Creating a High-Value Health Care System: Implications for Finland

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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. 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.

Common Proposals for Reforms

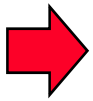
- Single Payer System
- Consumer-Driven Health Care
- Pay for Performance
- Integrated Payer-Provider Systems
- Electronic Medical Records

Finland's Health Care Challenge

Past Goals

Creating a universal and equitable health care system

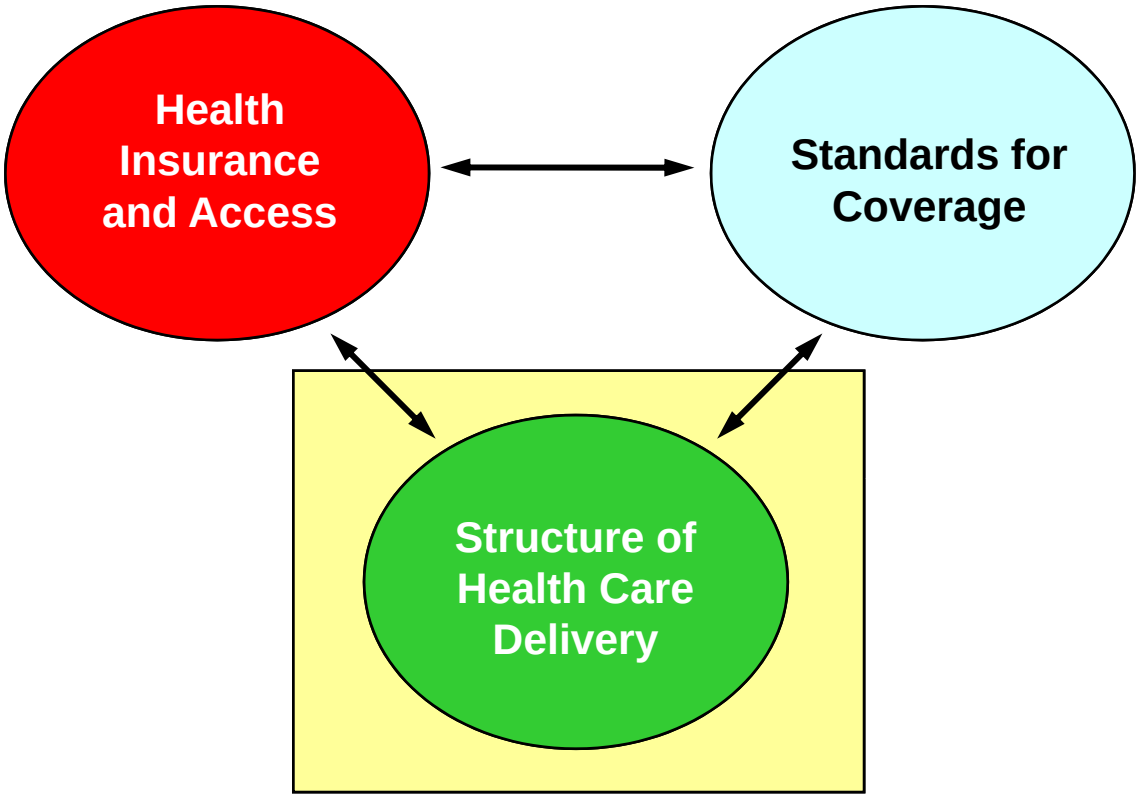
Controlling the cost of health care



Future Imperative

Creating a high-value health care system

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. 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, 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**
  - Competition for patients
  - Competition for health plan subscribers
- Today's competition in health care **is not aligned with value**

Financial success of system participants	$\neq$	Patient success

- 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

- Providers should **compete for patients** based on **value**
  - Instead of 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 adding capacity and expanding across locations

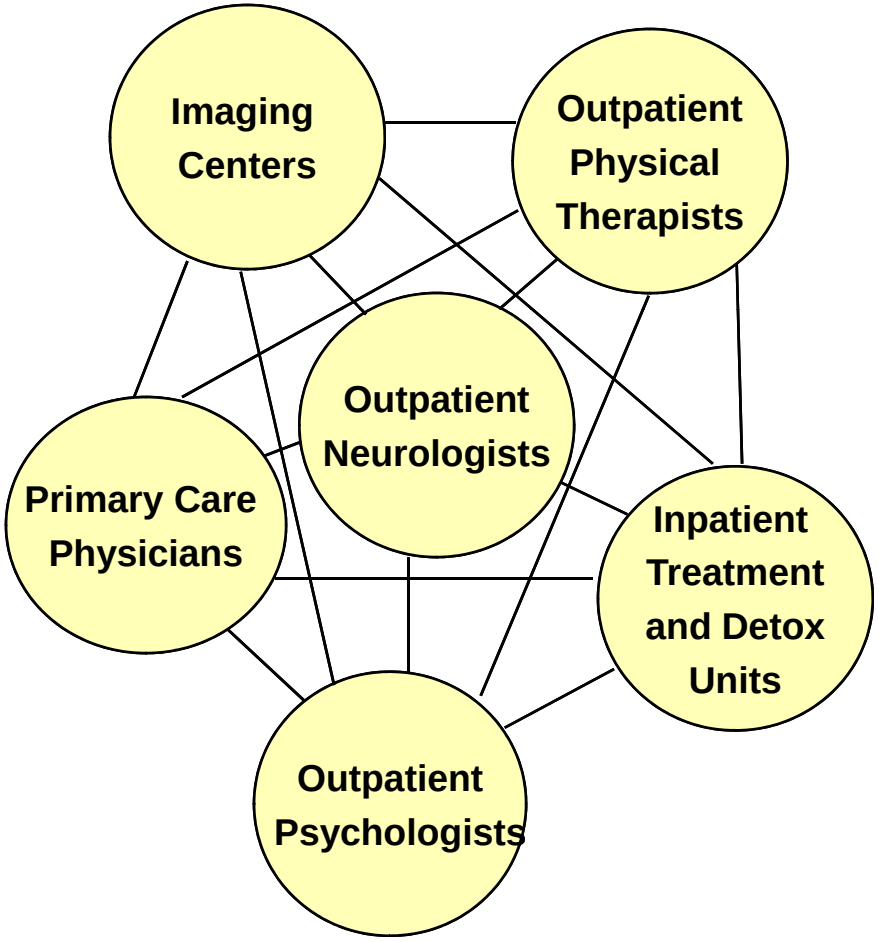
Principles of Value-Based Health Care Delivery

