

Value-Based Health Care Delivery

Professor Michael E. Porter

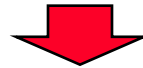
The Dartmouth Institute
September 11, 2009

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 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 create a **dynamic system** that keeps rapidly improving

Creating a Value-Based Health Care System

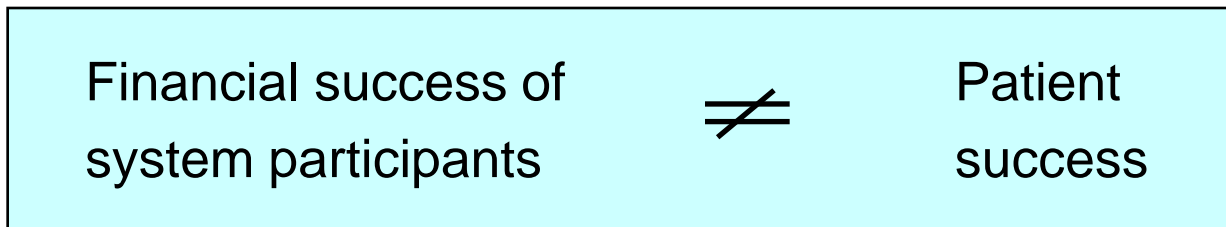
- Significant improvement in value will require **fundamental restructuring of health care delivery**, not incremental improvements

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

- Process improvements, lean production concepts, safety initiatives, disease management and other **overlays** 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**



- 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 for the care of 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

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**
3. 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
 - **Including** the most common co-occurring conditions
 - Involving **multiple** specialties and services



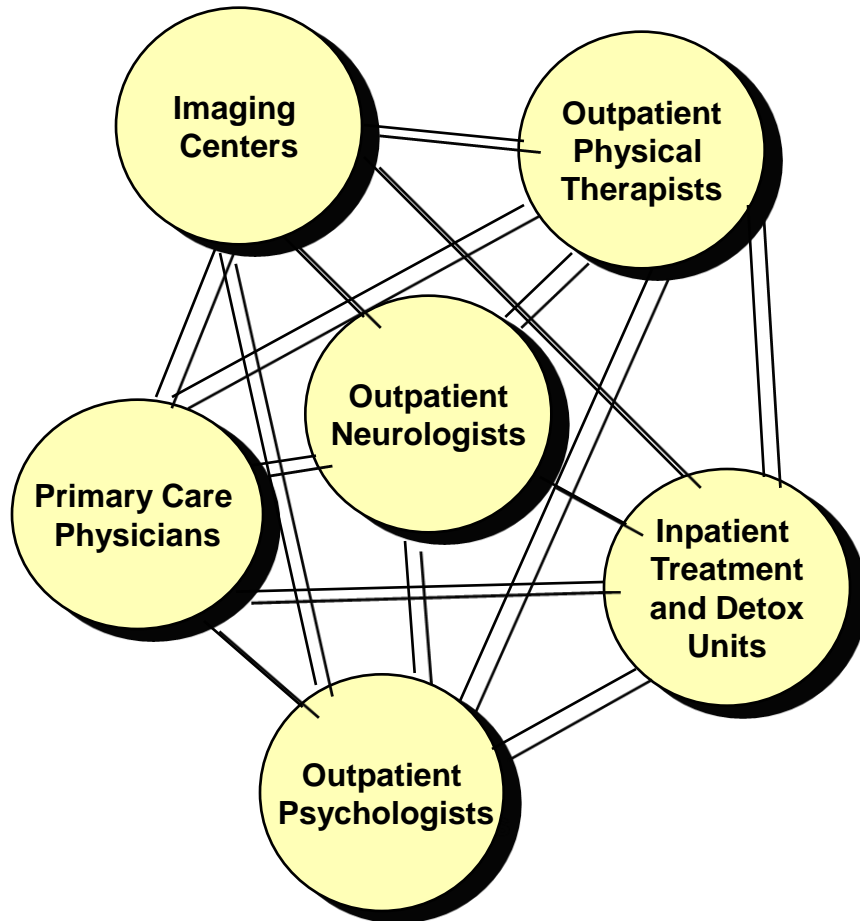
- The patient's medical condition is the **unit of value creation** in health care delivery

