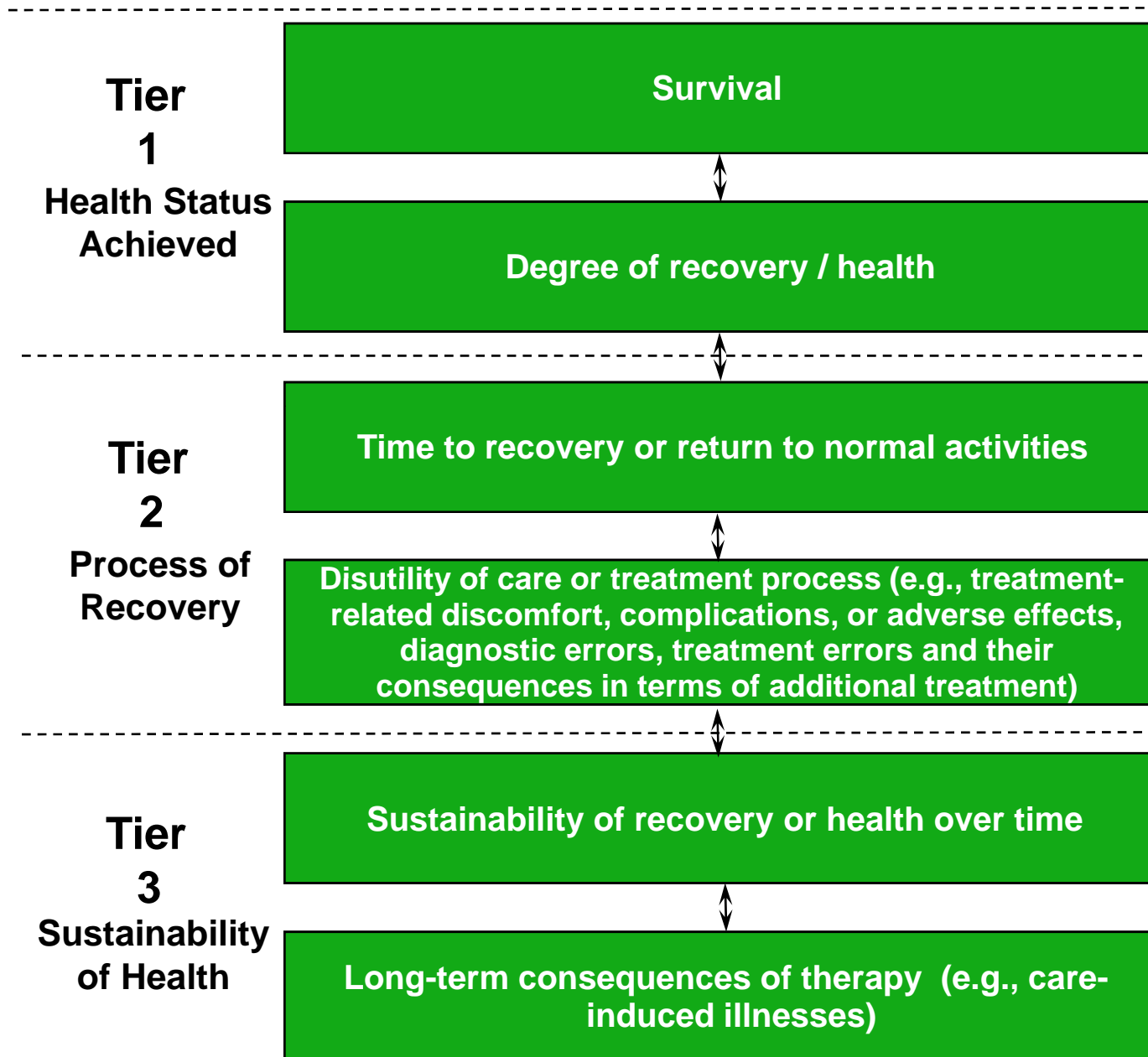


- The **primary goal is value**, not access, equity

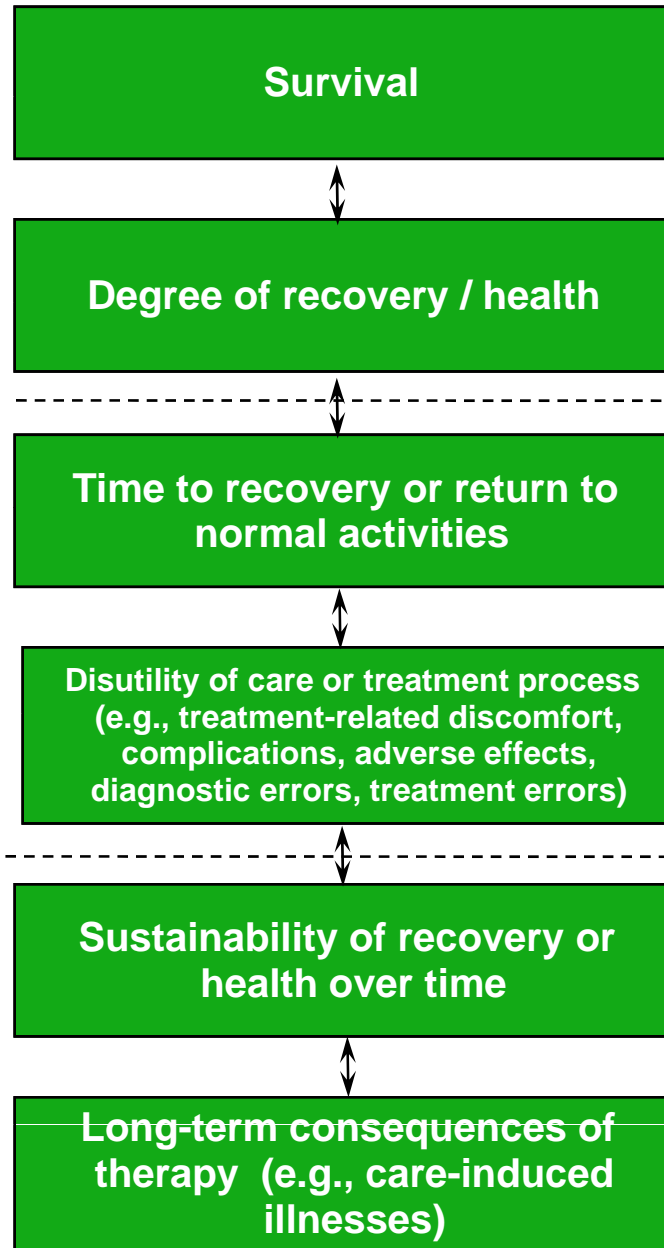
Measuring Value: The Unit of Analysis

- 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**
 - not for hospitals, practices, clinics, or departments
 - not for types of service (e.g. inpatient, outpatient, tests, rehabilitation)
 - not for interventions or short episodes
- 
- Current efforts suffer from measuring value at **differing/inappropriate levels**

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 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**
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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
 - 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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9. **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

Moving to Value-Based Competition

Implications for Providers

- Organize around **integrated practice units** (IPUs) for each medical condition
 - With mechanisms for cross-IPU coordination
- 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 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