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**

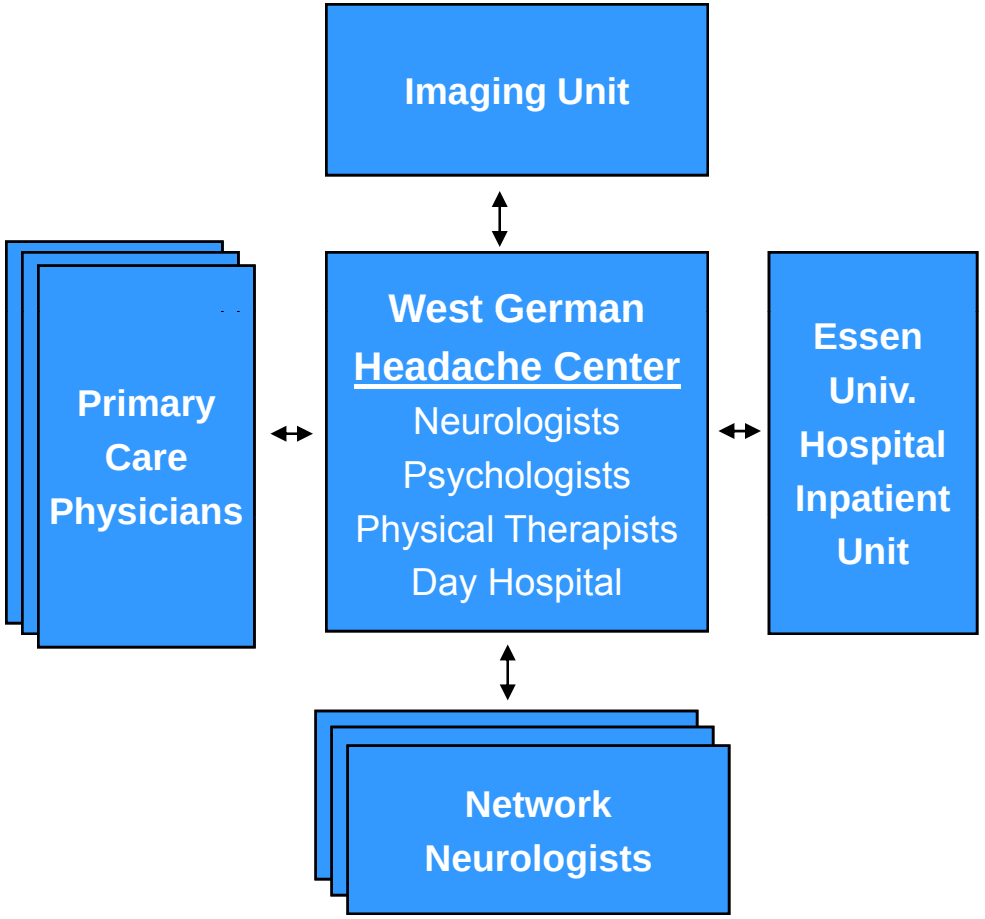
- A medical condition is **an interrelated set of patient medical circumstances best addressed in an integrated way**
  - Defined from the **patient's** perspective
  - Involving **multiple** specialties and services
- **Includes** the most common co-occurring conditions
- Examples
  - Diabetes (including vascular disease, retinal 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



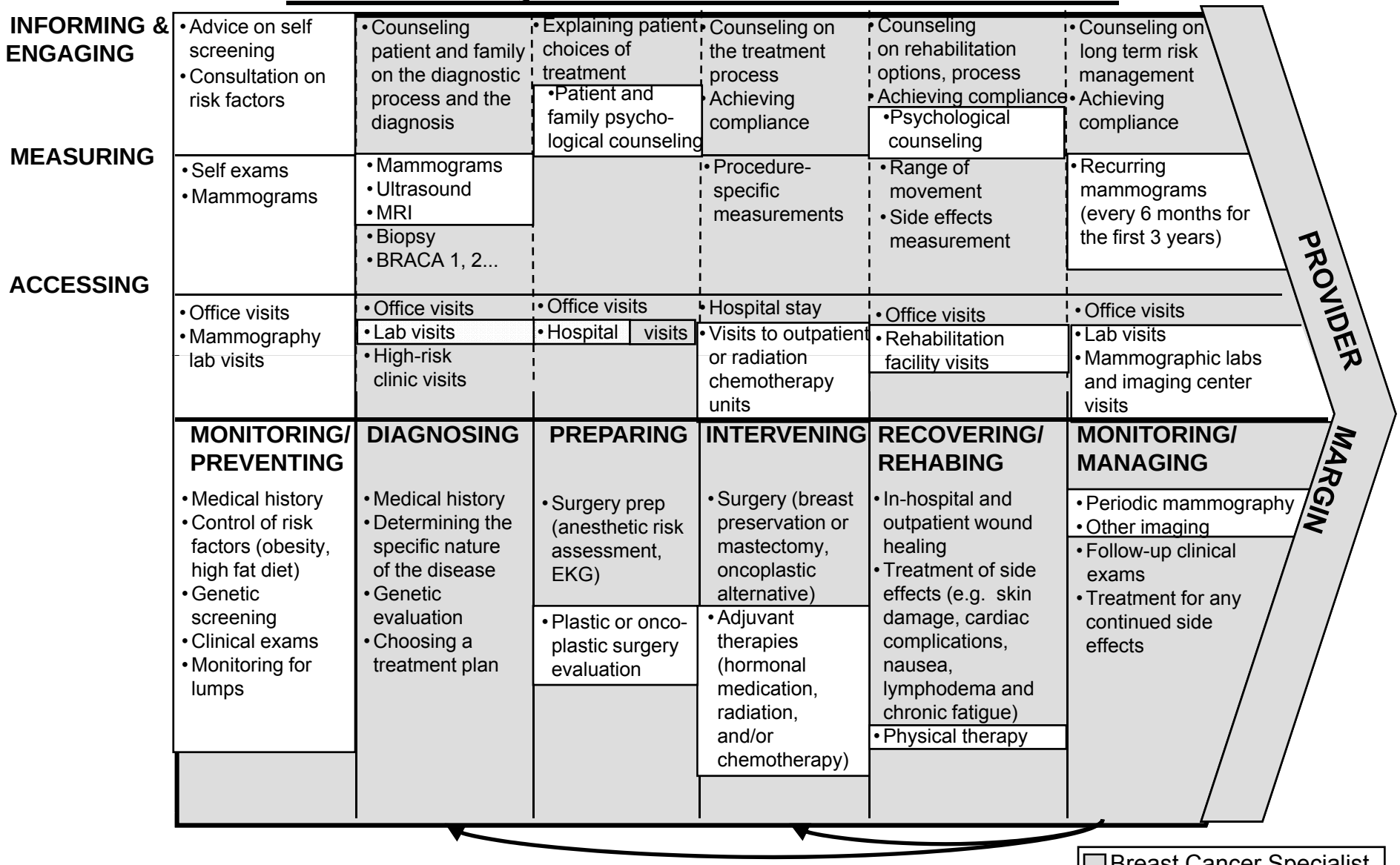
New Model: Organize into Integrated Practice Units (IPUs)