Restructuring Care Delivery

Migraine Care in Germany

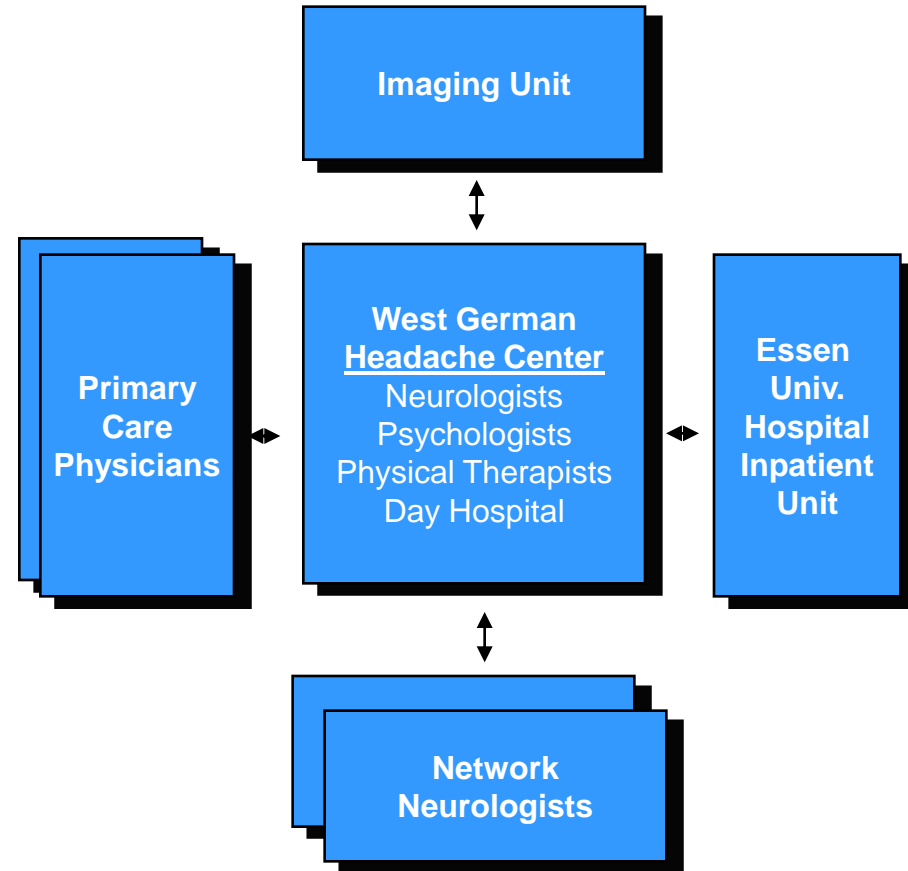
Existing Model:

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

ENGAGING	<ul style="list-style-type: none"> Advice on self screening Consultations on risk factors 	<ul style="list-style-type: none"> Counseling patient and family on the diagnostic process and the diagnosis 	<ul style="list-style-type: none"> Explaining patient treatment options/shared decision making Patient and family psychological counseling 	<ul style="list-style-type: none"> Counseling on the treatment process Education on managing side effects and avoiding complications of treatment Achieving compliance 	<ul style="list-style-type: none"> Counseling on rehabilitation options, process Achieving compliance Psychological counseling 	<ul style="list-style-type: none"> Counseling on long term risk management Achieving Compliance
	<ul style="list-style-type: none"> Self exams Mammograms 	<ul style="list-style-type: none"> Mammograms Ultrasound MRI Labs (CBC, Blood chems, etc.) Biopsy BRACA 1, 2... CT Bone Scans 	<ul style="list-style-type: none"> Labs 	<ul style="list-style-type: none"> Procedure-specific measurements 	<ul style="list-style-type: none"> Range of movement Side effects measurement 	<ul style="list-style-type: none"> MRI, CT Recurring mammograms (every six months for the first 3 years)
ACCESSING	<ul style="list-style-type: none"> Office visits Mammography lab visits 	<ul style="list-style-type: none"> Office visits Lab visits High risk clinic visits 	<ul style="list-style-type: none"> Office visits Hospital visits Lab visits 	<ul style="list-style-type: none"> Hospital stays Visits to outpatient radiation or chemotherapy units Pharmacy 	<ul style="list-style-type: none"> Office visits Rehabilitation facility visits Pharmacy 	<ul style="list-style-type: none"> Office visits Lab visits Mammographic labs and imaging center visits
	MONITORING/ PREVENTING	DIAGNOSING	PREPARING	INTERVENING	RECOVERING/ REHABING	MONITORING/ MANAGING
	<ul style="list-style-type: none"> Medical history Control of risk factors (obesity, high fat diet) Genetic screening Clinical exams Monitoring for lumps 	<ul style="list-style-type: none"> Medical history Determining the specific nature of the disease (mammograms, pathology, biopsy results) Genetic evaluation Labs 	<ul style="list-style-type: none"> Choosing a treatment plan Surgery prep (anesthetic risk assessment, EKG) Plastic or onco-plastic surgery evaluation Neo-adjuvant chemotherapy 	<ul style="list-style-type: none"> Surgery (breast preservation or mastectomy, oncoplastic alternative) Adjuvant therapies (hormonal medication, radiation, and/or chemotherapy) 	<ul style="list-style-type: none"> In-hospital and outpatient wound healing Treatment of side effects (e.g. skin damage, cardiac complications, nausea, lymphodema and chronic fatigue) Physical therapy 	<ul style="list-style-type: none"> Periodic mammography Other imaging Follow-up clinical exams Treatment for any continued or later onset side effects or complications

