Value-Based Health Care Delivery

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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. 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 Delivery

- Universal coverage and access to care are **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 patient value**
  - Ownership of entities is secondary (e.g. non-profit vs. for profit vs. government)
- How to construct 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 often delivered with 19th century organization structures, management practices, and pricing models

  - Process improvements, lean production concepts, safety initiatives, care pathways, disease management and other **overlays** to the current structure are beneficial but not sufficient

  - Consumers **cannot fix the dysfunctional structure** of the current system

Harnessing Competition on Value

- **Competition for patients/subscribers** 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**

Financial success of system participants	≠	Patient success

- Creating positive-sum **competition on value** is a central challenge in health care reform in every country

Principles of Value-Based Health Care Delivery

1. Set the goal as **value for patients**, not access, equity, volume, convenience, or cost containment

$$\text{Value} = \frac{\text{Health outcomes}}{\text{Costs of delivering the outcomes}}$$

- Outcomes are the **full set of *patient* health outcomes** over the care cycle
- Costs are the **total costs of the care for the patient's condition**, not just the costs borne by a single provider

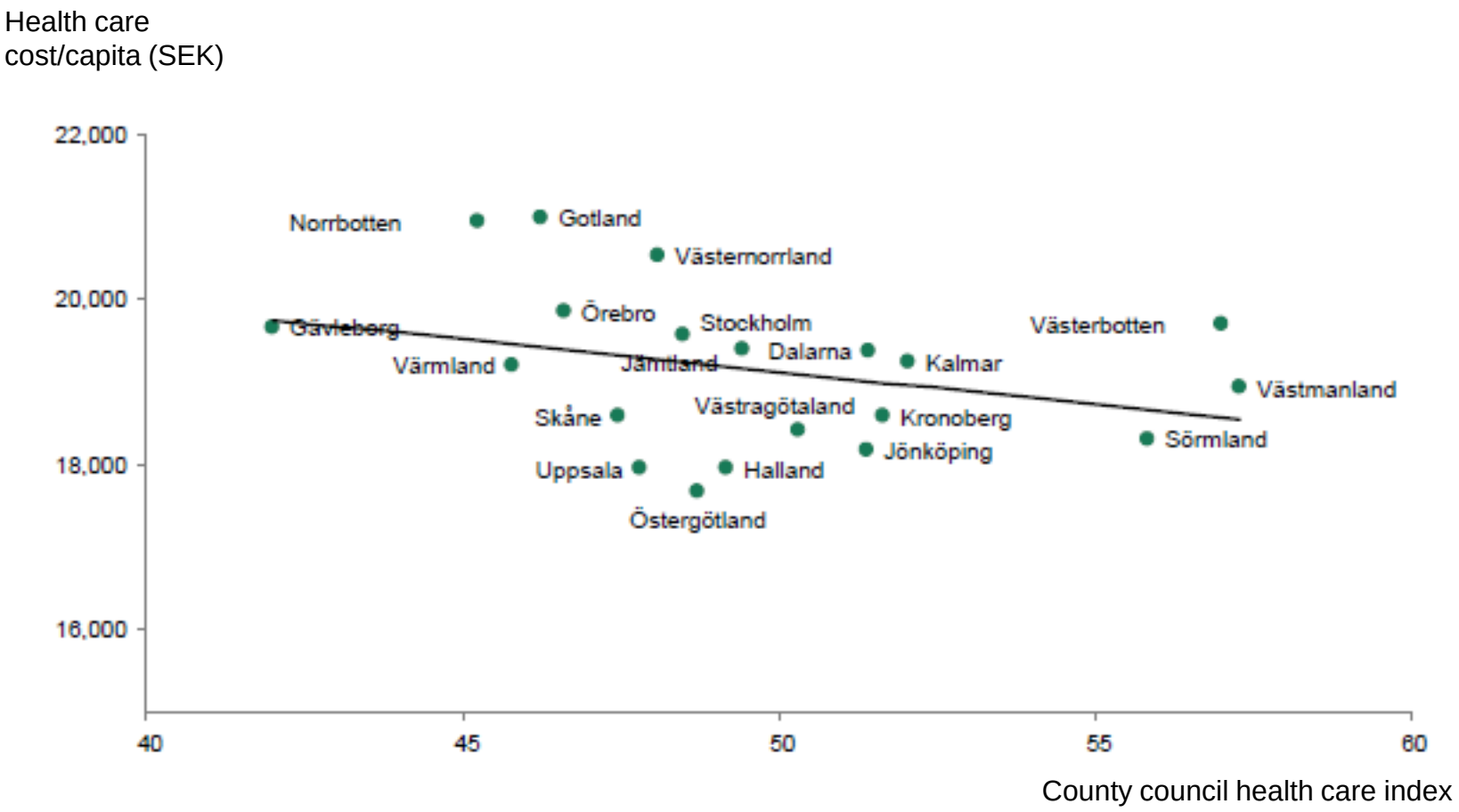
Principles of Value-Based Health Care Delivery

1. Set the goal as **value for patients**, not containing costs
2. **Quality improvement** is the key driver of cost containment and value improvement, where quality is **health outcomes**

- Prevention
- Early detection
- Right diagnosis
- Early and timely treatment
- Treatment earlier in the causal chain of disease
- Right treatment to the right patient
- Rapid cycle time of diagnosis and care
- Less invasive treatment methods
- Fewer complications
- Fewer mistakes and repeats in treatment
- Faster recovery
- More complete recovery
- Less disability
- Fewer relapses or acute episodes
- Slower disease progression
- Less need for long term care
- Less care induced illness

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

Cost versus Quality Sweden
Health Care Spending by County 2008



Note: Cost including; primary care, specialized somatic care, specialized psychiatry care, other medical care, political health- and medical care activities, other subsidies (e.g. drugs)
Source: Öppna jämförelser, Socialstyrelsen 2008;Sjukvårdsdata i fokus 2008; BCG analysis

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3. Care delivery should be organized around the patient's **medical condition** over the **full cycle of care**