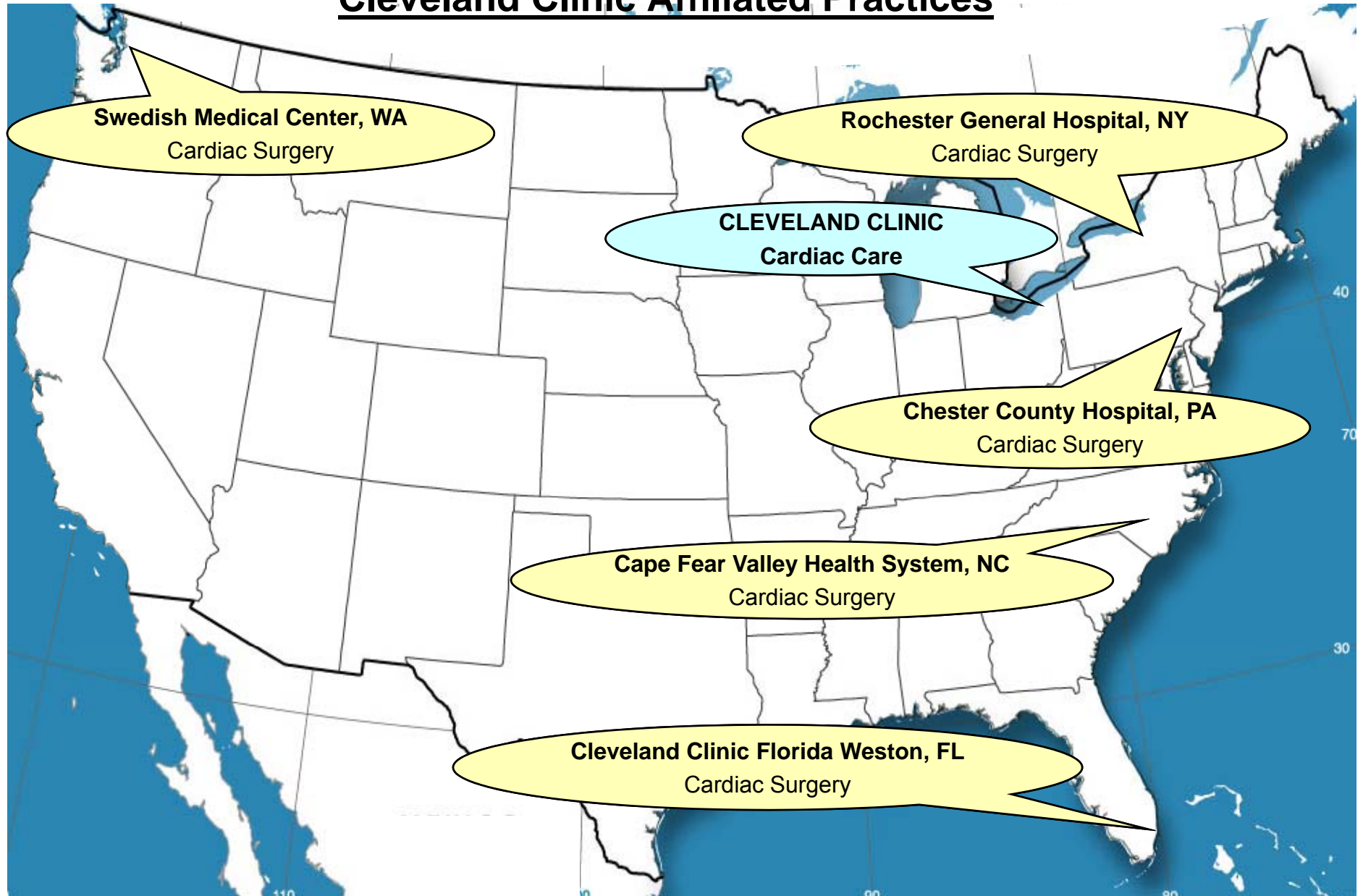
MD Anderson Cancer Center

Integrated Head and Neck Cancer Care

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

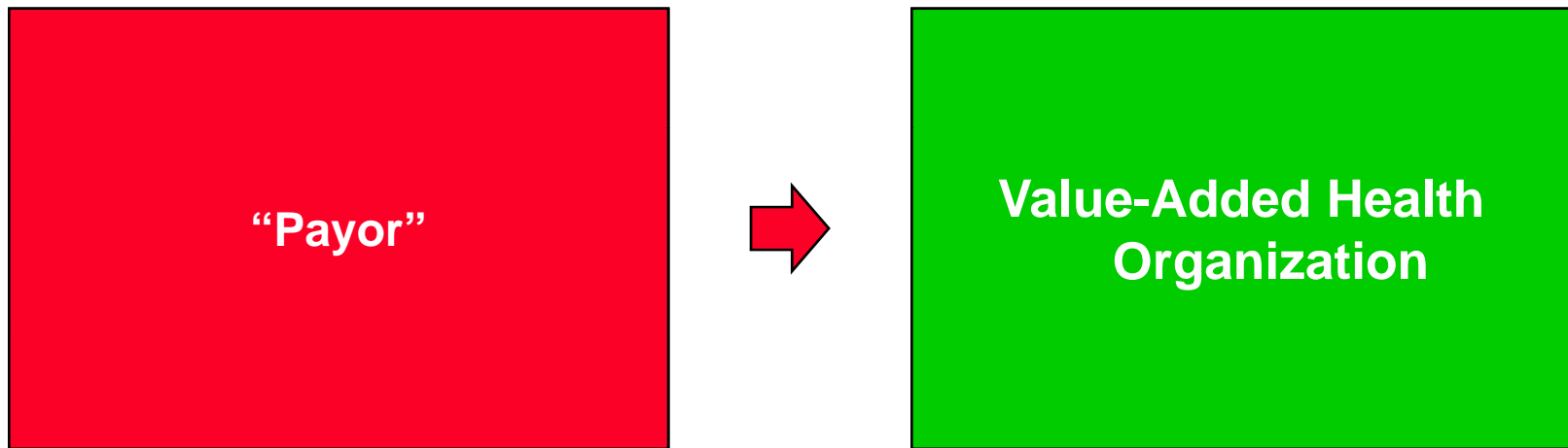
Managing Care Across Geography

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