PROVIDER MARGIN

Breast Cancer Specialist
 Other Provider Entities

The Care Delivery Value Chain

Acute Knee-Osteoarthritis Requiring Replacement

ENGAGING	<ul style="list-style-type: none"> Education on promotion of exercise, weight reduction, nutrition 	<ul style="list-style-type: none"> Education on meaning of diagnosis and prognosis of disease – short and long term outcomes Expectation setting 	<ul style="list-style-type: none"> Counseling on benefits/drawbacks of surgery, preparation for recovery Shared Decision Making Educating and calibrating expectations timeline/ location for recovery 	<ul style="list-style-type: none"> Maintenance and reassurance of expectations and the importance of rehab Set expectations for surgery recovery and immediate steps Team consistency 	<ul style="list-style-type: none"> Counseling on necessity of rehab, rehab exercises, and compliance Monitoring compliance 	<ul style="list-style-type: none"> Counsel to maintain exercise and healthy weight
MEASURING	<ul style="list-style-type: none"> Self reported loss of function Self reported pain WOMAC SF-36 	<ul style="list-style-type: none"> MRI, X-Ray results Measure loss of cartilage Alterations in subchondral bone WOMAC SF-36 	<ul style="list-style-type: none"> WOMAC, SF 36 Range of motion Pain Blood pressure Blood labs WOMAC SF-36 	<ul style="list-style-type: none"> Heart rate Temperature Blood pressure Blood loss Complications 	<ul style="list-style-type: none"> Range of motion Walking?, independent living? Work missed? Pain level UTI Infections WOMAC SF-36 	<ul style="list-style-type: none"> Range of motion Activities Pain level Missed work WOMAC SF-36
ACCESSING	<ul style="list-style-type: none"> PCP office visits Health clubs Physical therapy office 	<ul style="list-style-type: none"> Specialty office visits Imaging 	<ul style="list-style-type: none"> Outpatient visit Surgical prep room 	<ul style="list-style-type: none"> In OR , recovery, orthopedic floor at hospital or specialty surgery center 	<ul style="list-style-type: none"> Home, Skilled Nursing Facility, or Rehab Facility PT at home or at PT office 	<ul style="list-style-type: none"> PCP Office Health Club
MONITORING/ PREVENTING	DIAGNOSING	PREPARING	INTERVENING	RECOVERING/ REHABING	MONITORING/ MANAGING	
<p>Monitor</p> <ul style="list-style-type: none"> PCP medical exam Referral to specialist if problem persists <p>Prevent</p> <ul style="list-style-type: none"> Prescription of anti-inflammatory medicines* Exercise Weight loss 	<ul style="list-style-type: none"> Review MRI, X-Ray results Measure loss of cartilage Measure alterations in subchondral bone Orthopedic/ Rheumatologic Evaluation 	<p>Overall Prep</p> <ul style="list-style-type: none"> Home assessment Weight-loss Exercise/Strength building <p>Surgical Prep</p> <ul style="list-style-type: none"> Cardiology, pulmonary consults Blood labs Preoperative physical examination 	<p>Anesthesia Options</p> <ul style="list-style-type: none"> -General -Epidural 2 day 3 day <p>Surgical Procedure Options</p> <ul style="list-style-type: none"> -Device -Cement -Minimally Invasive <p>Pain Management</p>	<p>Living</p> <ul style="list-style-type: none"> Short term nursing for daily living support (e.g. showering, dressing) <p>Physical Therapy</p> <ul style="list-style-type: none"> Extensive daily or twice daily PT sessions to build up lost muscle and assure range of motion Education on exercises to perform between PT sessions Continuous motion machine 	<ul style="list-style-type: none"> Regular consultations as needed Long term exercise Revision if necessary Prophylactic antibiotics 	