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



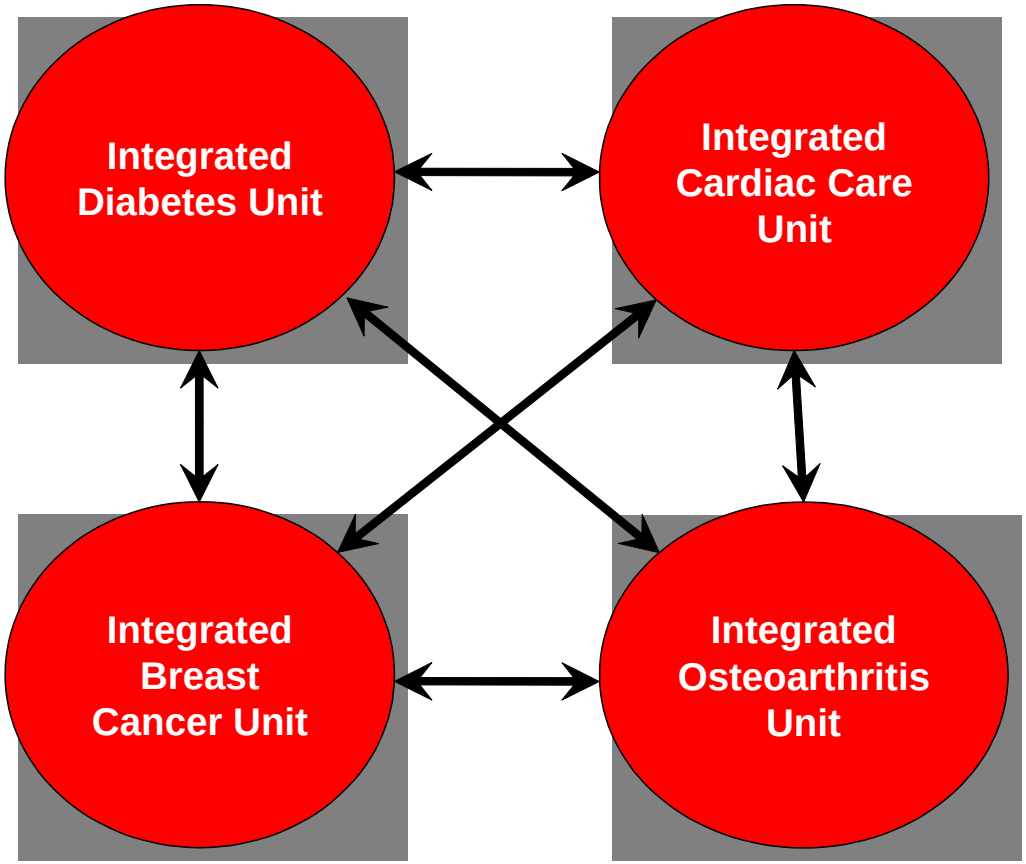
- **Primary care providers** are often the **beginning** and **end** of the care cycle
- The medical condition is the **unit of value creation** in health care delivery

Analyzing the Care Delivery Value Chain

1. Are the **set of activities** and the **sequence of activities** in the CDVC aligned with value?
2. Is the appropriate **mix of skills** brought to bear on each activity and across activities, and do individuals work as a **team**?
3. Is there **appropriate coordination** across the discrete activities in the care cycle, and are handoffs seamless?
4. Is care structured to **harness linkages** (optimize overall allocation of effort) across different parts of the care cycle?
5. Is the **right information** collected, integrated, and utilized across the care cycle?
6. Are the activities in the CDVC performed in **appropriate facilities and locations**?
7. What provider departments, units and groups are involved in the care cycle? Is the provider's **organizational structure** aligned with value?
8. What are the **independent entities** involved in the care cycle, and what are the relationships among them? Should a provider's **scope of services** in the care cycle be expanded or contracted?

Patients with Multiple Medial 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

Integrated Cancer Care

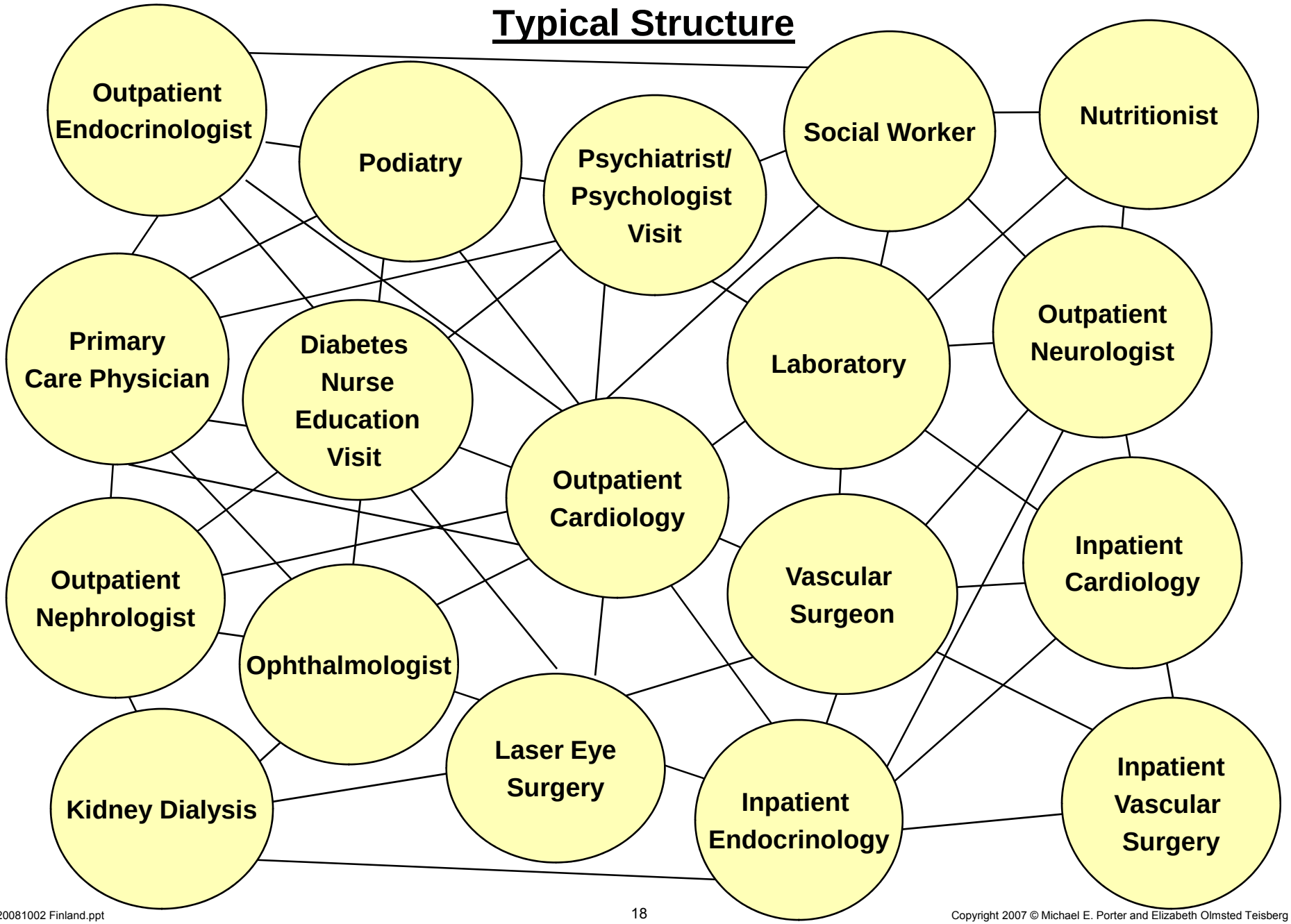
MD Anderson Head and Neck Center

Staff	
Head and Neck Center	**Shared**
Dedicated MDs -Medical Oncologists -Surgical Oncologists -Radiation Oncologists -Dentists -Diagnostic Radiologist -Pathologist -Opthalmologists	**Shared MDs** -Endocrinologists -Other specialists as needed (cardiologists, plastic surgeons, etc.)
Dedicated Skilled Staff -Nurses -Audiologist -Patient Advocate	**Shared Skilled Staff** -Nutritionists -Social Workers

