

Redefining Global Health Care Delivery

Narrowing the Gap Between Aspiration and Action

Michael E. Porter, PhD

Bishop Lawrence University Professor
Harvard University

Jim Yong Kim, MD, PhD

Chairman, Division of Global Health Equity
Harvard Medical School

July 7, 2008

Unprecedented Opportunity



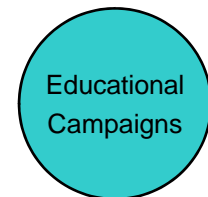
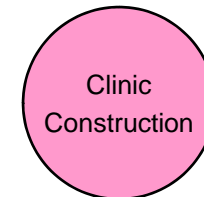
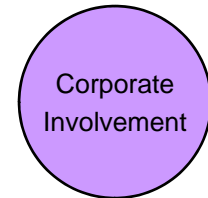
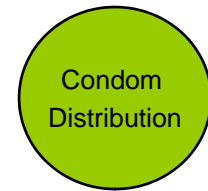
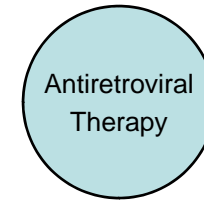
- Key leaders and institutions have recognized the gravity of global health problems
- Since 2001, over \$85B in new funding for development
- 28x HIV/AIDS spending increase from \$300M in 1996 to \$8.5B
- Dramatic decline in treatment costs

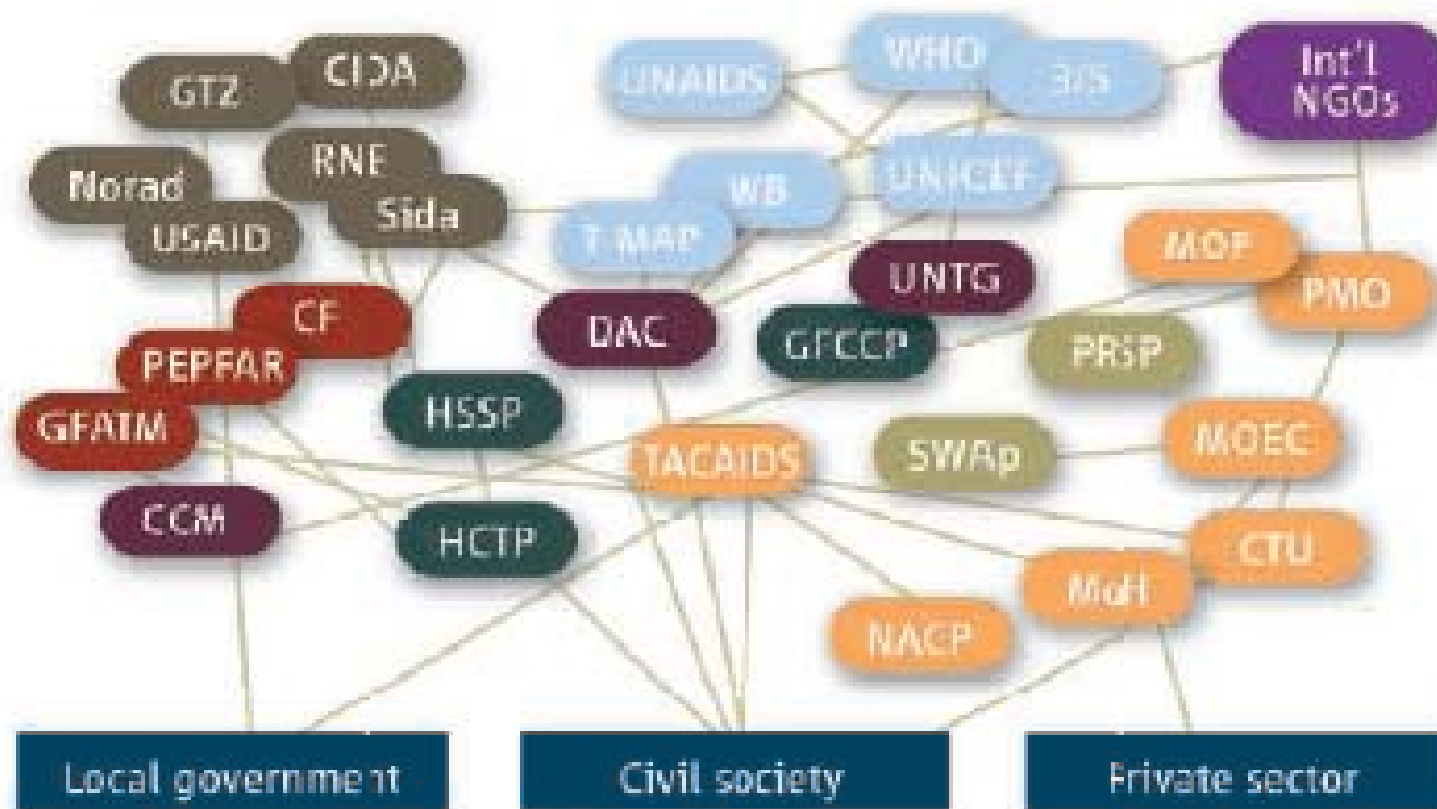
- **A golden era of funding for global health programs**

Global Health “Strategy” to Date

- Countries and even districts working in isolation
- Project-based
 - Donor preference driven
 - Experimental pilots that never scale
- Competition among implementers
- Cottage industry approach
- Fragmentation of services
- Absence of results and measurement
- Resources often diverted for overhead and consultants

- **Clear need for a better approach**





Relationships Between Various Stakeholders in Tanzania

- | | |
|---|---|
| ■ United Nations | ■ Coordinating committees |
| ■ Bilateral aid | ■ Plans and programs |
| ■ Drug-delivery programs | ■ IMF/World Bank |
| ■ Tanzanian government | ■ Nongovernmental organizations |

Redefining Global Health Care

- Access **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 health care systems that **dramatically improve value**
- Improving value is the means to **achieving social justice**

Creating a Value-Based Health Care System

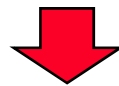
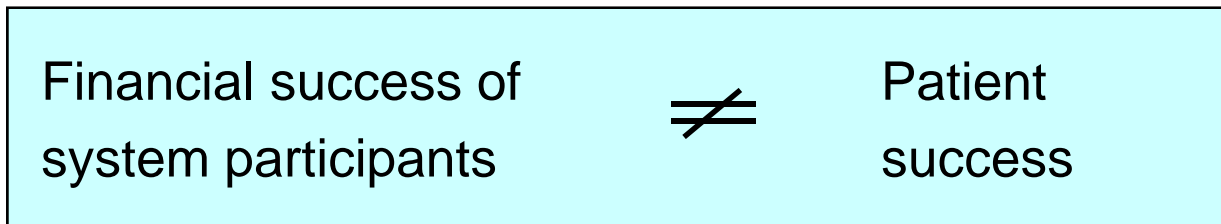
- Significant improvement in value will require **fundamental restructuring of health care delivery**, not incremental improvements

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**



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

Zero-Sum Competition in U.S. Health Care

Bad Competition

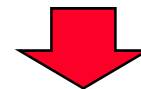
- Competition to **shift costs** or **capture more revenue**
- Competition to **increase bargaining power**
- Competition to **capture patients** and **restrict choice**
- Competition to **restrict services** in order to maximize revenue per visit or reduce costs



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 maximizing revenue or 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