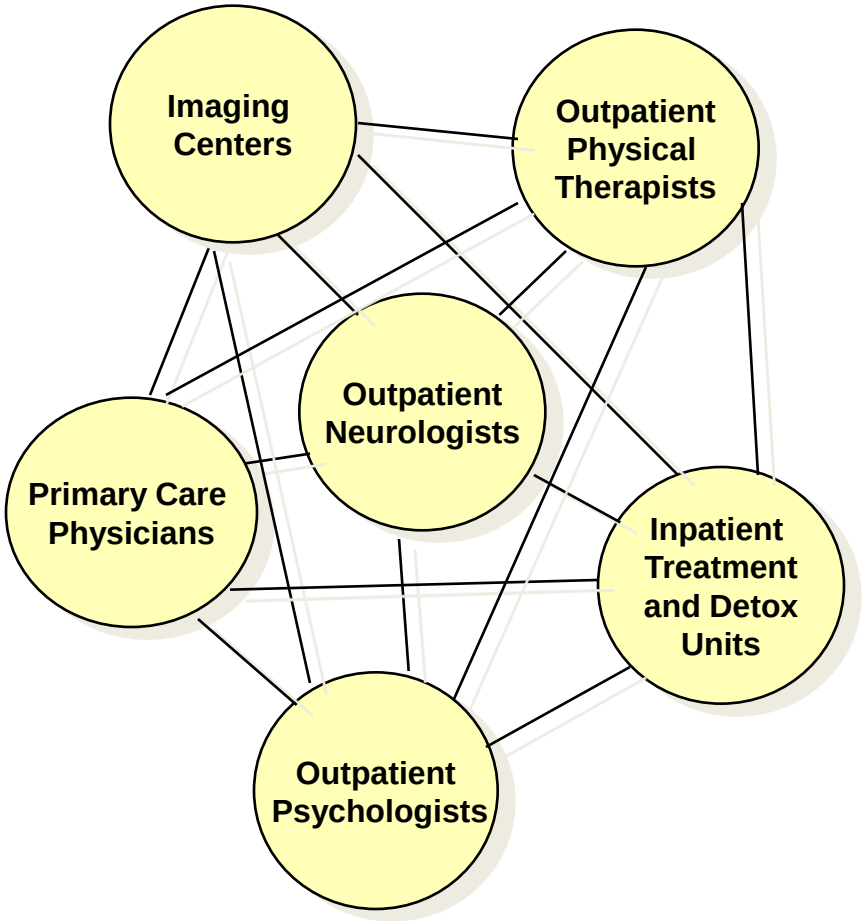
- A medical condition is **an interrelated set of patient medical circumstances best addressed in an integrated way**
  - Defined from the **patient's** perspective
  - **Including** the most common co-occurring conditions and complications
  - Involving **multiple** specialties and services