Facilities	
Head and Neck Center	**Shared**
-Dedicated Outpatient Unit	-Radiation Therapy -Pathology Lab -Ambulatory Chemo Center -Inpatient Wards →Medical Wards →Surgical Wards

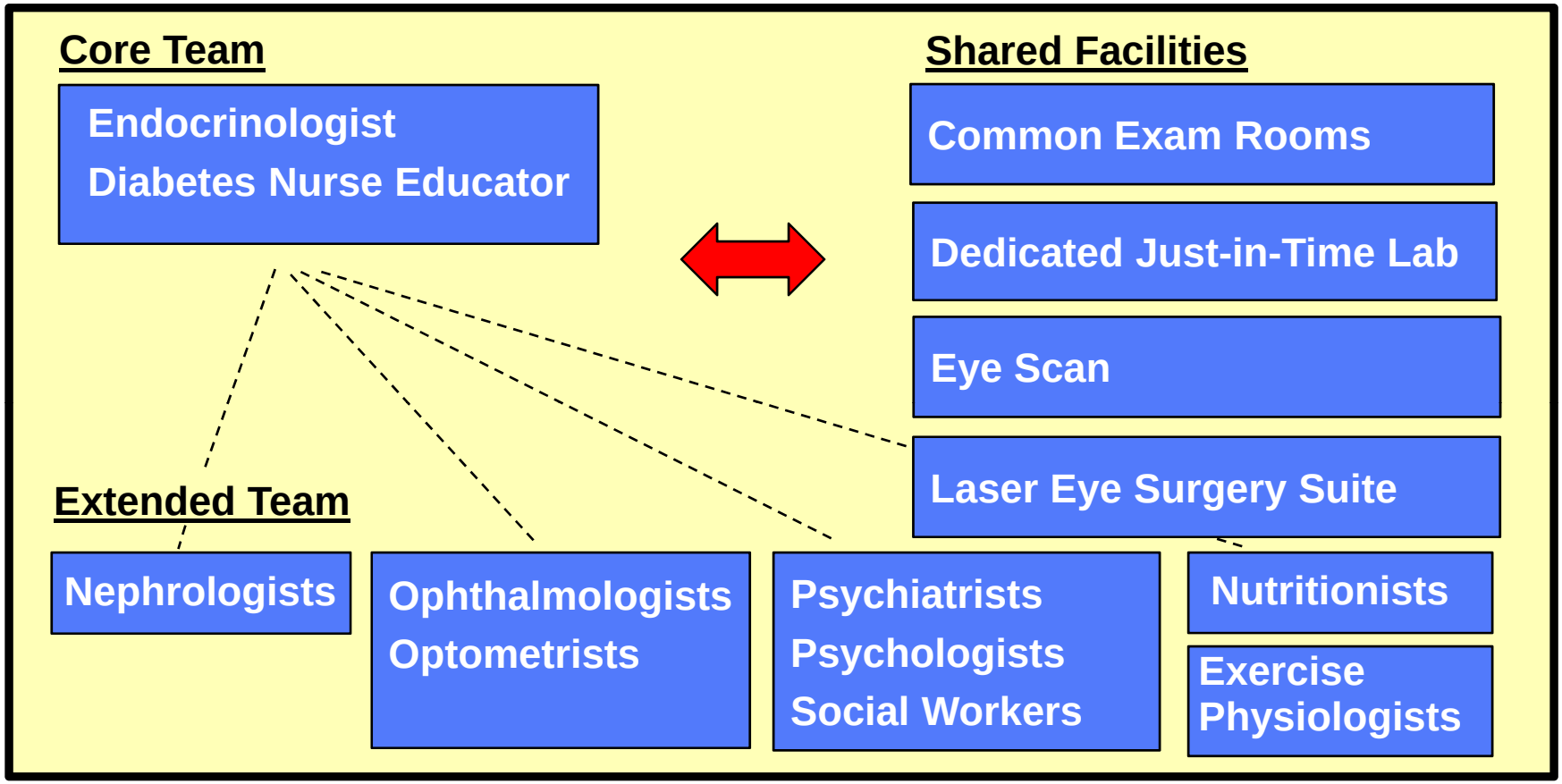
Source: Jain, Sachin H. and Michael E. Porter, *The University of Texas MD Anderson Cancer Center: Interdisciplinary Cancer Care*, Harvard Business School Case 9-708-487, Draft April 1, 2008

Diabetes Care
Typical Structure



Integrated Diabetes Care

Joslin Diabetes Center



Acute Complications

- Hyperglycemia
- Hypoglycemia

Long-Term Complications

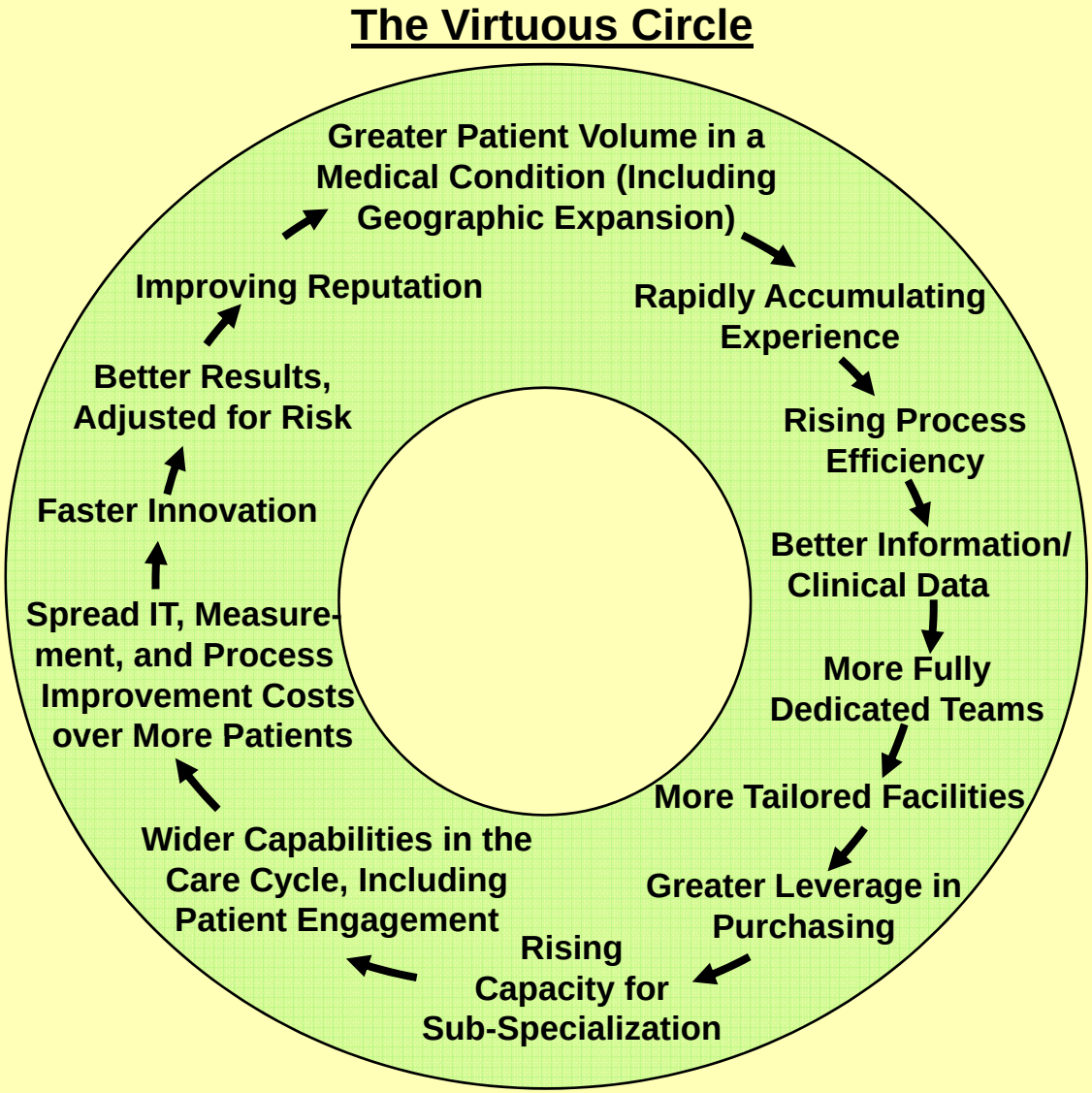
- Cardiovascular Disease
  - Cardiologist
- Neuropathy
  - Vascular Surgeon
  - Neurologist
  - Podiatrist
- End Stage Renal Disease