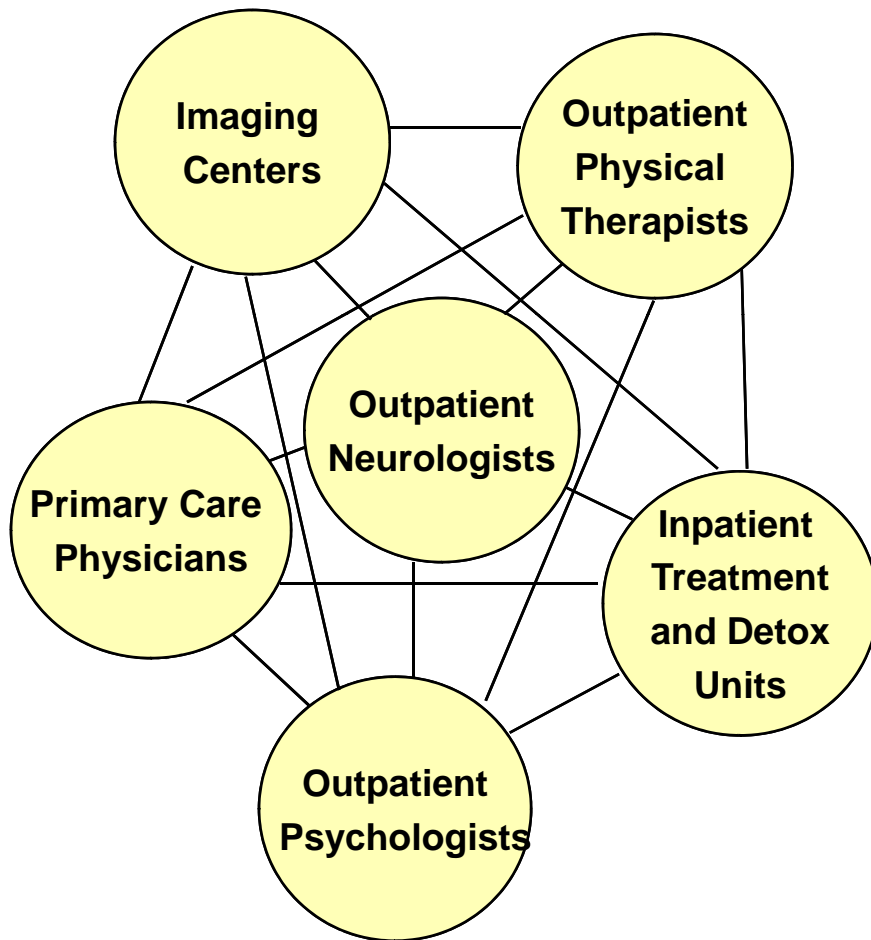
Principles of Value-Based Health Care Delivery

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**

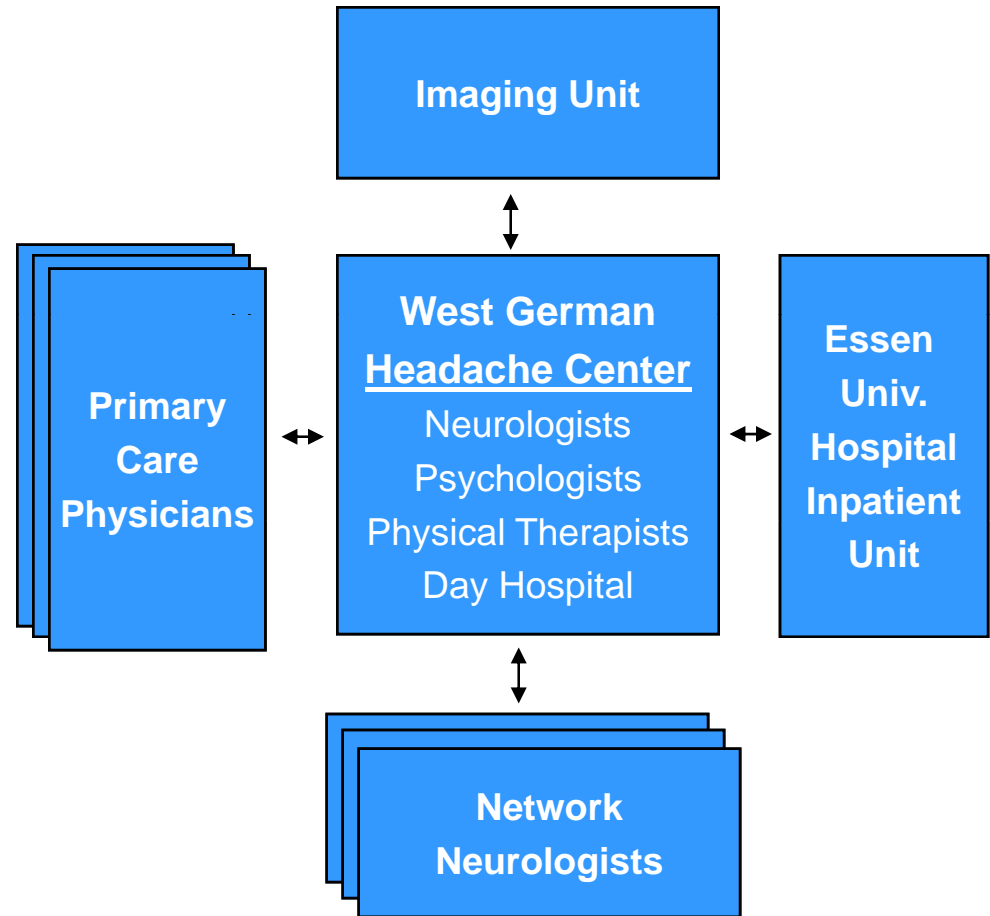
Restructuring Health Care Delivery

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

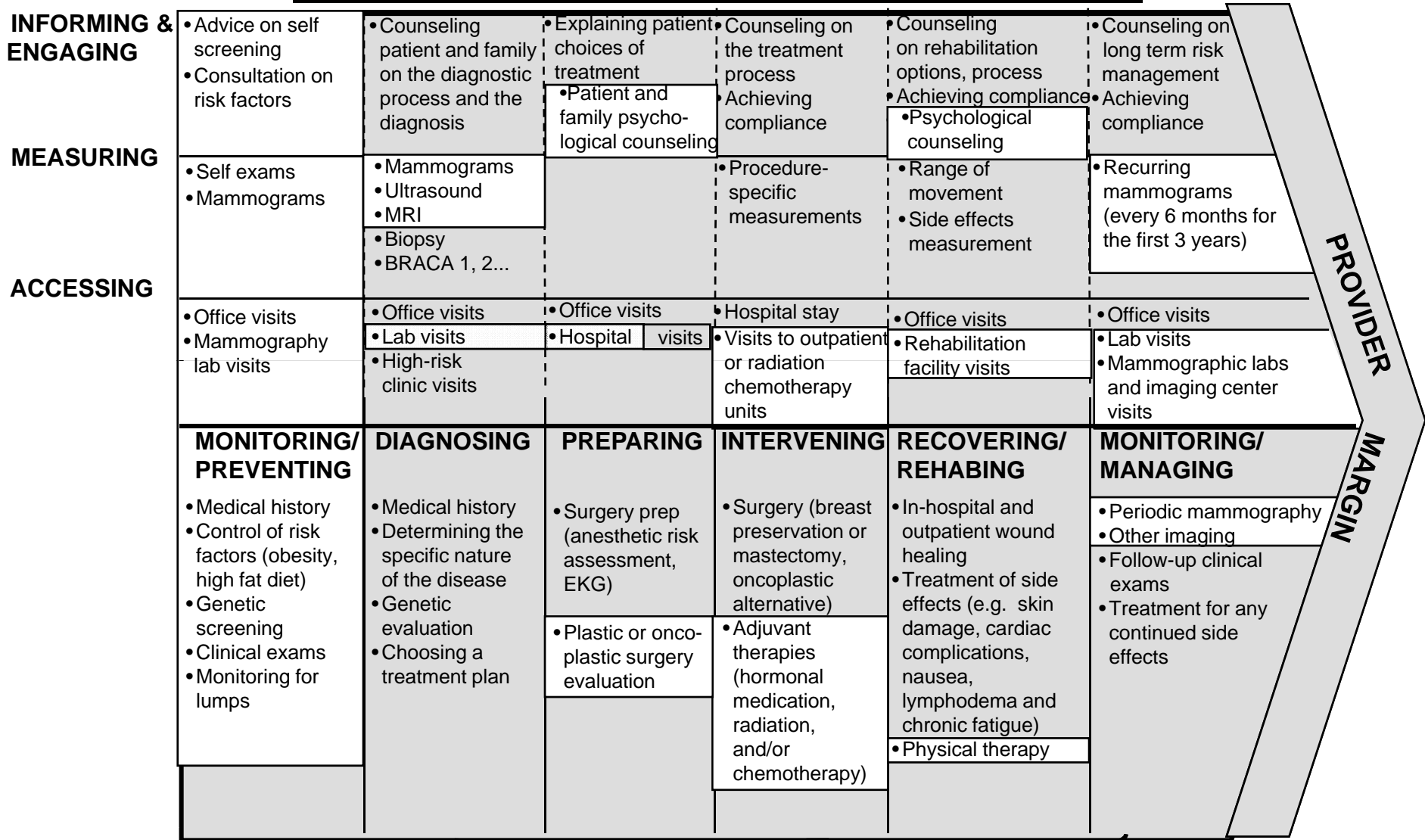
Principles of Value-Based Health Care Delivery