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

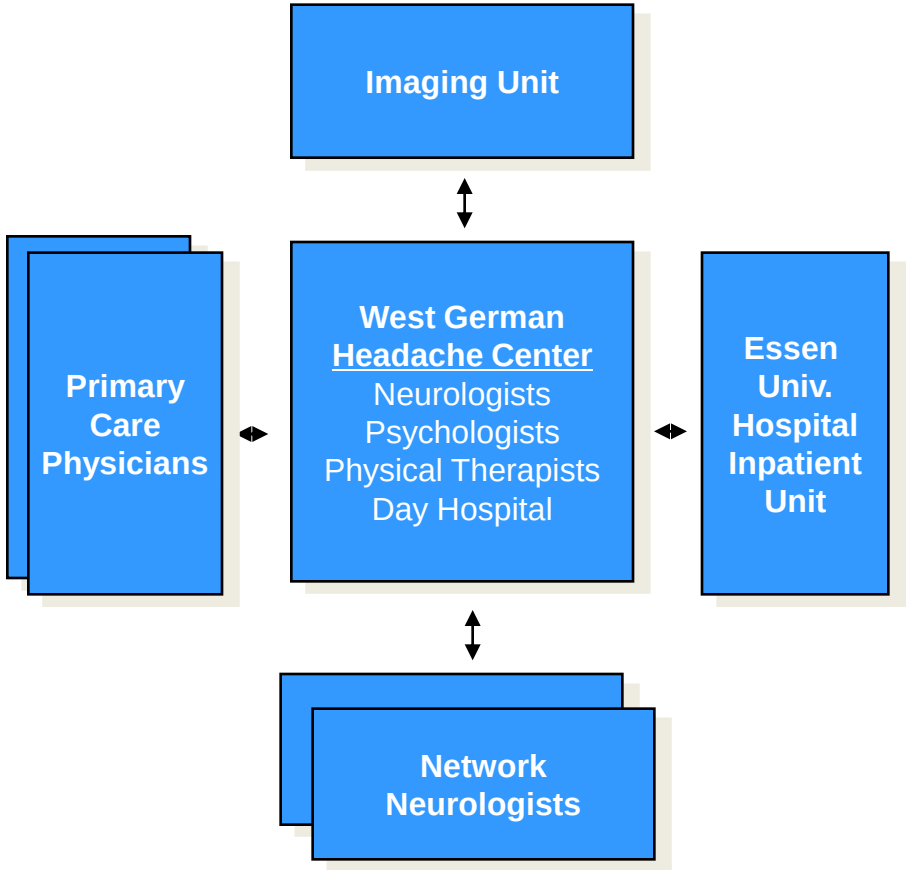
Restructuring Care Delivery

Migraine Care in Germany

Existing Model:
Organize by Specialty and Discrete Services



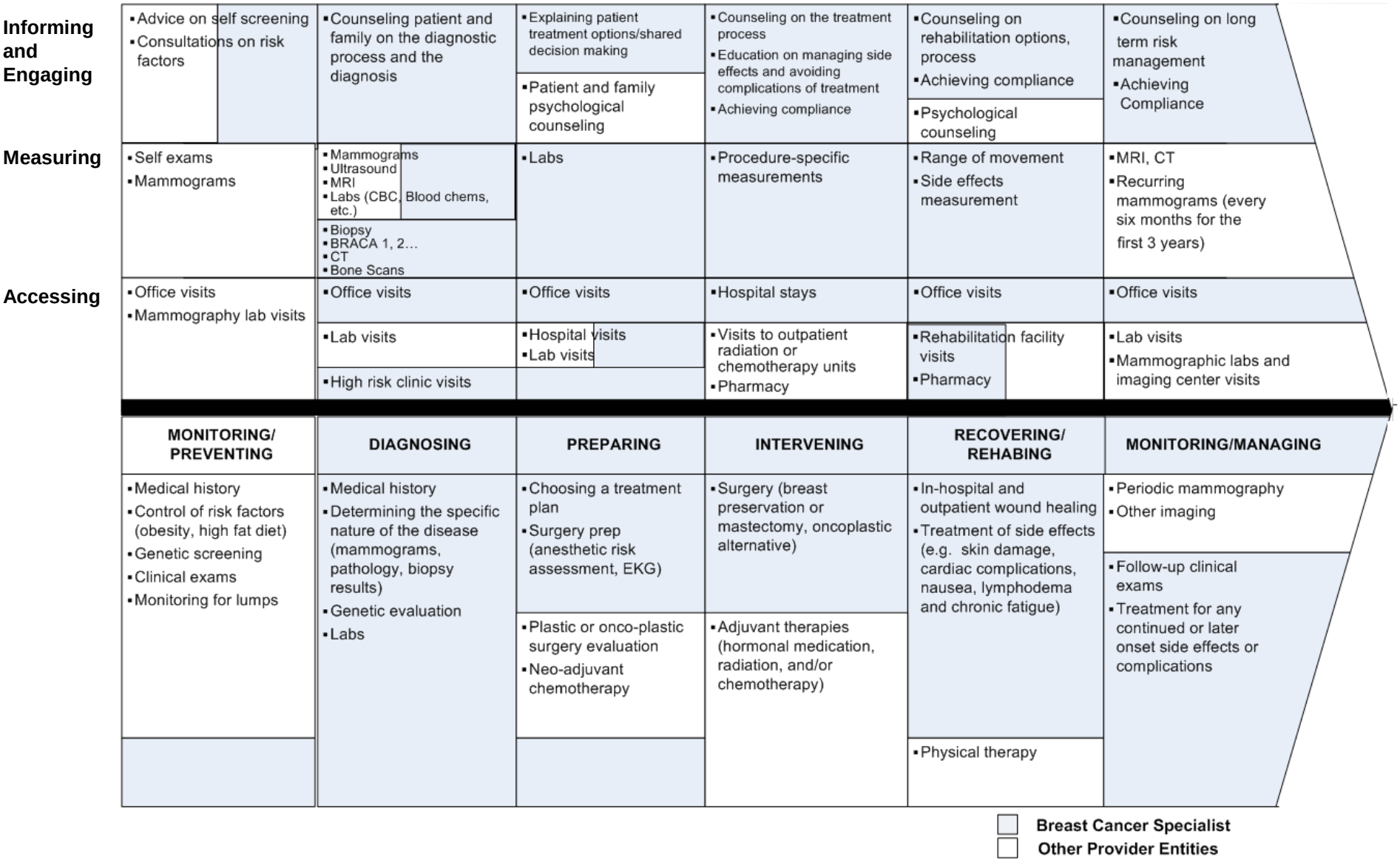
New Model:
Organize into Integrated Practice Units (IPUs)



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

Integrating Across the Cycle of Care

Breast Cancer



What is Integrated Care?

Key Elements of Integrated Care:

- Care for the full care cycle of a **medical condition**
- Encompassing **inpatient/outpatient/rehabilitation** care
- By **dedicated teams** focused around the patient
- **Co-located** in **dedicated facilities**
- In which providers are all part of the **same organizational entity**
- Utilizing a **single administrative and scheduling structure**
- With **joint accountability** for outcomes and overall costs

Integrated care is not the same as:

- Co-location
- Care delivered by the same organization
- A multispecialty group practice
- Clinical Pathways
- Freestanding focused factories
- An Institute or Center
- A Center of Excellence
- A health plan/provider system (e.g. Kaiser Permanente)
- Medical home
- Accountable Care Organization

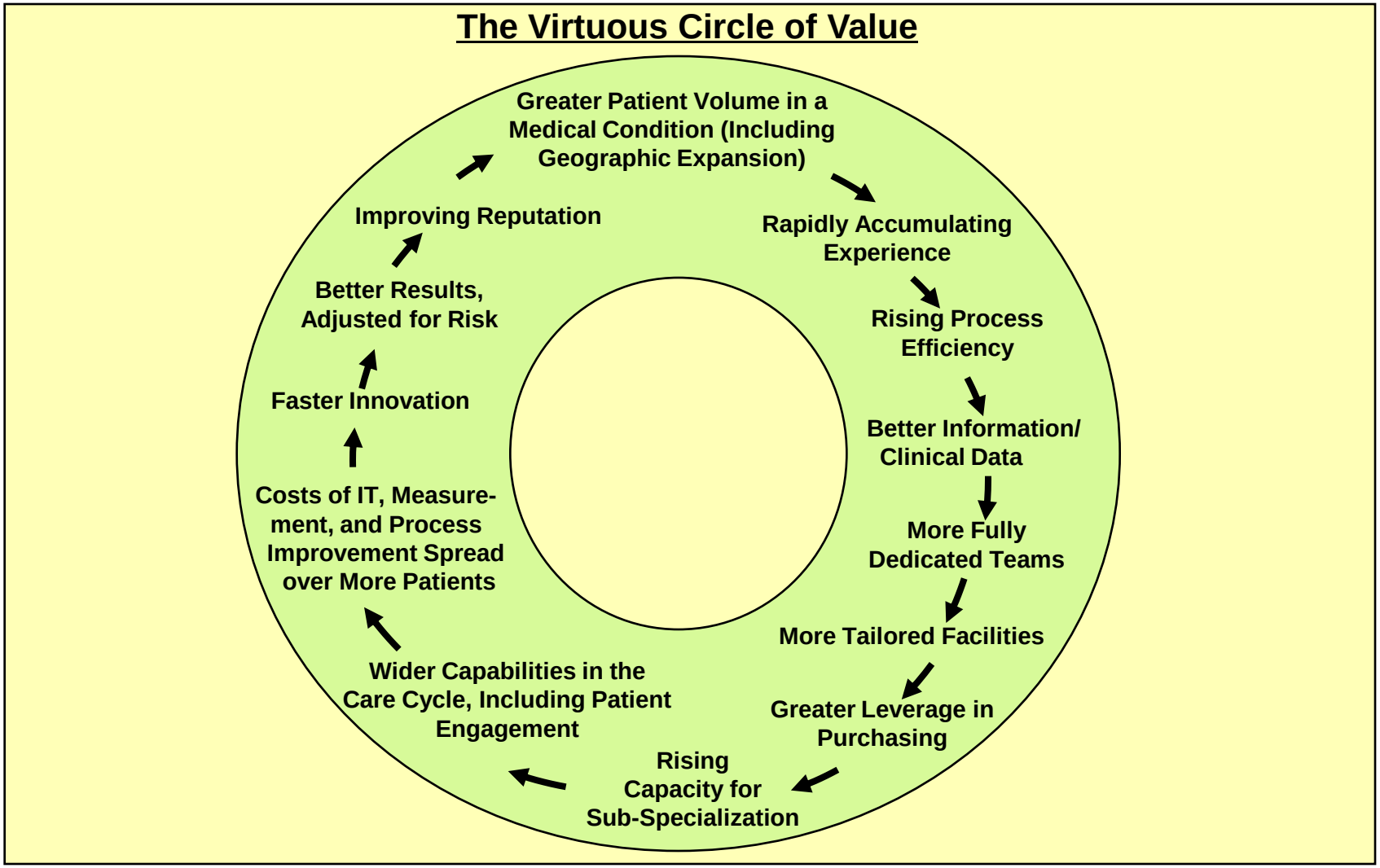
Integrated Models of Primary Care

- Today's primary care is **fragmented** and attempts to address **overly broad** needs with limited resources