What is Integrated Care?

- Integration of specialties and services over the **care cycle for a medical condition (IPU)**
  - Optimize the whole versus the parts
  - Providers will often operate multiple IPUs
- For some patients, coordination of care **across medical conditions**
  - A patient can be cared for by **more than one IPU**
- Integrated care is **not** just:
  - Co-location
  - Care delivered by the same organization
  - A multispecialty group practice
  - Freestanding focused factories
  - A Center
  - A Center of Excellence
  - 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



Consequences of Service Fragmentation

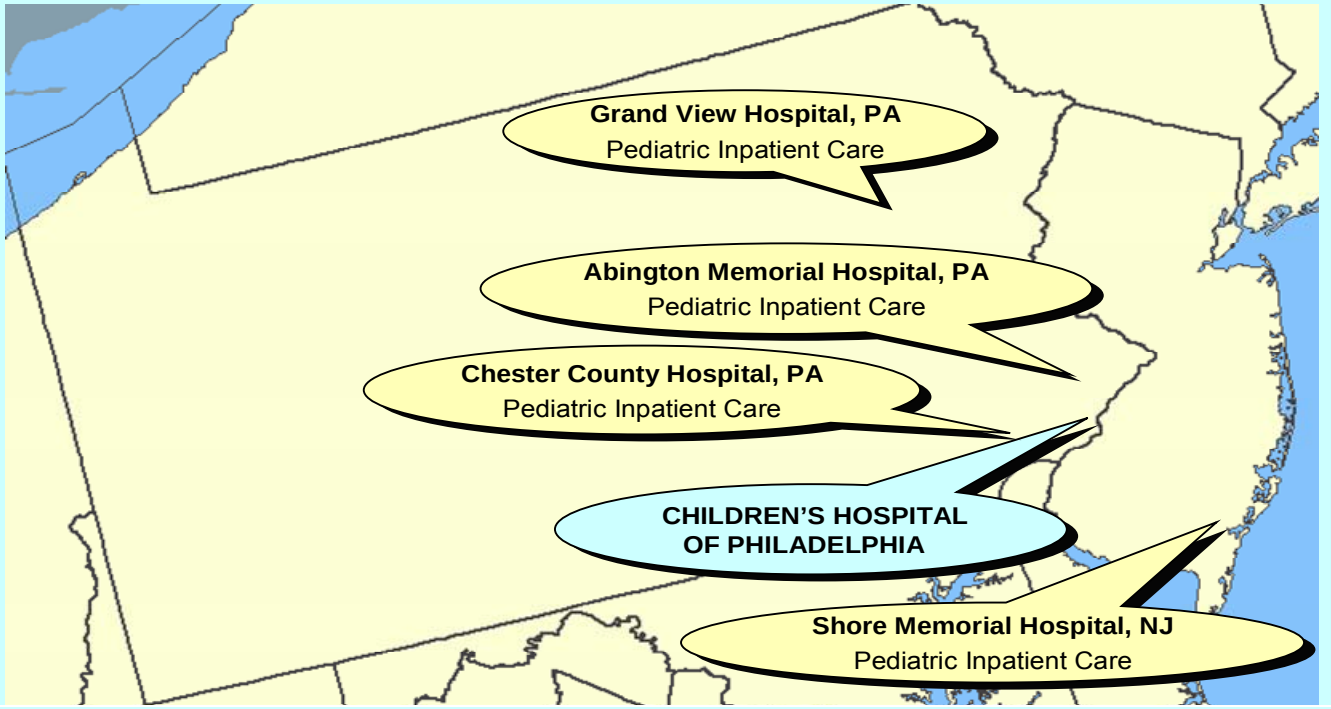
- Health care delivery in every country is **highly fragmented**
  - Extreme duplication of services
  - Low volume of patients per medical condition per provider
  - Duplication and fragmentation are present **even within affiliated hospitals or systems**
- Most providers **lack the scale and experience** 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**