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

The Cycle of Care

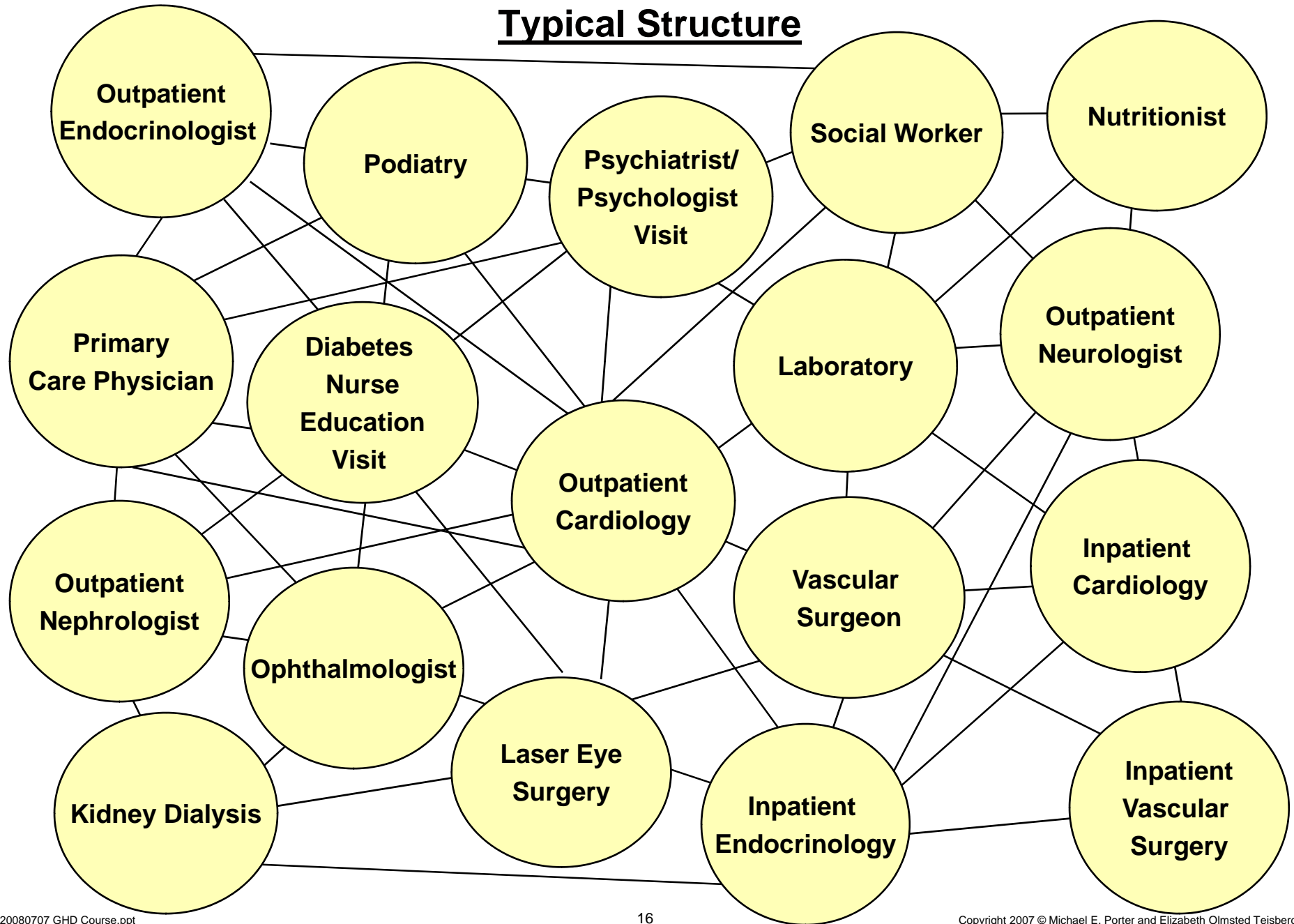
Care Delivery Value Chain for Breast Cancer