- Redefine primary care as prevention, screening, diagnosis, wellness and health maintenance **service bundles**
- Design primary care services around **specific patient populations** (e.g. healthy adults, frail elderly, type II diabetics) rather than attempt to be all things to all patients
- Provide primary care service bundles using **multidisciplinary teams, support staff,** and **dedicated facilities**
- Deliver primary care at the **workplace**, **community organizations**, and **other settings** that offer regular patient contact and the ability to develop a group culture of wellness
- Create **formal partnerships** between primary care organizations and specialty IPUs

Principles of Value-Based Health Care Delivery

4. Provider **experience**, **scale**, and **learning** at the medical condition level drive value improvement



- Volume and experience will have a **much greater impact** on value in an IPU structure
- The virtuous circle **extends across geography in integrated care organizations**

Fragmentation of Hospital Services
Sweden

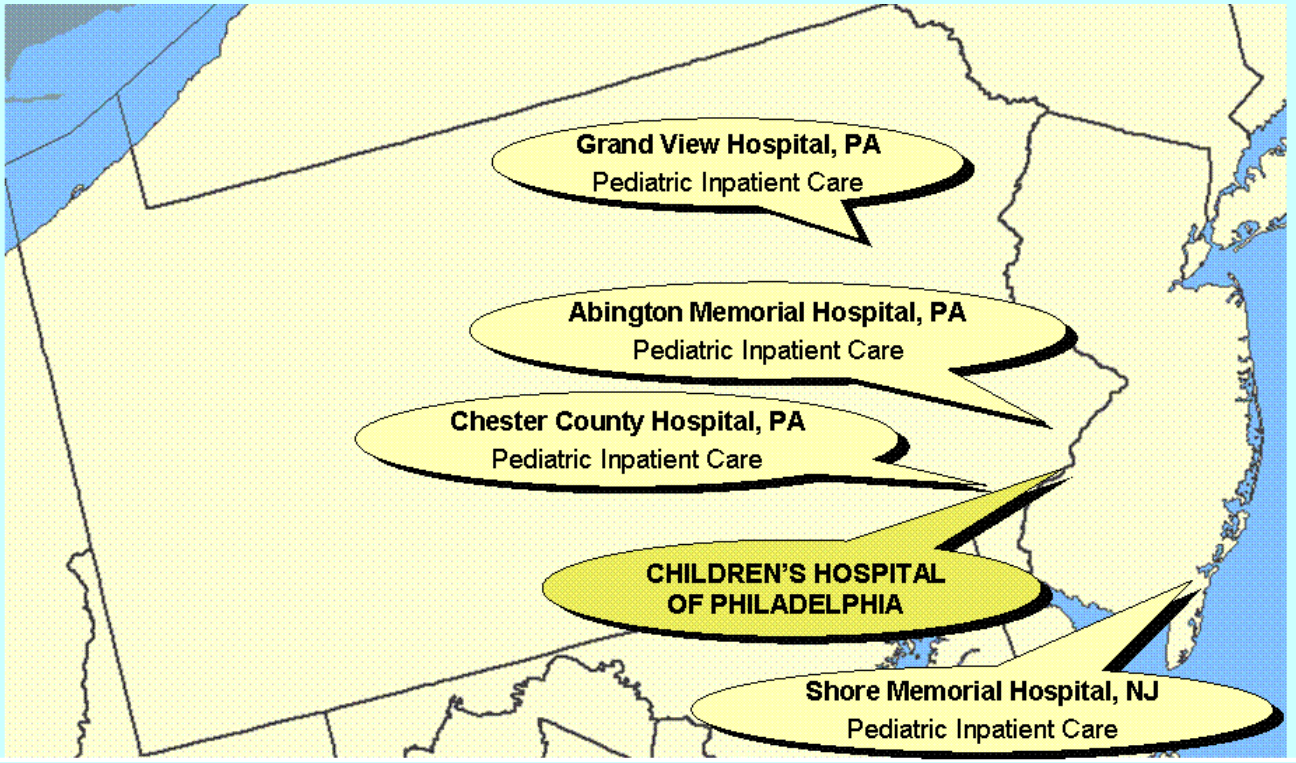
DRG	Number of admitting providers	Average percent of total national admissions	Average admissions/ provider/ year	Average admissions/ provider/ week
Knee Procedure	68	1.5%	55	1
Diabetes age > 35	80	1.3%	96	2
Kidney failure	80	1.3%	97	1
Multiple sclerosis and cerebellar ataxia	78	1.3%	28	1
Inflammatory bowel disease	73	1.4%	66	1
Implantation of cardiac pacemaker	51	2.0%	124	2
Splenectomy age > 17	37	2.6%	3	<1
Cleft lip & palate repair	7	14.2%	83	2
Heart transplant	6	16.6%	12	<1

Source: Compiled from The National Board of Health and Welfare Statistical Databases – DRG Statistics, Accessed April 2, 2009.