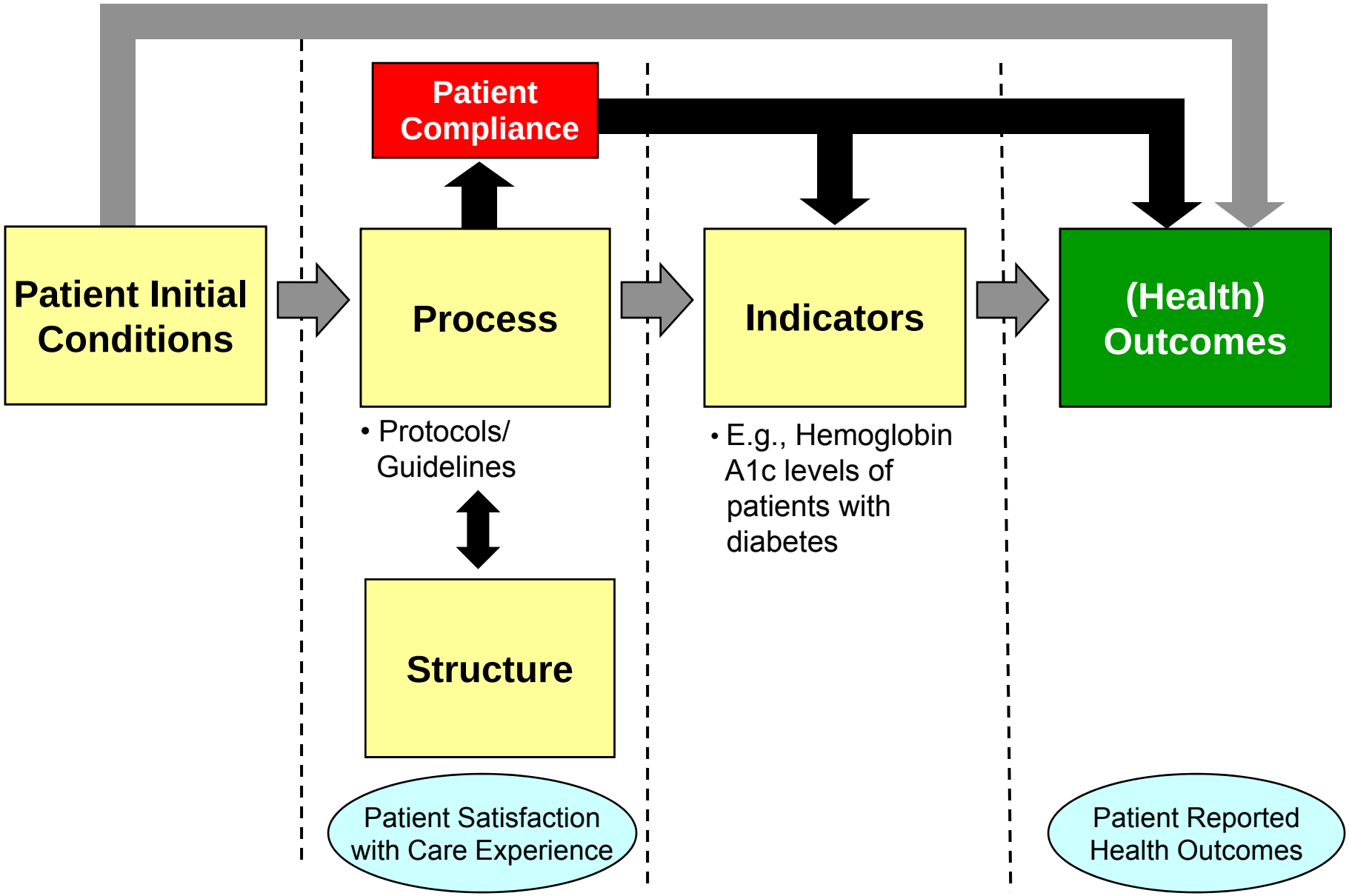
Principles of Value-Based Health Care Delivery

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

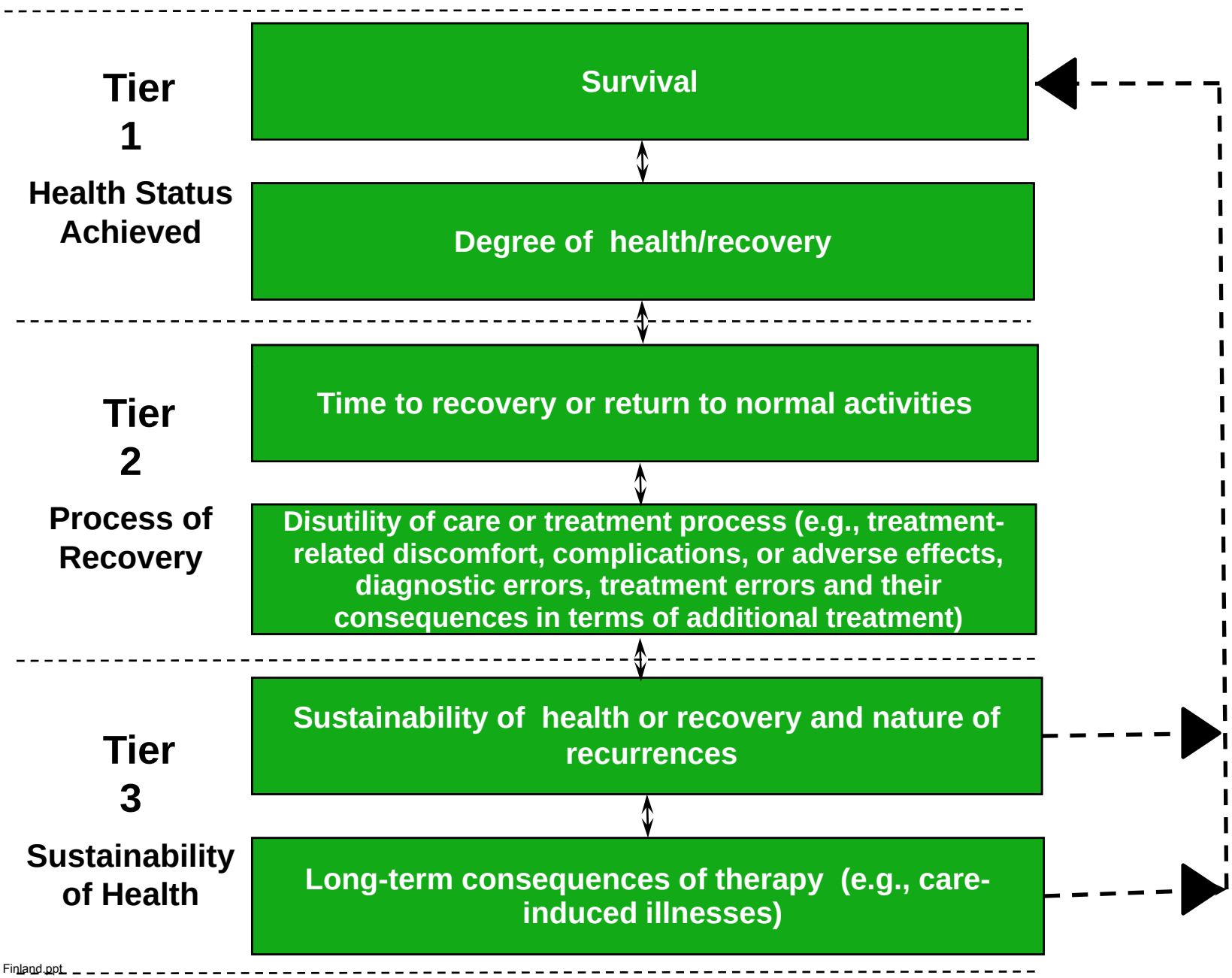
- **For** medical conditions over the cycle of care
  - Not for interventions or short episodes
  - Not for practices, departments, clinics, or hospitals
  - Not separately for types of service (e.g. inpatient, outpatient, tests, rehabilitation)