- **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

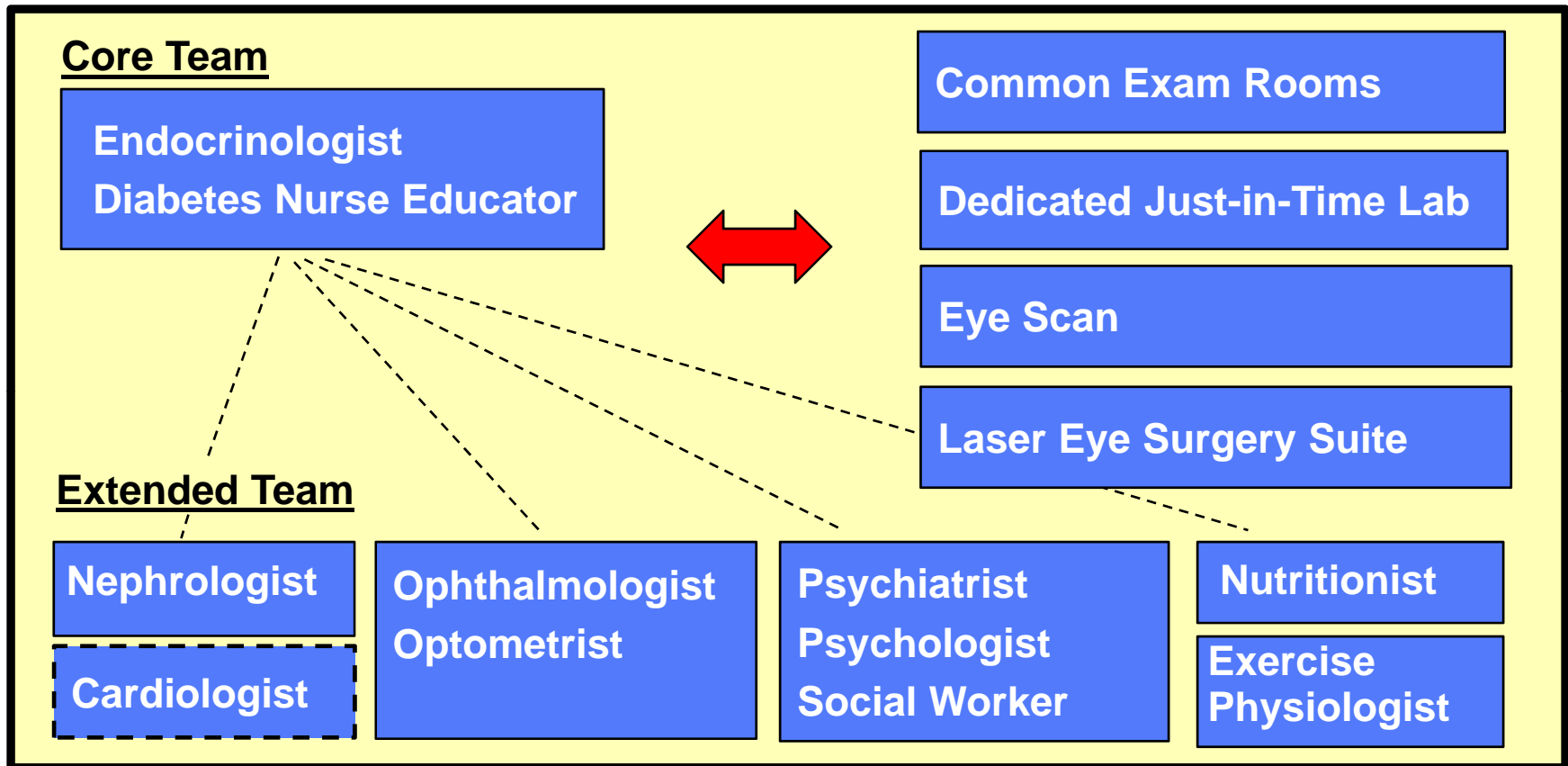
<input checked="" type="checkbox"/>	Breast Cancer Specialist
<input type="checkbox"/>	Other Provider Entities

Diabetes Care Typical Structure



Integrated Diabetes Care

Joslin Diabetes Center



Acute Complications

Hyperglycemia
Hypoglycemia

Long-Term Complications

Cardiovascular Disease
Cardiologist

Neuropathy
Vascular Surgeon
Neurologist

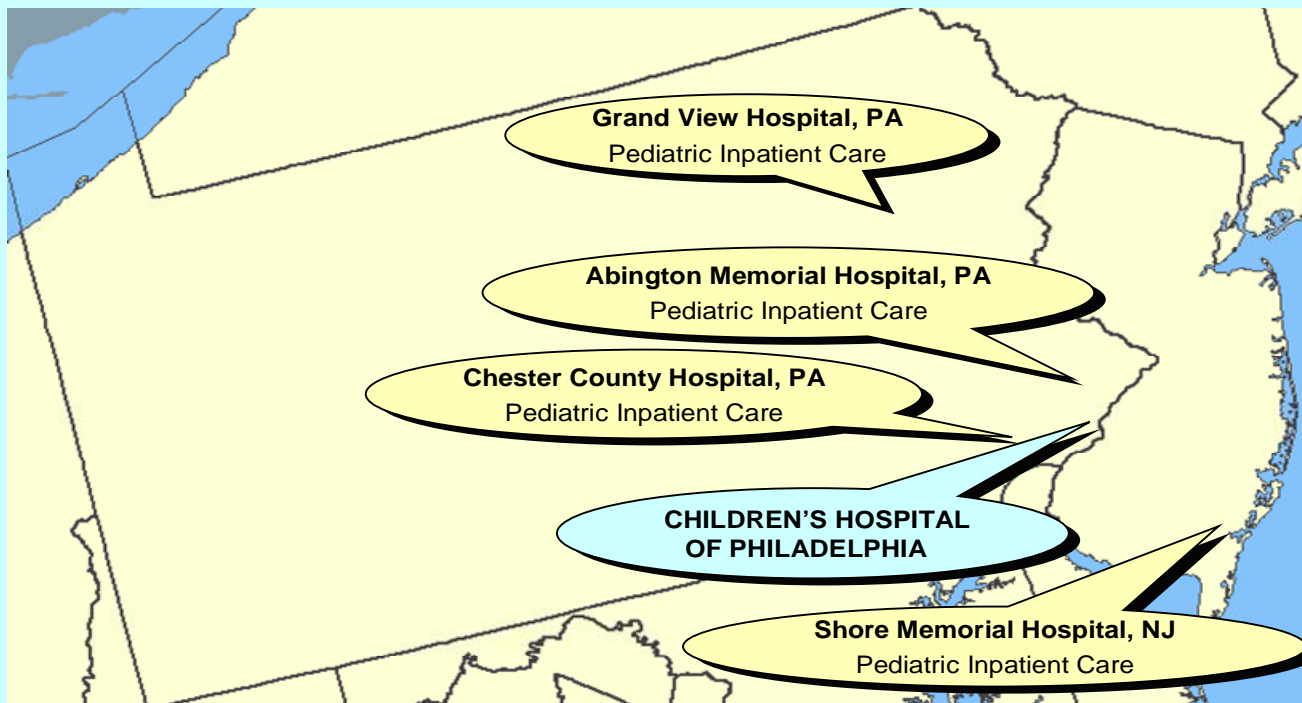
Podiatry

End Stage Renal Disease

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

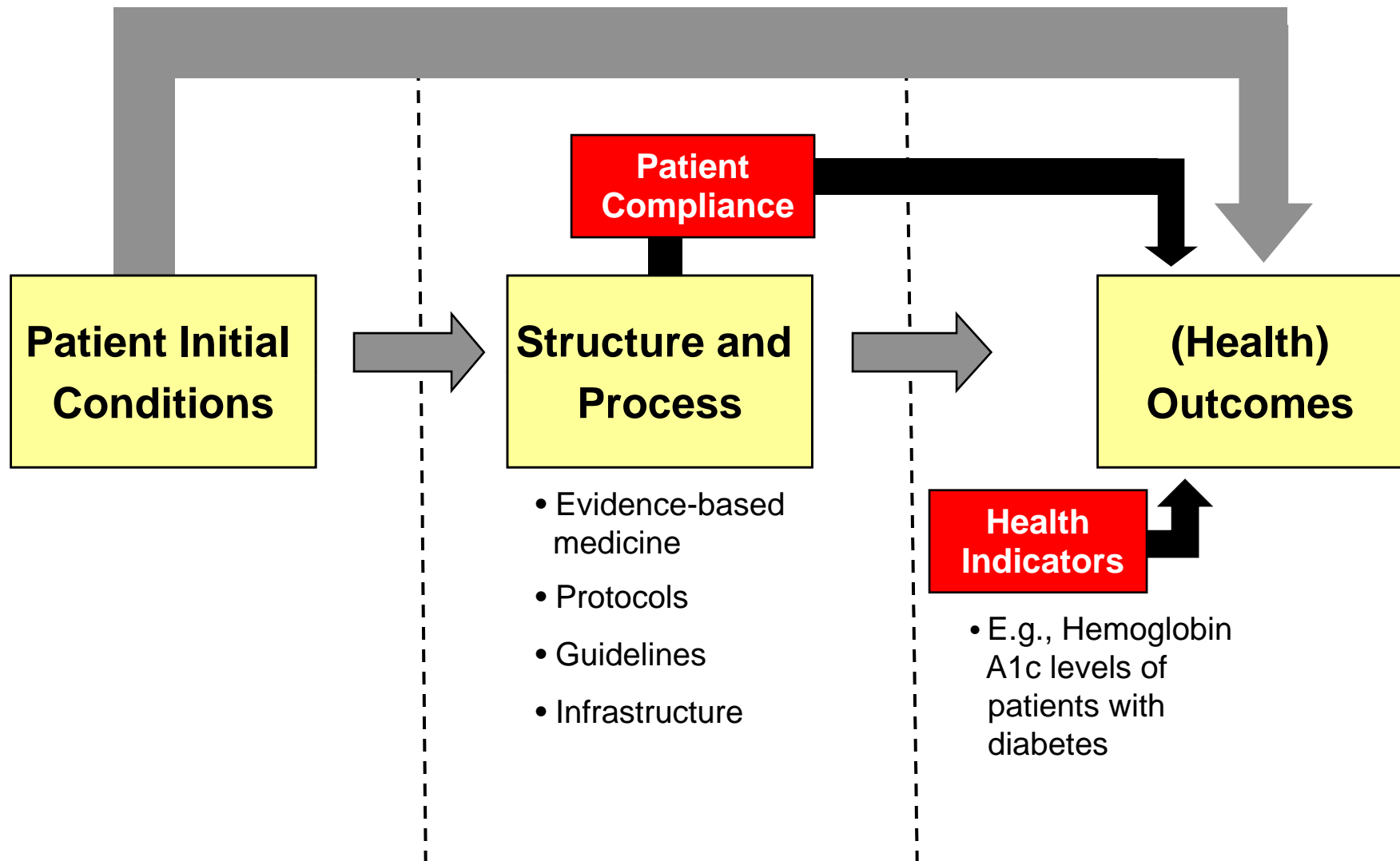
1. The goal must be **value for patients**, not lowering costs
2. Health care delivery should be organized around **medical conditions** over the **full cycle of care**
3. **Value** must be universally measured and reported