Principles of Value-Based Health Care Delivery

5. **Integrate care across facilities** and **geography**, rather than duplicating services in stand-alone units

Children's Hospital of Philadelphia (CHOP) Affiliations



- Deliver services in the **appropriate** facility, not every facility
- Excellent providers can manage care delivery across **multiple geographic areas**

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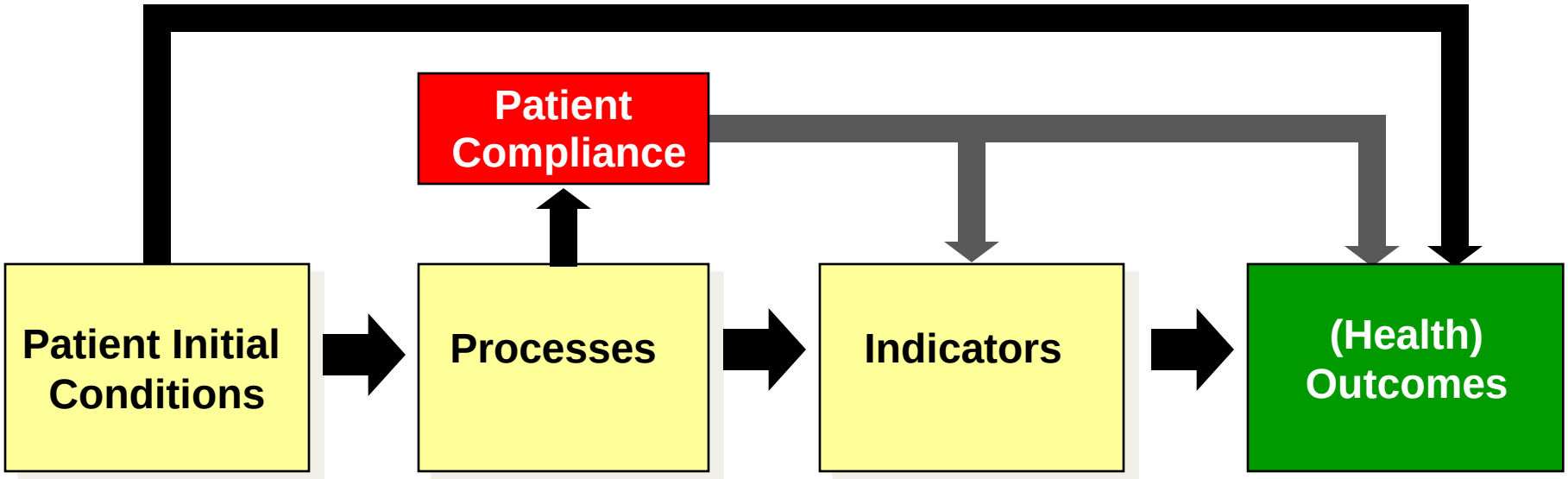
3. Care delivery should be organized around the patient's **medical condition** over the **full cycle of care**
4. Provider **experience**, **scale**, and **learning** at the medical condition level drive value improvement
5. **Integrate care across facilities** and **geography**, rather than duplicating services in stand-alone units
6. Measure and report **outcomes** and **costs** for every provider, every medical condition, and every patient

Measuring Value in Health Care



Protocols/ Guidelines

E.g., Hemoglobin A1c levels for diabetics

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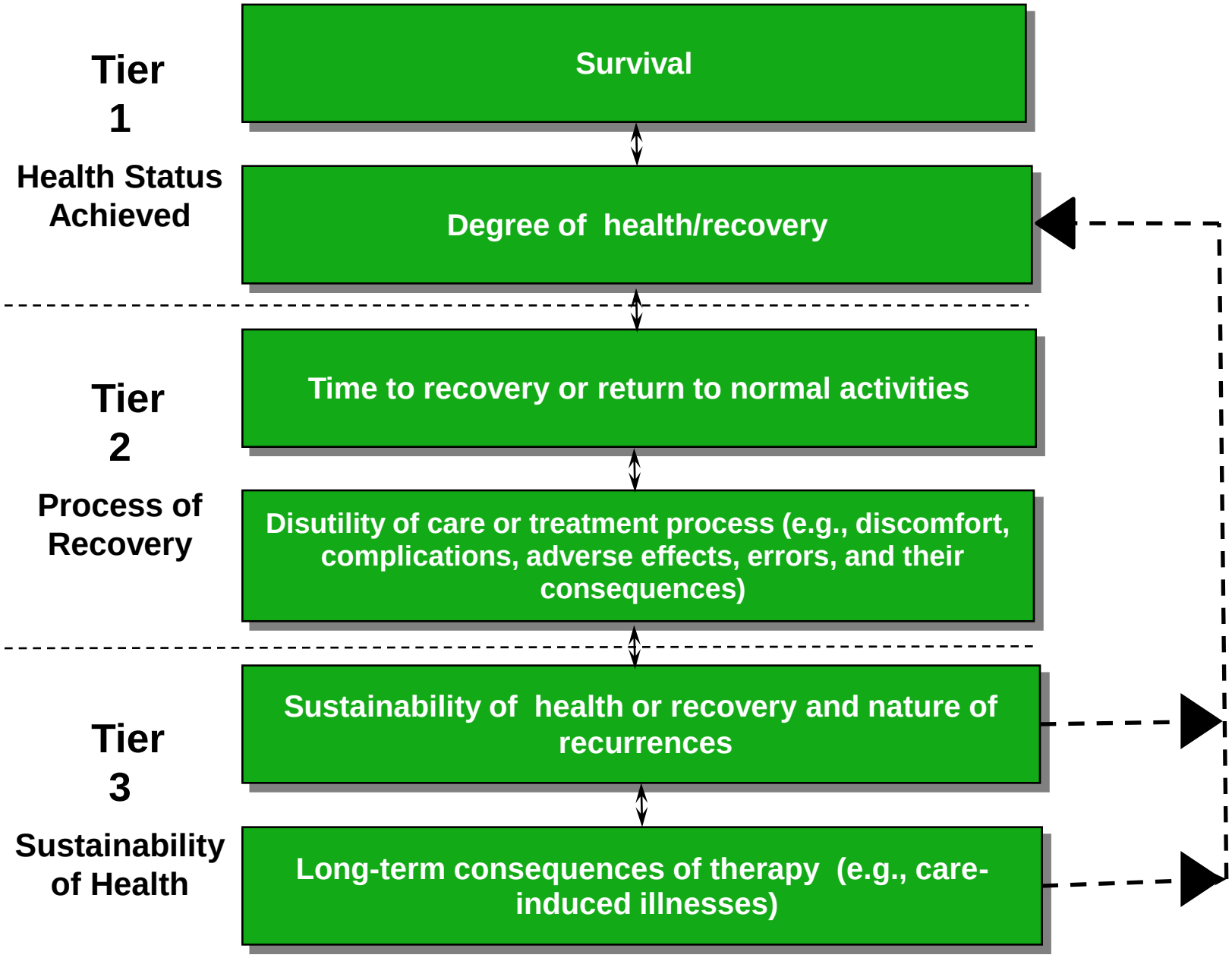
- Results must be measured at **the level at which value is created** not traditional organizational units