PROVIDER MARGIN

Orthopedic Specialist
 Other Provider Entities

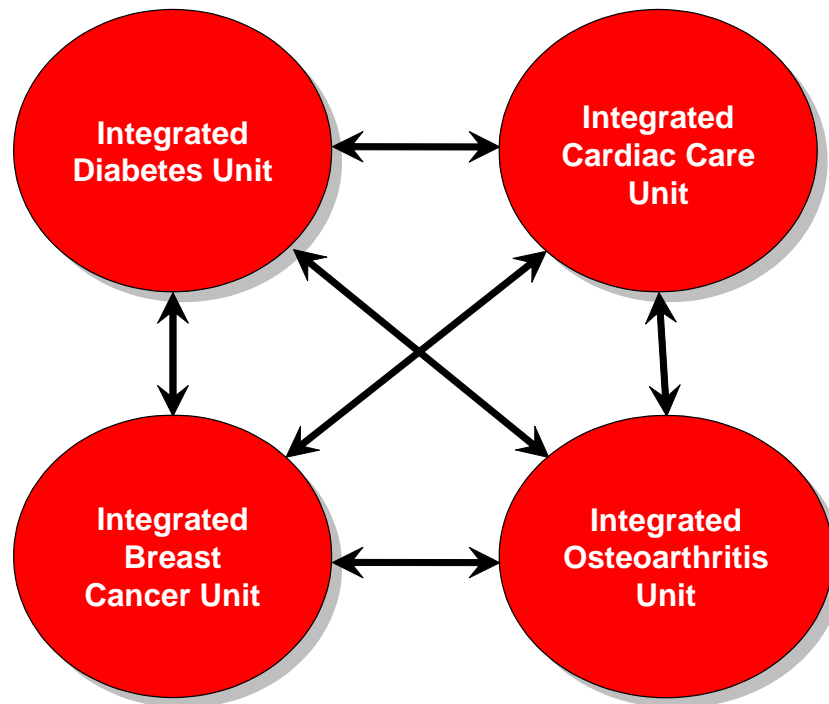
Integrated Cancer Care

MD Anderson Head and Neck Center

Dedicated	Shared
<p>Dedicated MDs</p> <ul style="list-style-type: none"> - 8 Medical Oncologists - 12 Surgical Oncologists - 8 Radiation Oncologists - 5 Dentists - 1 Diagnostic Radiologist - 1 Pathologist - 4 Opthamologists 	<p>Shared MDs</p> <ul style="list-style-type: none"> - Endocrinologists - Other specialists as needed (cardiologists, plastic surgeons, etc.)
<p>Dedicated Skilled Staff</p> <ul style="list-style-type: none"> - 22 Nurses - 3 Social Workers - 4 Speech Pathologists - 1 Nutritionist - 1 Patient Advocate 	<p>Shared Skilled Staff</p> <ul style="list-style-type: none"> - Dietician - Inpatient Nutritionist - Radiation Nutritionists - Smoking Cessation Counselors
<p>Dedicated Patient Access Center</p>	
<p>Dedicated Facilities</p> <ul style="list-style-type: none"> - Dedicated Outpatient Unit 	<p>Shared Facilities (located nearby)</p> <ul style="list-style-type: none"> - Radiation Therapy - Pathology Laboratory - Ambulatory Chemotherapy - ORs (grouped by common needs) - Inpatient Wards <ul style="list-style-type: none"> - Surgical Wards - Medical Wards

Coordinating Care Across IPUs

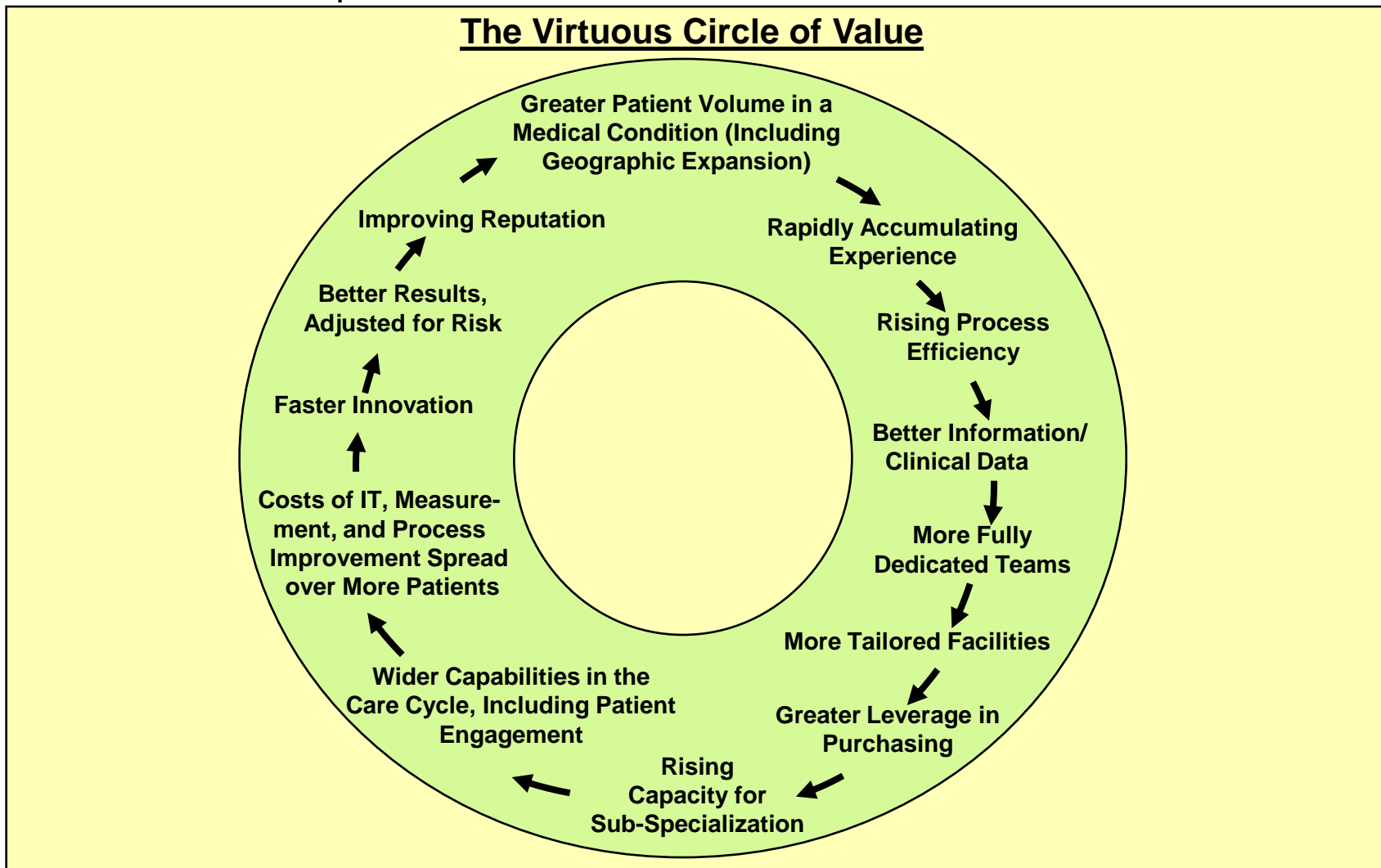
Patients with Multiple Medical Conditions



- The **primary** organizational structure for care delivery should be around the forms of integration required for **every patient**
 - The current system is organized around the **exception**, not the rule
- **Supplementary mechanisms** should be utilized to manage coordination across primary units
- IPUs will **greatly simplify** coordination of care for patients with multiple medical conditions

Principles of Value-Based Health Care Delivery

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



- 
- The virtuous circle **extends across geography** when care for a medical condition is integrated across locations