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

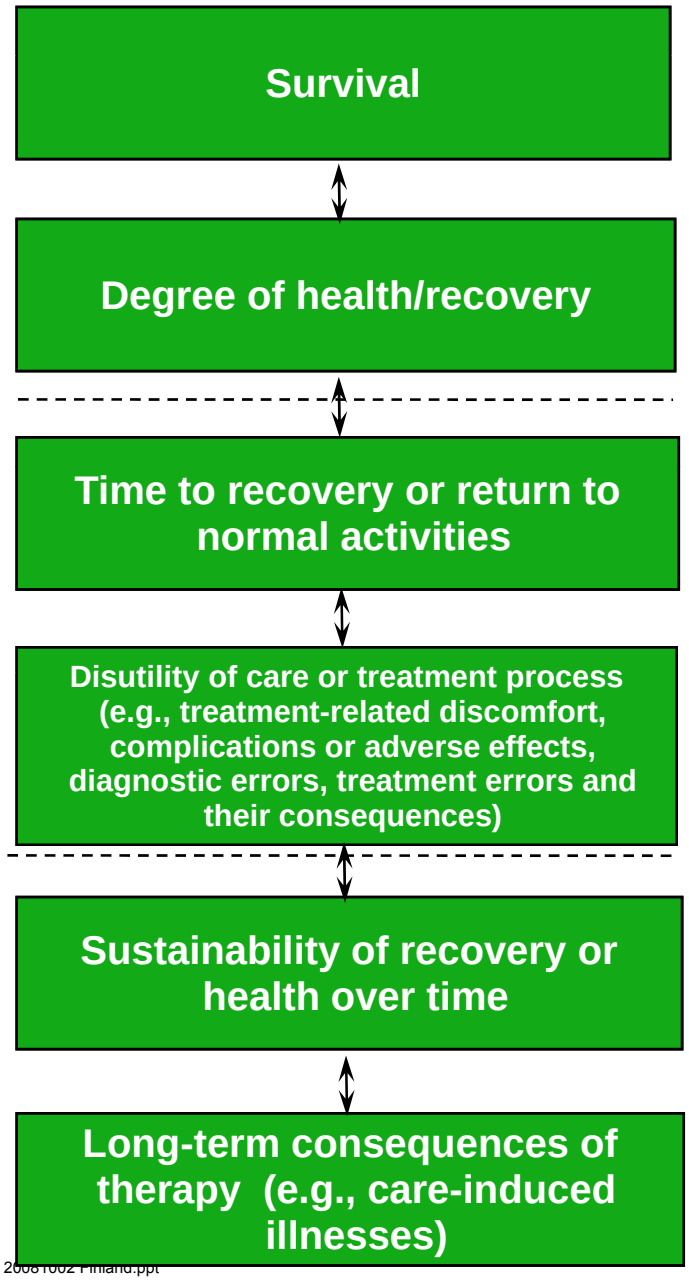
Measuring Value in Health Care



The Outcome Measures Hierarchy



Illustrative Breast Cancer Outcomes



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

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

- **Breast preservation**
- **Breast conservation surgery outcomes**

- **Time to remission**

- **Time to achieve functional and cosmetic status**

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

- **Limitation of motion**
- **Breast reconstruction discomfort and complications**
- **Depression**

- **Cancer recurrence**
- **Consequences of recurrence**

- **Sustainability of functional status**

- **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
- Previous treatments
- Age
- Menopausal status
- General health, including co-morbidities
- Psychological and social factors

- As care delivery improves, some initial conditions that once affected outcomes will **decline in importance**

Measuring Value: Essential Principles

- Outcomes should be measured at the **medical condition level**
- Outcomes should be **adjusted for patient initial conditions**
- **Physicians** need results measurement to support value improvement
  - Use of measures by patients will develop more slowly
- 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

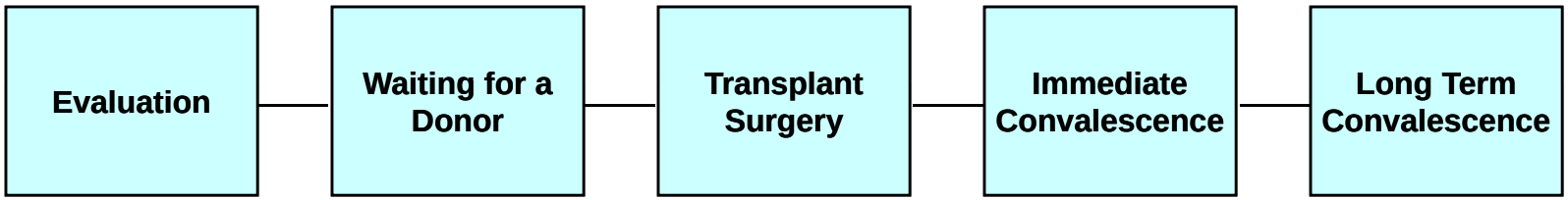
Principles of Value-Based Health Care Delivery

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 adjusted for **patient complexity**
- Reimbursement for **overall management of chronic conditions**
- Reimbursement for **prevention and screening**, not just treatment

- **Providers** should be proactive in moving to new reimbursement models

Organ Transplantation Care Cycle



Alternative therapies to transplantation

Addressing organ rejection

Fine-tuning the drug regimen

Adjustment and monitoring

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

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**
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 federations of 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 payors 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

ThedaCare Health System

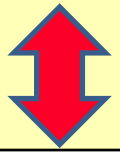
Rationalizing Service Lines

ThedaClark Medical Center

- Neurology and neurosurgery at ThedaClark
- Trauma care at ThedaClark
- Bariatrics at ThedaClark
- Inpatient rehabilitation at ThedaClark
- Pediatric inpatient care outsourced to Children's Hospital of Wisconsin-Fox Valley

Appleton Medical Center

- Cardiac surgery at Appleton
- Radiation oncology at Appleton
- Created Orthopedics Plus, an IPU



Critical access community hospitals coordinate services with larger hospitals

New London Family Medical Center Community Hospital

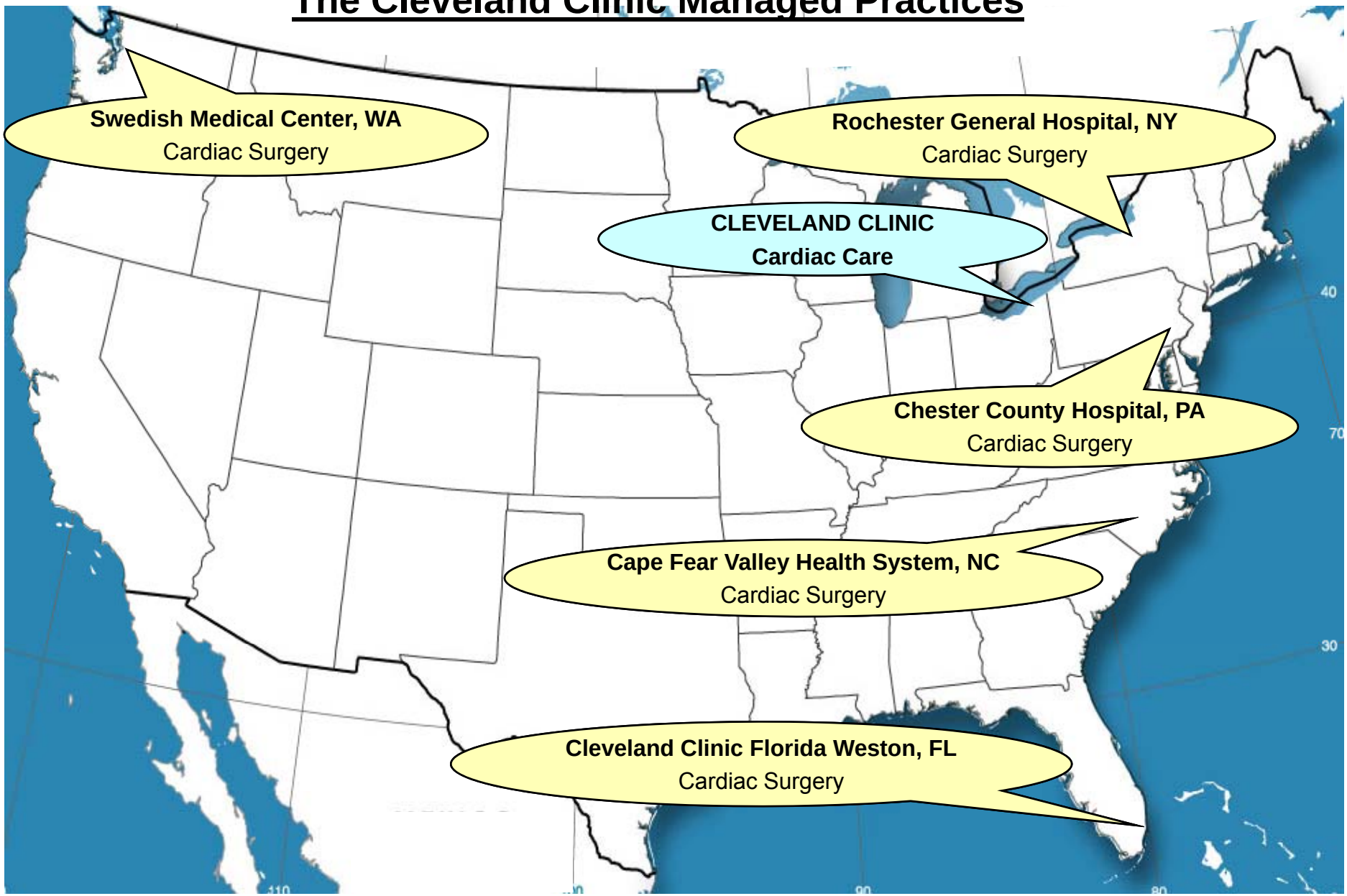
Riverside Medical Center Community Hospital