- **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)



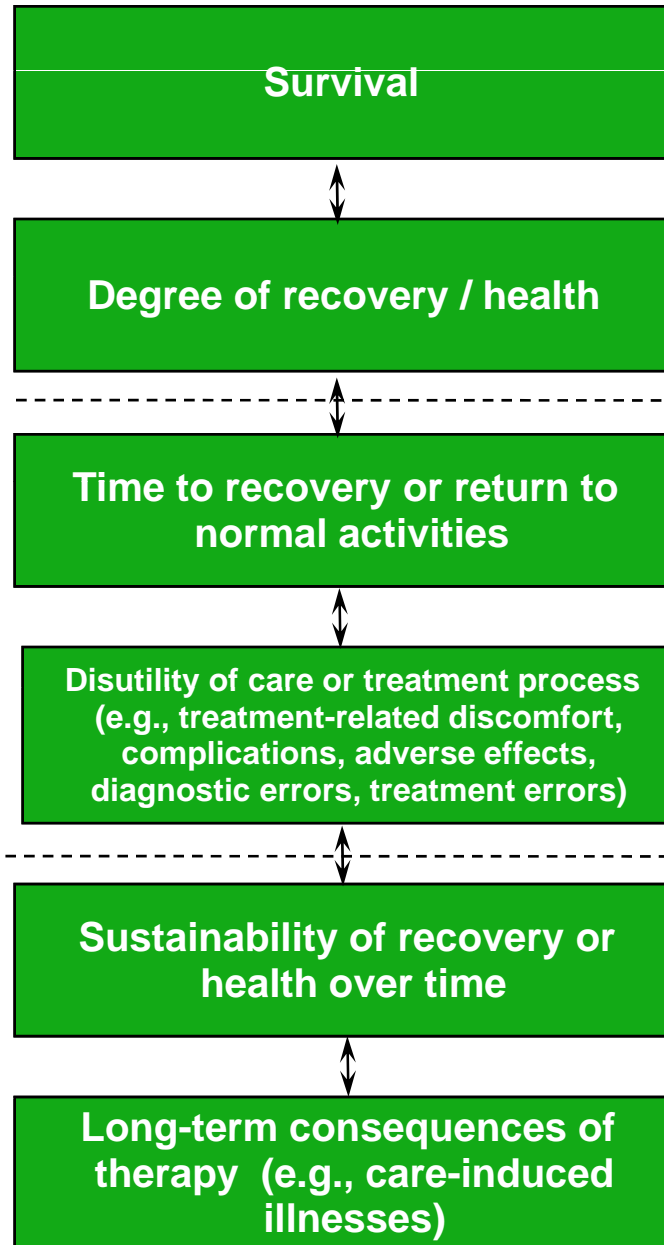
- Results must be measured at the **level at which value is created** for patients

Measuring Value in Health Care



The Outcome Measures Hierarchy

Breast Cancer



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

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

- **Time to remission**

- **Nosocomial infection**
- **Nausea**
- **Vomiting**

- **Cancer recurrence**

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

- **Breast conservation outcome**

- **Time to achieve functional status**

- **Febrile neutropenia**
- **Limitation of motion**
- **Depression**

- **Sustainability of functional status**

- **Premature osteoporosis**

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, not wait for health plans and Medicare

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

Developed World and Resource-Poor Settings Suffer from Similar Delivery Problems

Current Model

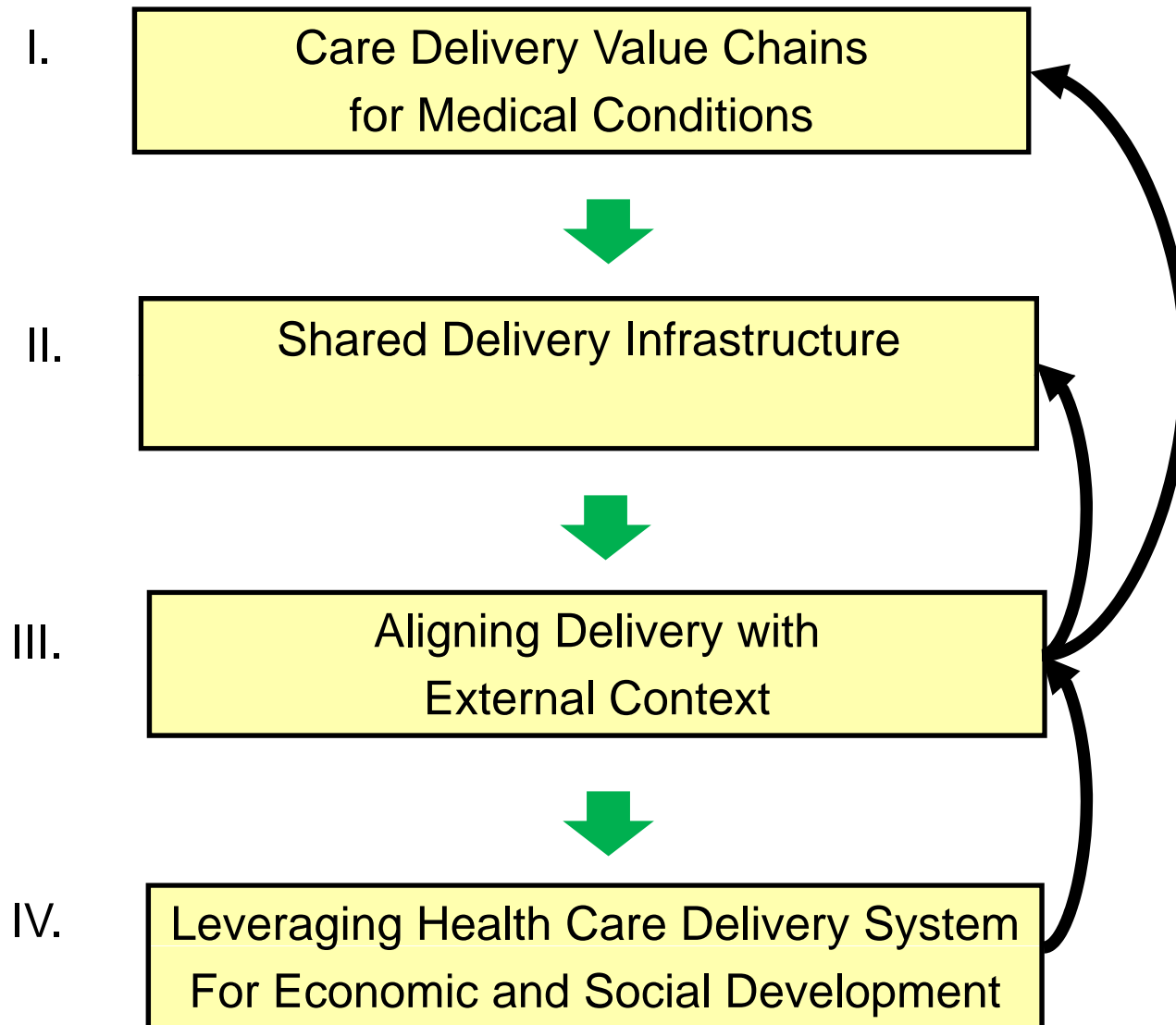
- The product is **treatment**
- Measure **volume** of services (# tests, treatments)
- Focus on **specialties** or **types** of practitioners
- Discrete **interventions**
- Individual disease **stages**
- **Fragmented** programs and entities
- **Localized** pilots and demonstration projects