Fragmentation of Hospital Services

Japan

Procedure	Number of hospitals performing the procedure	Average number of procedures per provider per year	Average number of procedures per provider per week
Craniotomy	1,098	71	1.4
Operation for gastric cancer	2,336	72	1.4
Operation for lung cancer	710	46	0.9
Joint replacement	1,680	50	1.0
Pacemaker implantation	1,248	40	0.8
Laparoscopic procedure	2,004	72	1.4
Endoscopic procedure	2,482	202	3.9
Percutaneous transluminal coronary angioplasty	1,013	133	2.6

Source: Porter, Michael E. and Yuji Yamamoto, *The Japanese Health Care System: A Value-Based Competition Perspective*, Unpublished White Paper, September 1, 2007

IPUs and Value

Outcomes

Cost

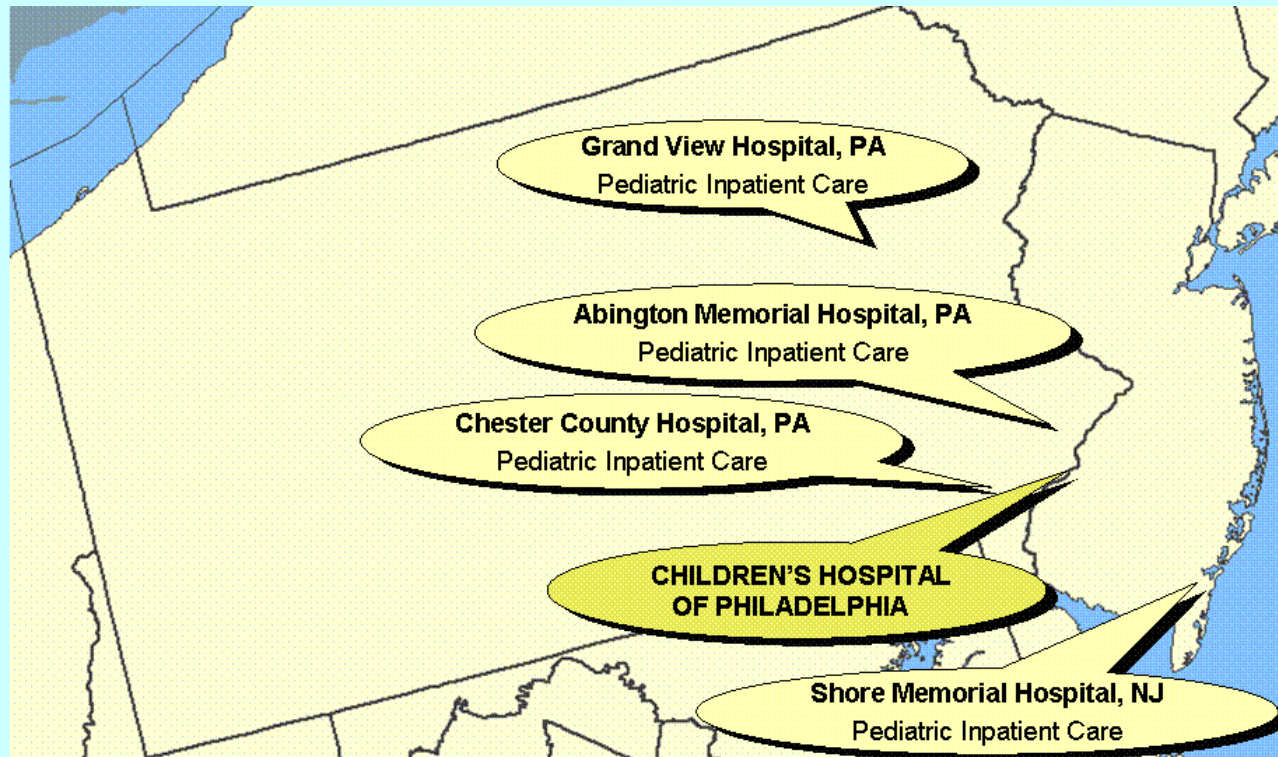
- **Better decisions** in terms of diagnosis and treatment
 - Specialized experience and expertise
 - Better coordination/peer review
 - Better integration of co-occurrences
- **Better execution** of treatment
 - Specialized experience and expertise
 - Tailored facilities
 - Seamless management of common co-occurrences
- **Faster** cycle time
- Improved **patient compliance and engagement** with care
- Full range of **support services** needed to achieve success for the patient (e.g. nutrition, rehabilitation, counseling, psychological support)
- Vastly greater patient **convenience**

- **Greater provider efficiency**
- **Better utilization of facilities**
- **Streamlined administrative costs**

Principles of Value-Based Health Care Delivery

5. **Integrate care across facilities** and **regions**, 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 geographies**