- ICU care transferred to other ThedaCare sites

Source: Porter, Michael E. and Sachin H. Jain, ThedaCare: System Strategy, HBS case No. 9-708-424, November 9, 2007

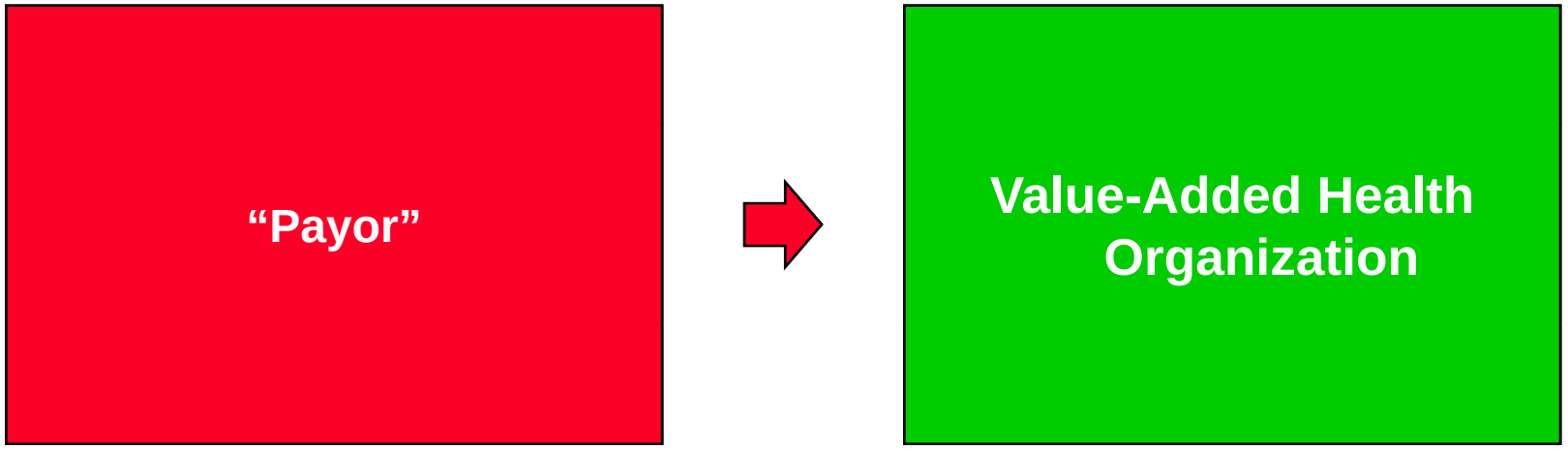
Managing Care Across Geography

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
  - High value public providers
- Promote **coordination of care** with occupational and external providers
- Find ways to advocate **reform of the health care coverage** and **care delivery systems**
- Measure and hold staff accountable for the company's **health value received**

Creating a High-Value Health Care System
Consumers

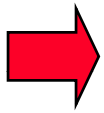
- Participate actively in **managing personal health**
- Expect **relevant information** and **seek advice**
- Expect the freedom and information needed to make treatment and provider choices based on **outcomes** and **value**, not geography or convenience
- **Comply** with treatment and preventative practices

- But "consumer-driven health care" is the **wrong metaphor** for reforming the system

Creating a High-Value Health Care System
Government

- Government policy should **set the right rules and ensure results measurement,** but restructuring health care delivery must occur from the **bottom up**

→ Government-led
→ Consumer-driven
→ Payment-centric



→ Results-driven
→ Patient-centric
→ Physician-led

Creating a High-Value Health Care System
Government, cont'd.

- Establish provider-level **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
- **Restructure health care delivery** around the integrated care of medical conditions
- Shift reimbursement systems to **bundled prices for cycles of care** instead of global budgets or payments for discrete treatments or services
- **Open up competition** among providers and across geography
- 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 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

Implications for Finland

- Organize care around **integrated practice units** for medical conditions
  - Eliminate artificial distinctions between health centers, hospitals, and long-term care
  - Integrate activities among different geographic locations
- Promote **coordination of care** and eventual care integration across public, private, and occupational providers
- **Limit duplication of service lines** among providers to reach threshold patient volume for excellent care
  - Service lines choices should depend on provider success and case volume, not geography
  - But, strong need to maintain multiple providers for all but the very rarest conditions, and allow international care in fields without at least two Finnish providers
- **Open up provider competition for patients** across municipalities
  - Equity implies equal access to the best possible care
  - "Personal doctor" model promotes continuity of care, but physicians need not be assigned to patients
- Expand excellent providers of care for medical conditions **across geography**

Implications for Finland, cont'd.

- Strengthen and improve access to **primary care**
  - Some general practitioners may accept patients with particular medical conditions, not solely based on geography
  - Integrate primary care services into care cycles where appropriate
  - Improve coordination across primary and specialty care providers
  - Allocate clinical responsibilities appropriately across physician and non-physician staff
- Move to **care cycle reimbursement**, not global budgets or fee-for-service payments
- Expand provider-level **outcome** and **cost measurement** across all medical conditions
  - For entire care cycles, not just interventions or episodes
  - For all providers, not just hospitals
- Set **IT standards** and enable universal IT adoption
  - Make IT a requirement for payment
- Create **true health plans** that assist citizens in managing their health, not passive government payor organizations
  - Municipalities should help guide patients to excellent providers
- Significantly increase the **role of patients** in their health and their health care