New Model

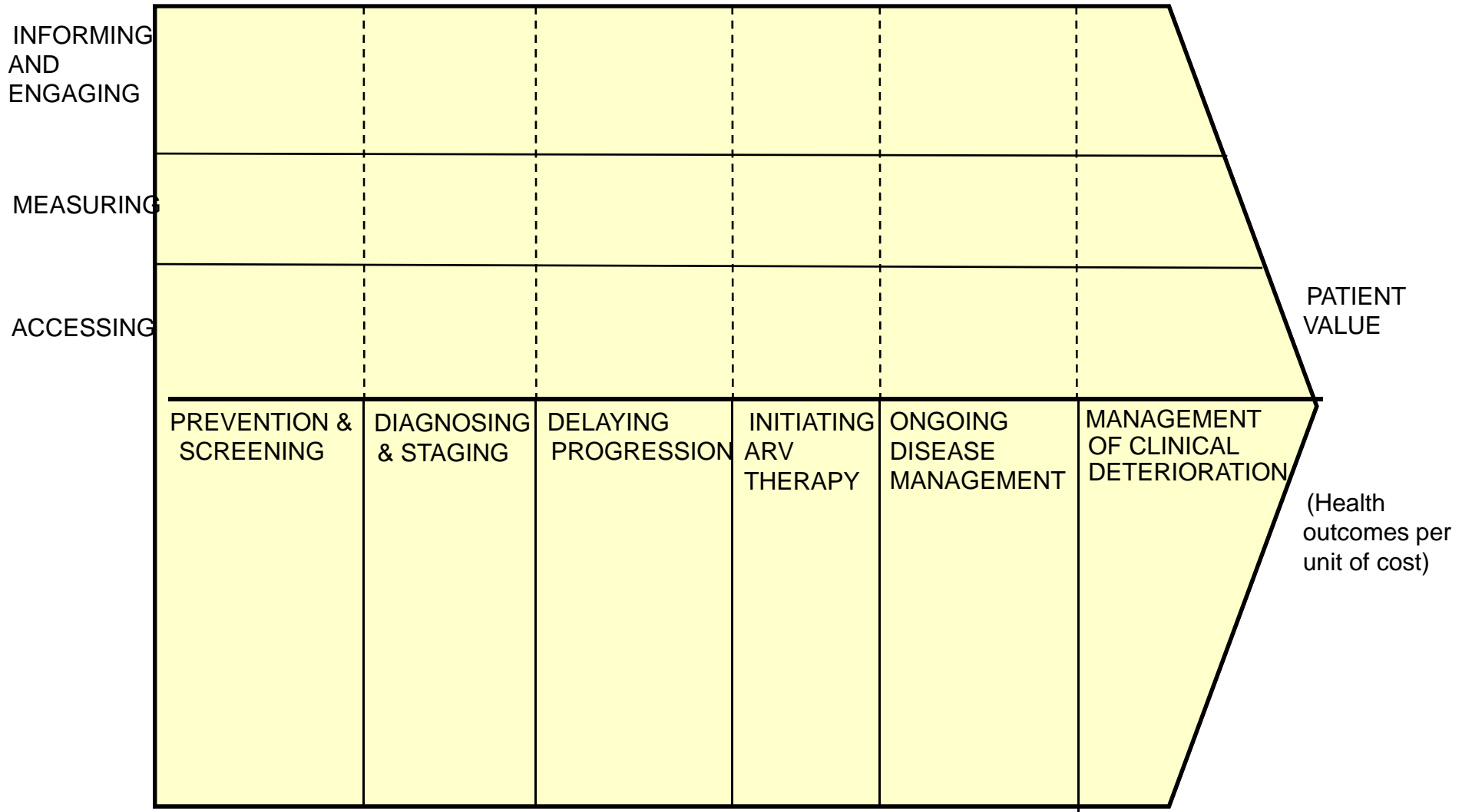
- The product is **health**
- Measure **value** of services (health outcomes per unit of cost)
- **Coordinated** and **integrated** care delivery
- **Care cycles**
- Sets of prevalent **co-occurrences**
- **Integrated** care delivery systems
- Integrated **systems across communities** and **regions**