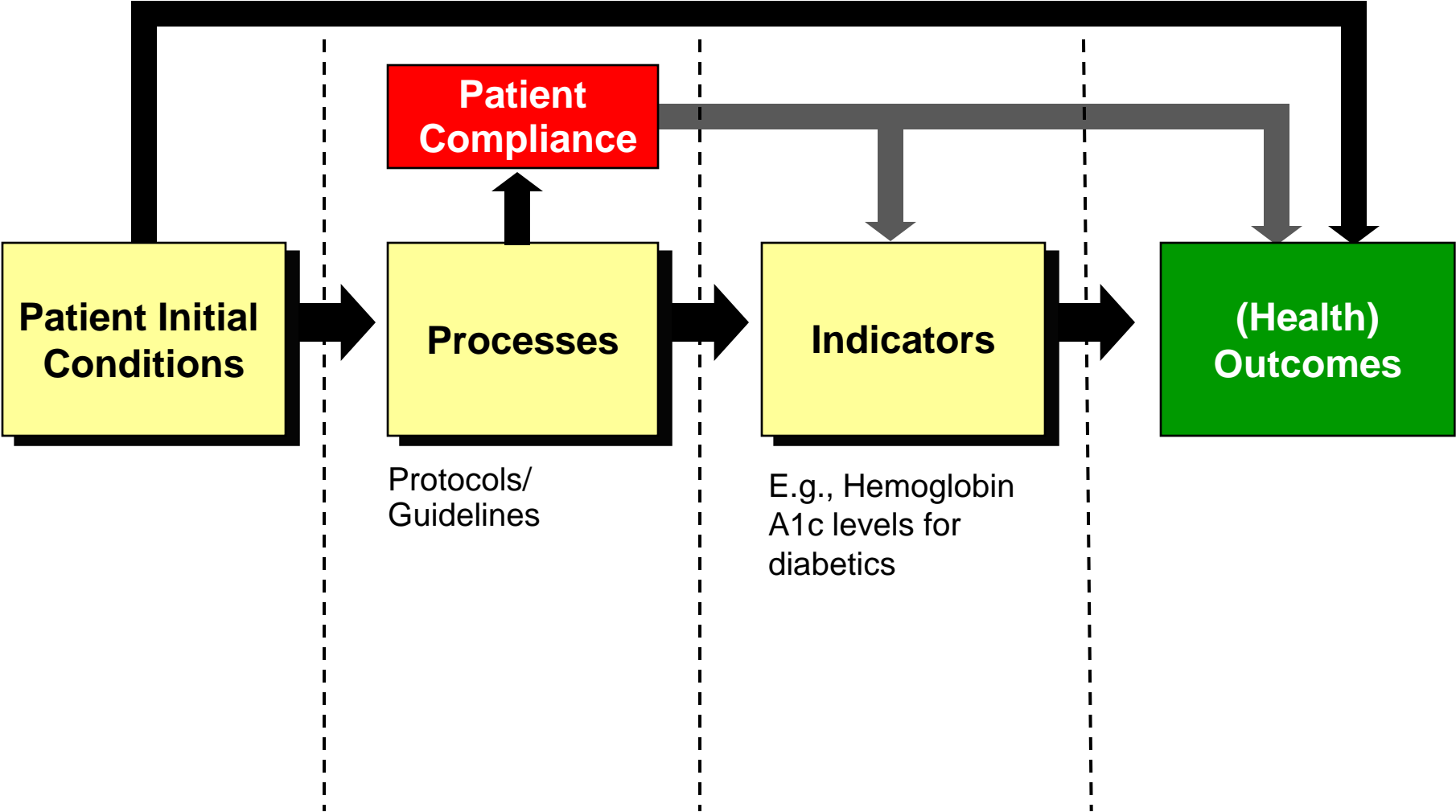
Principles of Value-Based Health Care Delivery

1. Set the goal as **value for patients**, not containing costs
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3. Care delivery should be organized around **medical conditions** 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 **across regions**, rather than duplicating services in stand-alone units
6. **Measure** and **report** outcomes and ultimately value for every provider for every medical condition