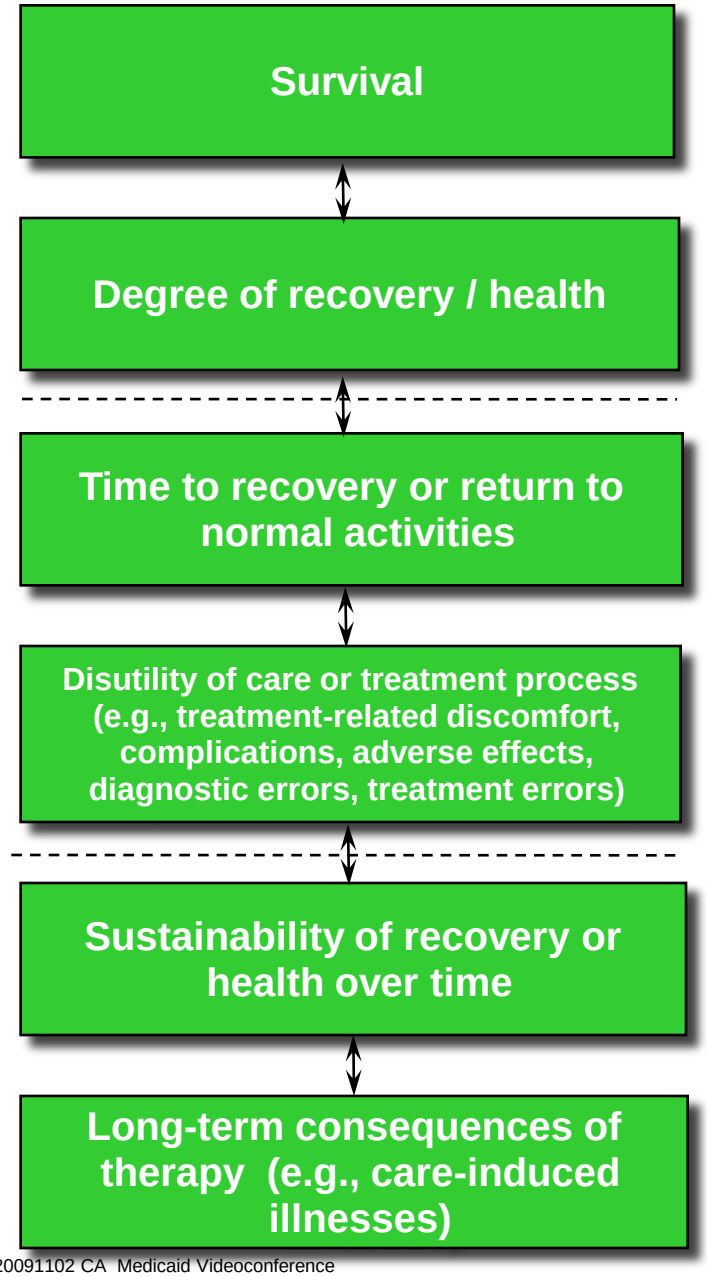
- Outcomes should be measured for **each medical condition** over the **cycle of care**
  - Not for interventions or short episodes
  - Not separately for types of service (e.g. inpatient, outpatient, tests, rehabilitation)
  - Not for practices, departments, clinics, or entire hospitals

The Outcome Measures Hierarchy



The Outcome Measures Hierarchy

Breast Cancer



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

- **Degree of remission**
- **Functional status**

- **Breast conservation outcome**

- **Time to remission**

- **Time to achieve functional status**

- **Nosocomial infection**
- **Nausea**
- **Vomiting**
- **Febrile neutropenia**

- **Limitation of motion**
- **Suspension of therapy**
- **Failed therapies**
- **Depression**

- **Cancer recurrence**

- **Sustainability of functional status**

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

- **Fertility/pregnancy complications**
- **Premature osteoporosis**

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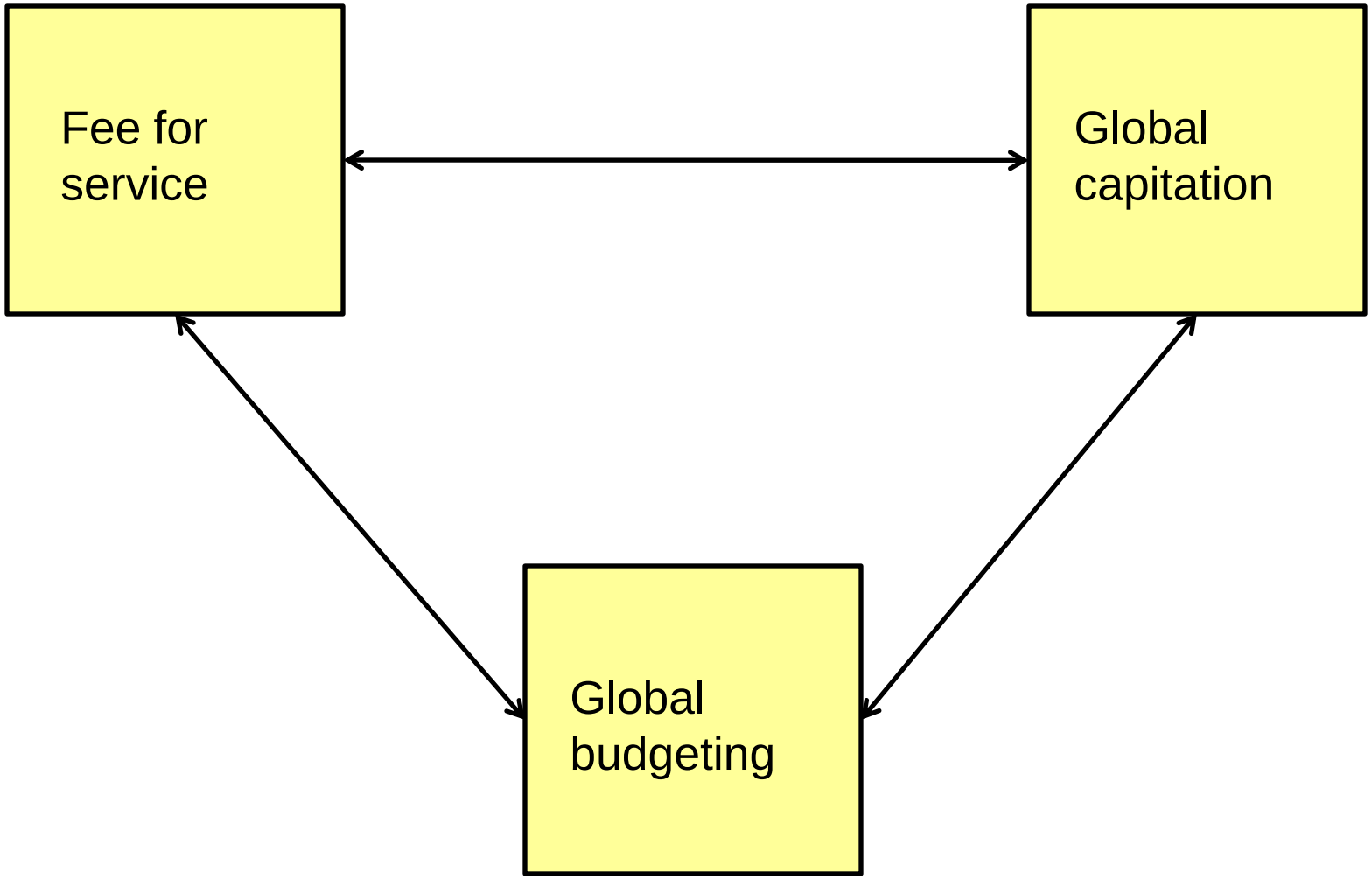
5. **Integrate care across facilities** and **geography**, rather than duplicating services in stand-alone units
6. Measure and report **outcomes** and **costs** for every provider, every medical condition, and every patient
7. **Align reimbursement** with value and reward innovation