A Framework for Global Health Delivery



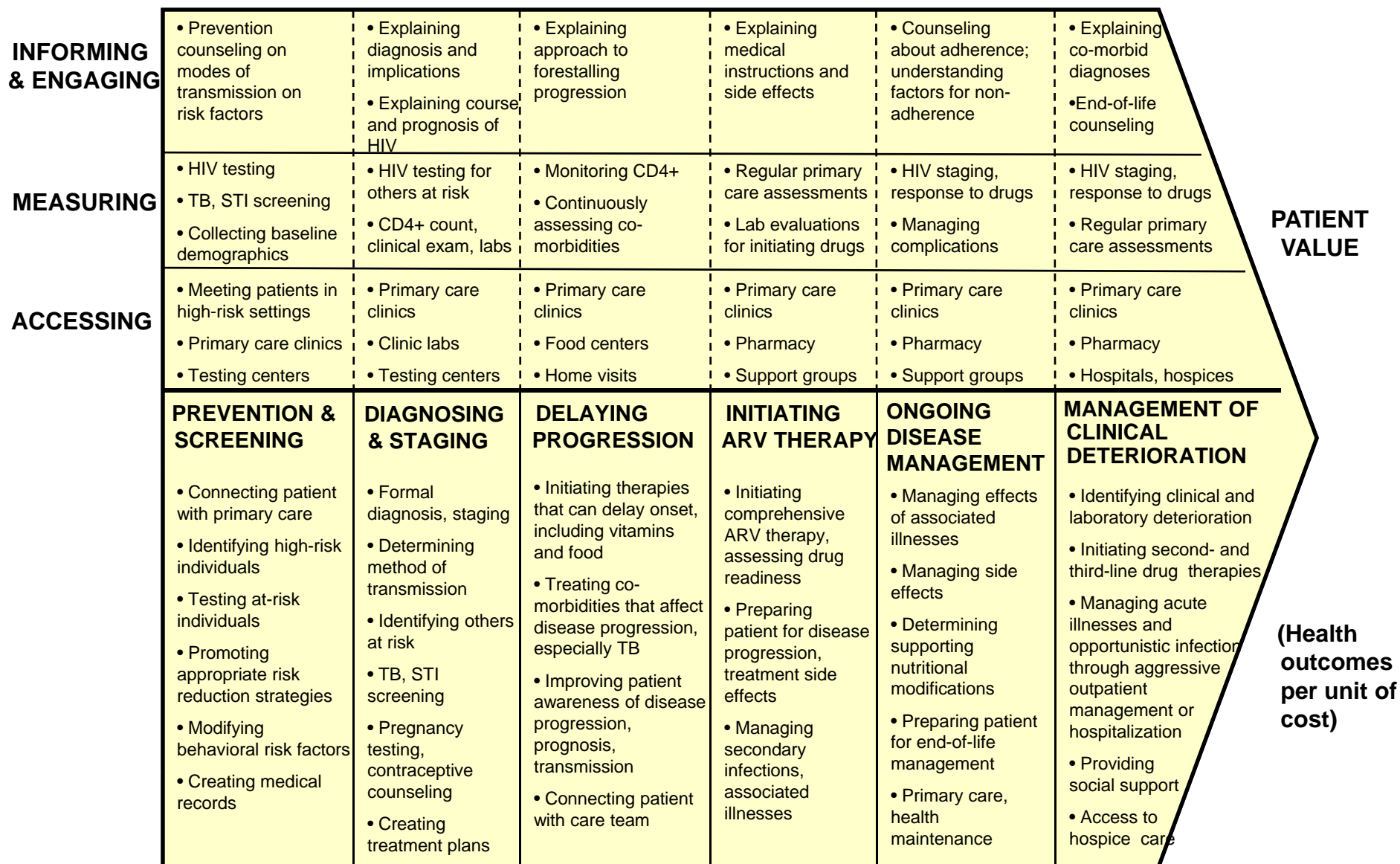
HIV/AIDS Care Delivery Value Chain

Resource-Poor Settings



The Care Delivery Value Chain

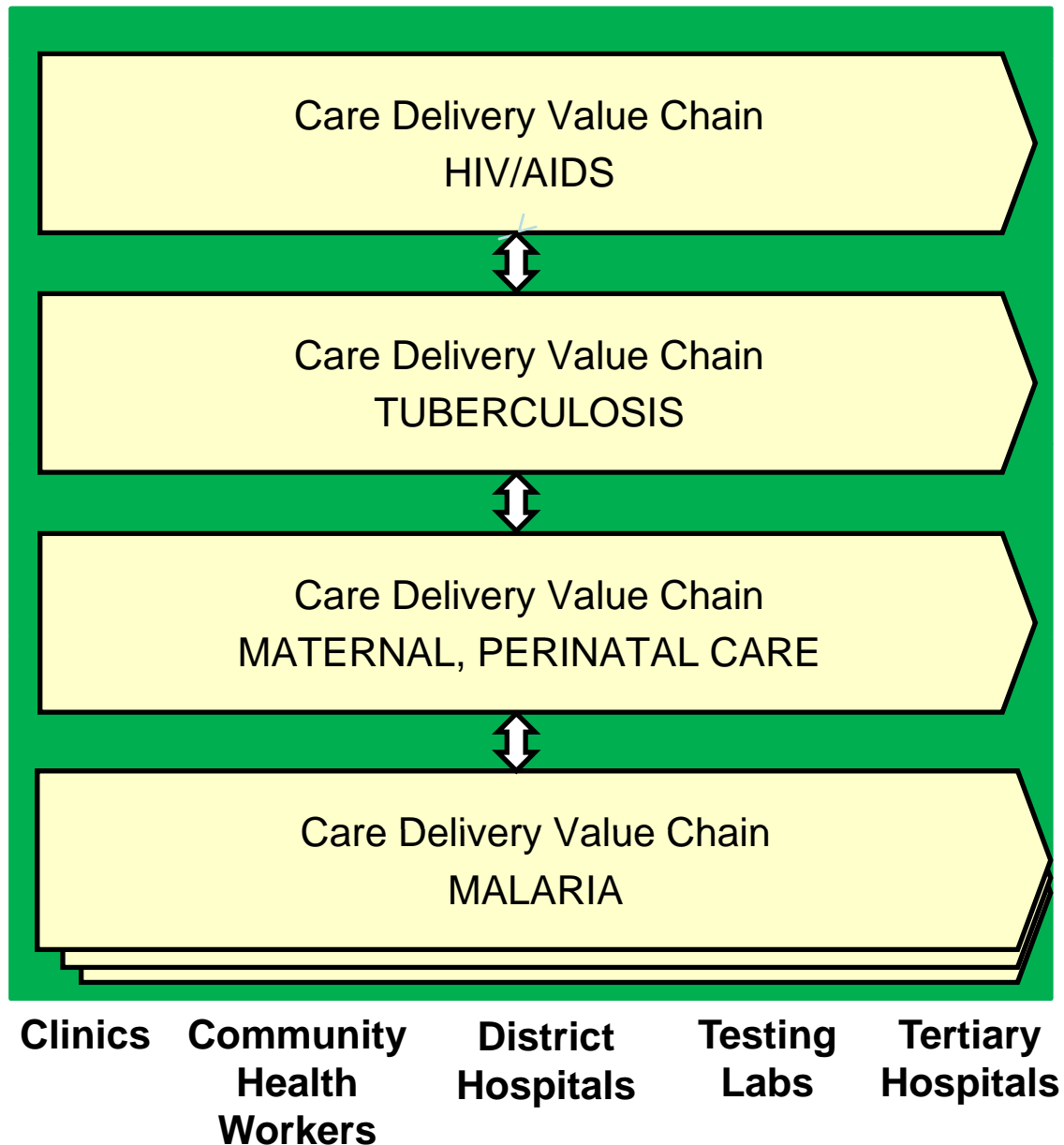
HIV/AIDS



Implications for HIV/AIDS Care - I

- **Early diagnosis** helps in forestalling disease progression
- Intensive evaluation and treatment at time of diagnosis can **forestall disease progression**
- **Improving compliance** with first stage drug therapy lowers drug resistance and the need to move to more costly second line therapies