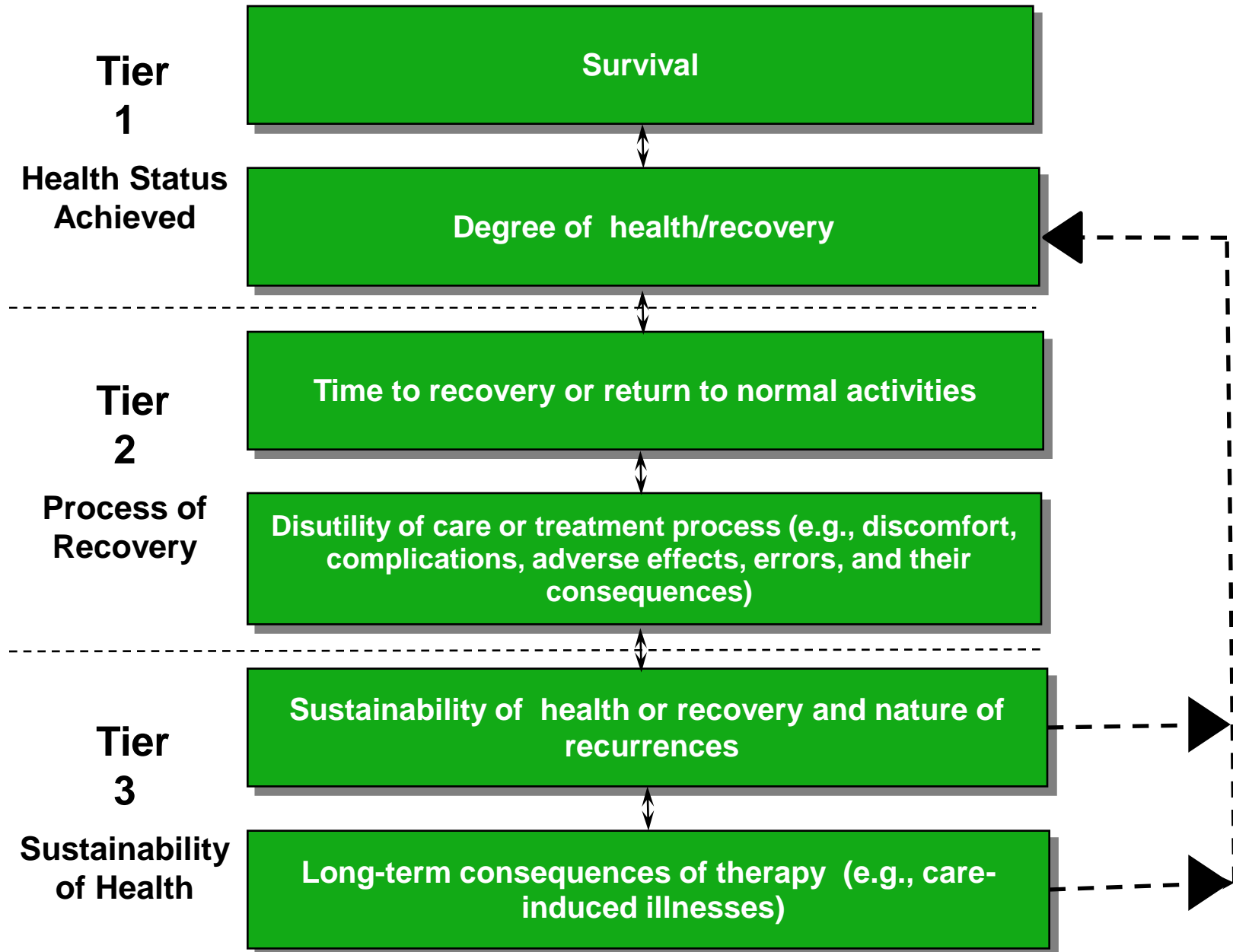


- Outcomes should be measured for **each medical condition** over the **cycle of care**
 - Not for interventions or short episodes
 - Not for practices, departments, clinics, or entire hospitals
 - Not separately for types of service (e.g. inpatient, outpatient, tests, rehabilitation)
- Results must be measured at **the level at which value is created** not traditional organizational units