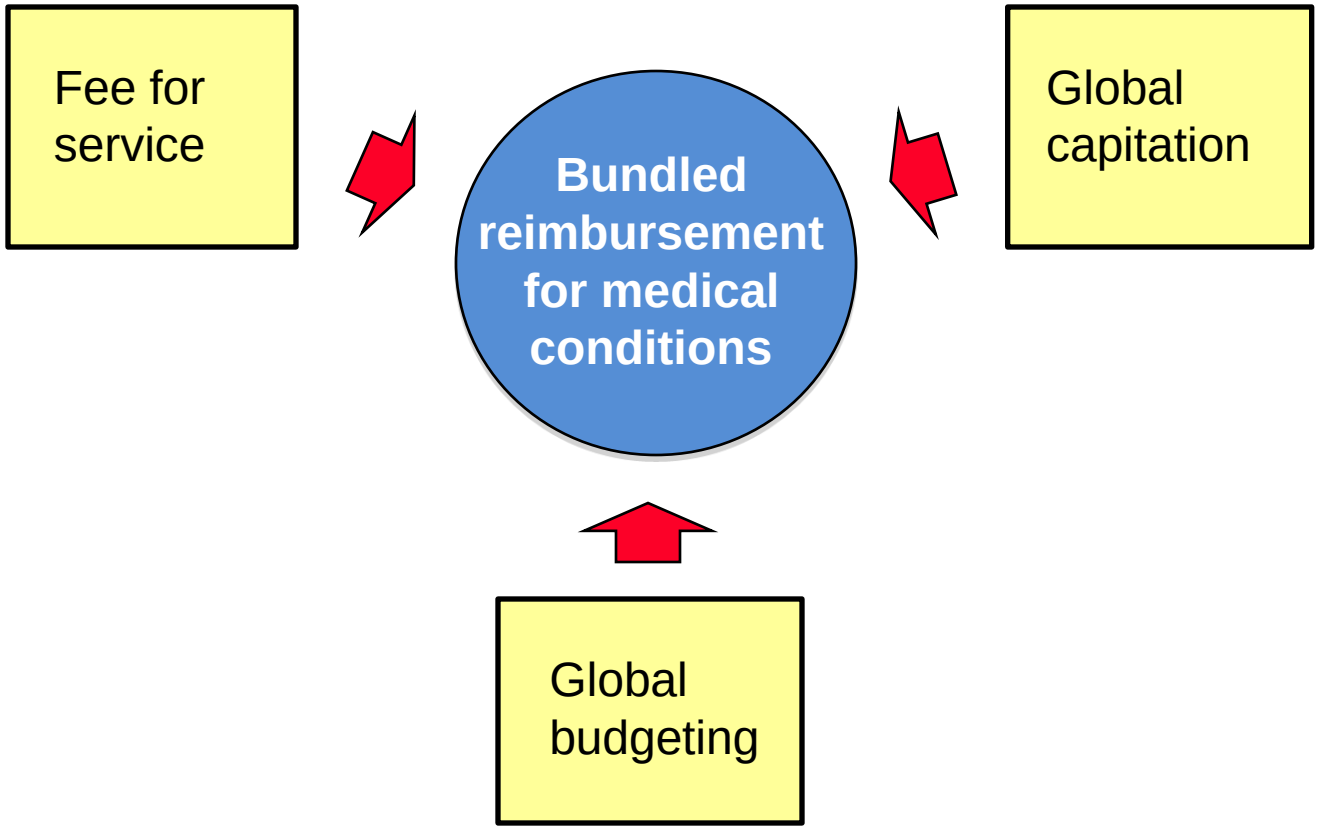
- **Bundled reimbursement** for **cycles of care** for medical conditions, not payment for discrete services or short episodes
- Time-base bundled reimbursement for **managing chronic conditions**
- Reimbursement for defined **prevention, screening, wellness/health maintenance** service bundles

- **Providers** and **health plans** should be proactive in driving new reimbursement models, not wait for government

Traditional Reimbursement Systems in Health Care Delivery

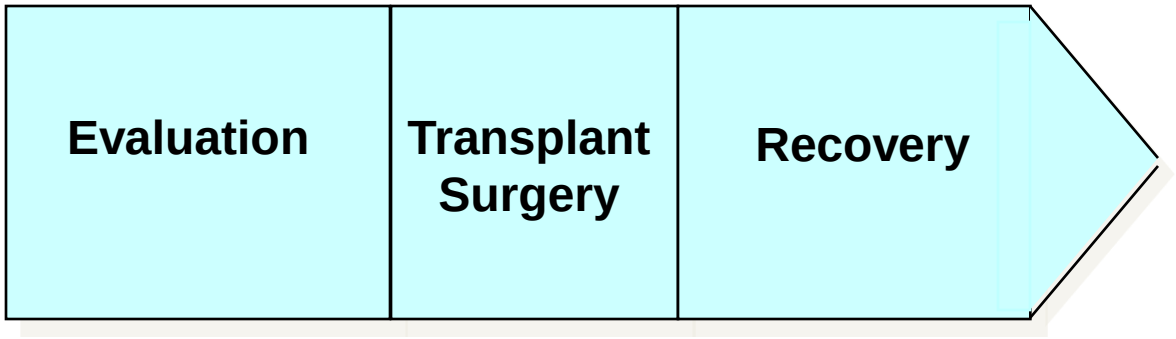


Value-Based Reimbursement



- Bundled reimbursement for care cycles motivates **value improvement, care cycle optimization**, and **spending to save**
- **Outcome measurement and reporting** at the medical condition level is needed for any reimbursement system to ultimately succeed