Shared Delivery Infrastructure



Implications for HIV/AIDS Care - II

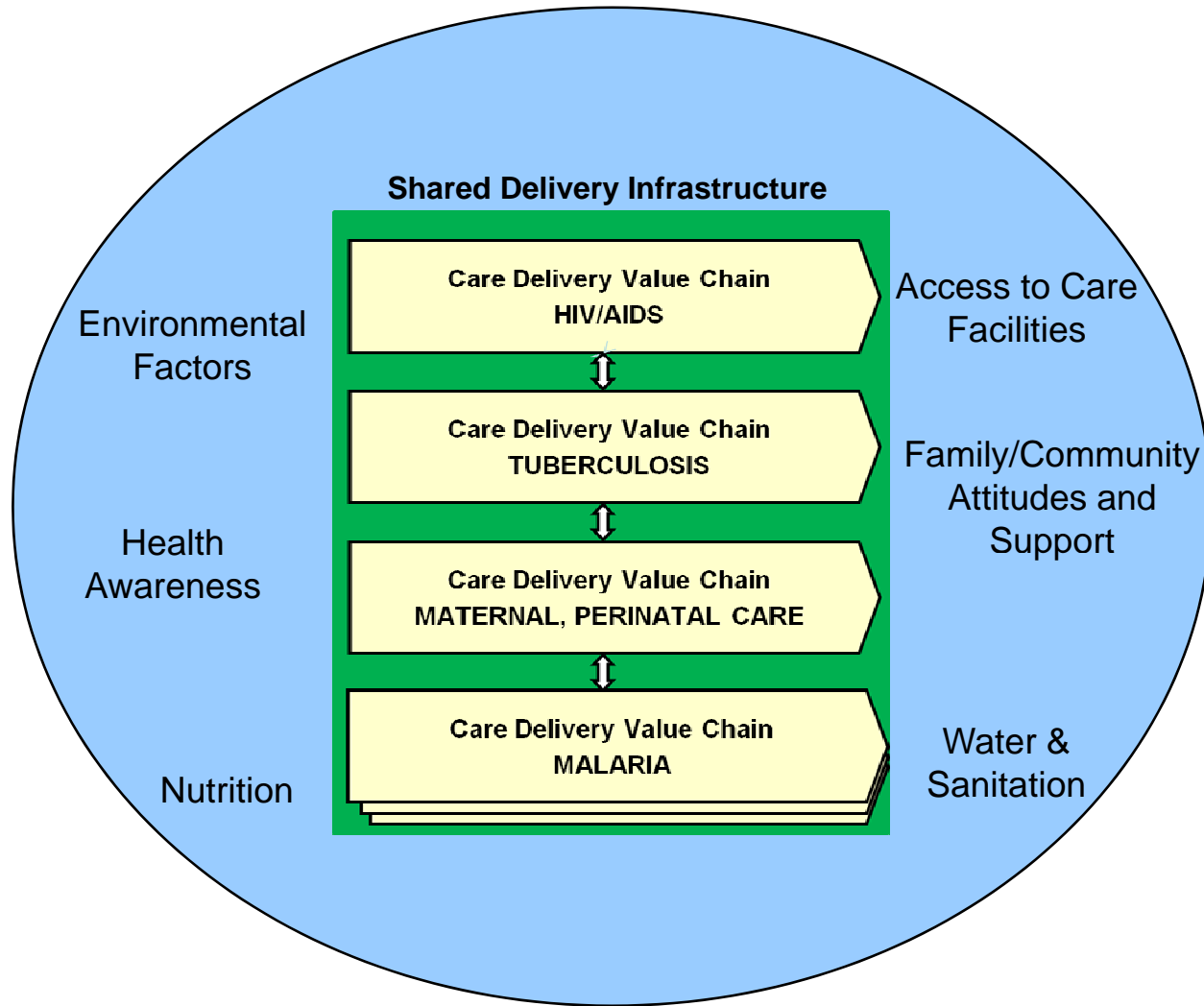
- Screening is most effective when **integrated into a primary health care system**
- Providing **maternal and child health** care services is integral to the HIV/AIDS care cycle by substantially reducing the **incidence of new cases of HIV**
- Community health workers not only improve compliance with ARV therapy but can **simultaneously address other conditions**



- Coordinated development of shared **primary and secondary care infrastructure** can improve the value of the HIV/AIDS care cycle while simultaneously improving value in the care of other diseases

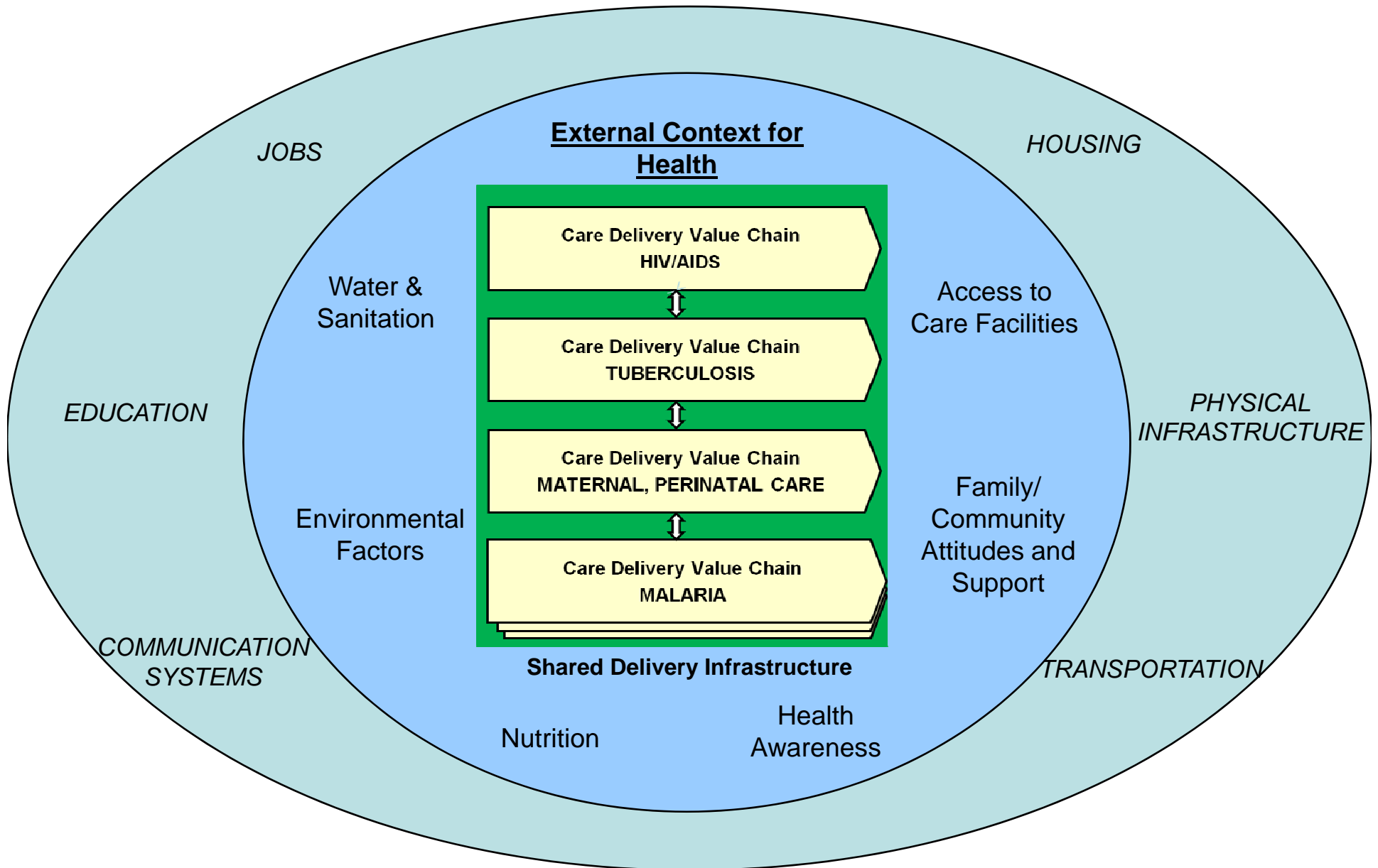
Integrating Delivery and Context

Close-In Factors



Integrating Delivery and Context

Broader Influences



Implications for HIV/AIDS Care - III

- Community health workers can have a major role in **overcoming transportation and other barriers to access and compliance** with care
- Providing nutrition support can be important to **success in ARV therapy**
- Gender dynamics **limit the use of prevention options** in some settings
- Integrating HIV screening and treatment into routine primary care facilities can help address the **social stigma** of seeking care for HIV/AIDS



- Management of **social** and **economic barriers** is critical to the treatment and prevention of HIV/AIDS

The Relationship Between Health Systems and Economic Development

Better Health Enables Economic Development

- Enables people to work
- Raises productivity

Better Health Systems Foster Economic Development

- Direct employment (health sector jobs)
- Local procurement
- Catalyst for infrastructure (e.g. cell towers, internet, and electrification)

An Opportunity for Harvard to Lead