Reimbursement for Care Cycles
Organ Transplantation



- Addressing organ rejection
- Fine-tuning the drug regimen
- Adjustment and monitoring

- Leading transplantation centers offer a **single bundled price**

- UCLA Medical Center was a pioneer
- In dividing transplantation revenue, some UCLA physicians **bear risk** and capture some of the value improvement, while others are compensated with conventional charges

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7. **Align reimbursement** with value and reward innovation
8. Utilize information technology to enable **restructuring of care delivery** and **measuring results**, rather than treating it as a solution itself

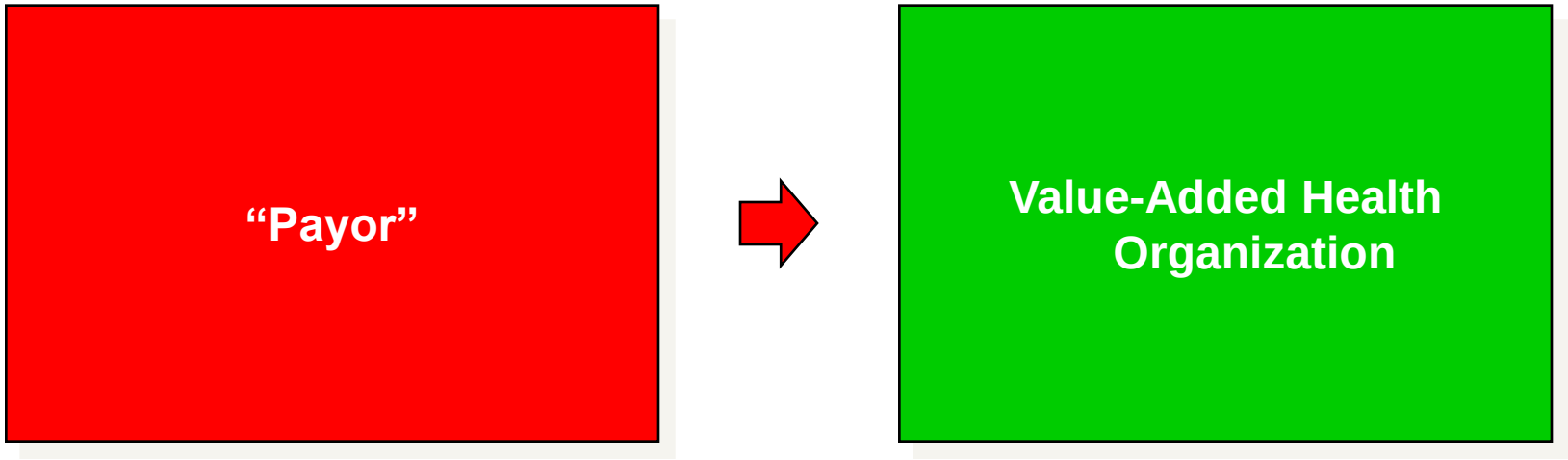
- Common data definitions
- "Structured" data vs. free text
- Data encompasses the full care cycle, including referring entities
- Interoperability standards enabling communication among systems
- Structure for combining all types of data (e.g. notes, images) for each patient over time
- Templates for medical conditions to enhance the user interface
- Accessible by, and allowing communication among, all involved parties, including patients
- Architecture that allows easy extraction of outcome measures

Value-Based Health Care Delivery

The Strategic Agenda for Providers

1. **Integrated Practice Units**
   - Including primary care
2. **Outcomes and Cost Measurement**
3. **New Reimbursement Models**
   - Engage health plans but also seek direct relationships with employers/employer groups
4. **Provider System Integration**
   - **Rationalize service lines/ IPUs** across facilities to improve volume, avoid duplication, and enable excellence
   - Offer specific services at the **appropriate facility**
     - **e.g. acuity level, cost level, benefits of convenience**
   - Clinically integrate care **across facilities** within an IPU structure
     - The **care delivery organization should span facilities**
   - Formally link **primary care** units to specialty IPUs
5. **Growth Across Geography**
6. **Enabling Information Technology Platform**

Value-Based Healthcare Delivery:
Implications for Health Plans



Value-Adding Roles of Health Plans

- Measure and report **overall health results** for members by medical condition versus other plans
- Assemble, analyze and manage the **total medical records** of members
- Provide for comprehensive and integrated **prevention**, **wellness**, **screening**, and **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

- Health plans will require **new capabilities** and **new types of staff** to play these roles

Implications for Government

Shift insurance market competition to value and enable universal coverage:

- Shift insurance market competition by ending discrimination based on pre-existing conditions and re-pricing upon illness
- Build upon the current **employer based system**
- Create a viable insurance option for **individuals and small groups** through large statewide and multistate **insurance pools**, coupled with a **reinsurance system** for high cost individuals
- Establish **income-based subsidies** on a sliding scale for lower income individuals
- Once viable insurance options are established, **mandate the purchase of health insurance** for all Americans
- Give employers a choice of providing insurance or a payroll tax based on the proportion of employees requiring public assistance

Implications for Government (Continued)

Restructure Delivery

- Establish universal and mandatory measurement and reporting of provider **health outcomes**
  - **Experience** reporting as an interim step
- Shift reimbursement systems to **bundled payment for cycles of care** instead of payments for discrete treatments or services
- Encourage **restructuring of health care delivery** around the integrated care for medical conditions
  - Eliminate obstacles such as Stark Laws, Corporate Practice of Medicine
  - Minimum volume standards as an interim step
- Create new integrated **prevention, wellness, screening** and **health maintenance** service bundles for defined patient groups
- Mandate **EMR adoption** that enables integrated care and supports outcome measurement
  - Software as a service model for smaller providers
  - National standards for data, communication, and aggregation
- Encourage **responsibility of individuals** for their health and health care
- **Open up value-based competition** for patients within and across state boundaries

How Will Redefining Health Care Begin?

- It is **already happening** in the U.S. and other countries
- Steps by pioneering institutions will be **mutually reinforcing**
- Once competition begins working, value improvement will **no longer be discretionary**
- Those organizations that **move early** will gain major benefits

- **Providers** can and should take the lead