Measuring Value in Health Care

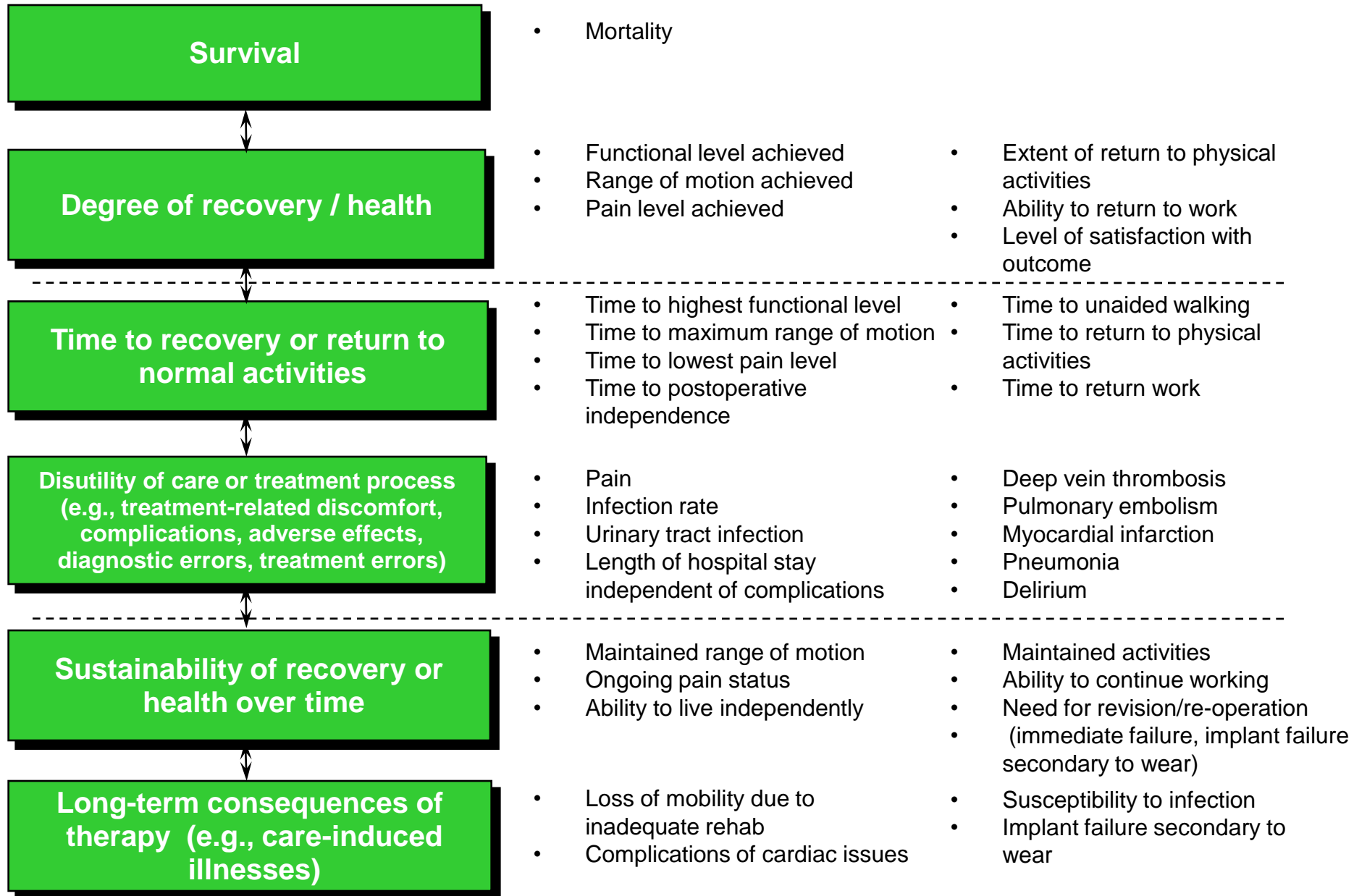


The Outcome Measures Hierarchy



The Outcomes Measures Hierarchy

Acute Knee-Osteoarthritis Requiring Replacement



Principles of Value-Based Health Care Delivery

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4. Provider **experience**, **scale**, and **learning** at the medical condition level drive value improvement
5. **Integrate care across facilities** and **across regions**, rather than duplicate services in stand-alone units
6. **Measure** and **report** outcomes and ultimately value for every provider for every medical condition
7. **Align reimbursement** with value and reward innovation

- **Bundled reimbursement** for **cycles of care**, not payment for discrete treatments or services, short episodes, global budgets, or capitation
- 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

Principles of Value-Based Health Care Delivery

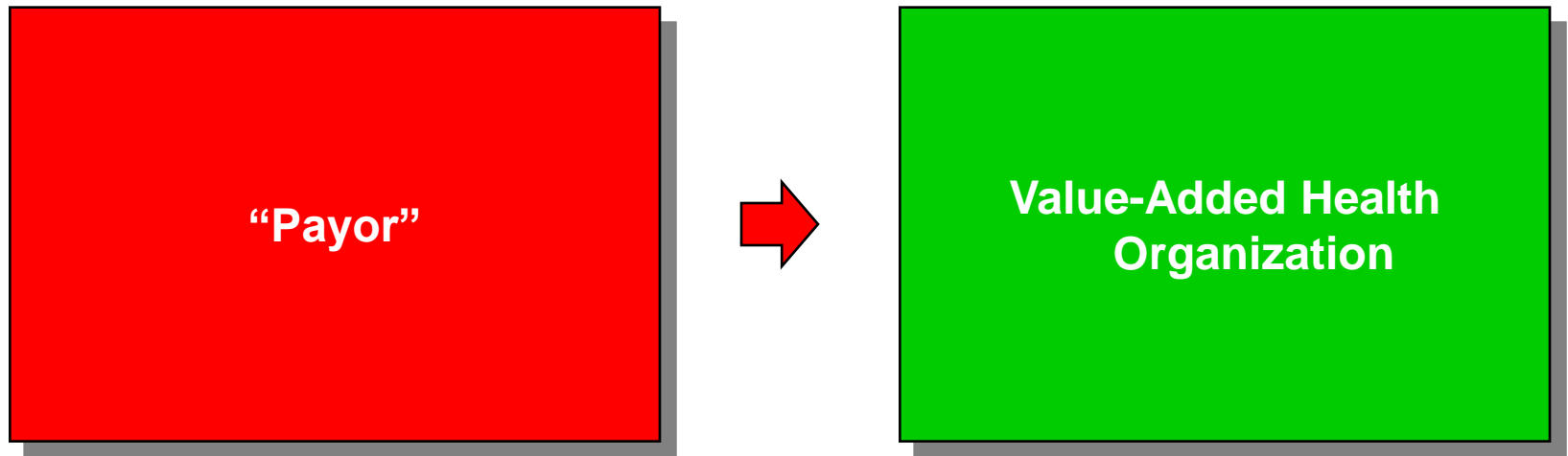
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6. **Measure** and **report** outcomes and ultimately value for every provider for every medical condition
7. **Align reimbursement** with value and reward innovation
8. Utilize information technology to enable **restructuring of care delivery** and **measuring results**, rather than treating it as a solution itself

- Common data definitions
- Precise interoperability standards
- Architecture for combining all types of data (e.g. notes, images) for each patient over time
- Encompass the full care cycle, including referring entities
- Templates for medical conditions to enhance the user interface
- Accessible to all involved parties

Value-Based Health Care Delivery: Implications for Providers

- Organize around **integrated practice units** (IPUs)
 - Employ formal **partnerships** and **alliances** with other organizations involved in the care cycle
 - Measure **outcomes** and **costs** for every patient by medical condition
 - Lead the development of **new bundled reimbursement models**
 - System Integration: **specialize** and **integrate** services across facilities
 - **Rationalize service lines/ IPUs** across facilities to improve volume, avoid duplication, and enable excellence
 - Clinically integrate care **across facilities** within an IPU structure
 - Common organizational unit across facilities
 - Offer specific services at the **appropriate facility**
 - e.g. acuity level, cost level, benefits of convenience
 - Formally link **primary care** IPUs to specialty IPUs
 - Grow high-performing practices **across regions**
- 
- Implement an integrated **electronic medical record** system to support these functions

Value-Based Healthcare Delivery: Implications for Health Plans



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

Current Model

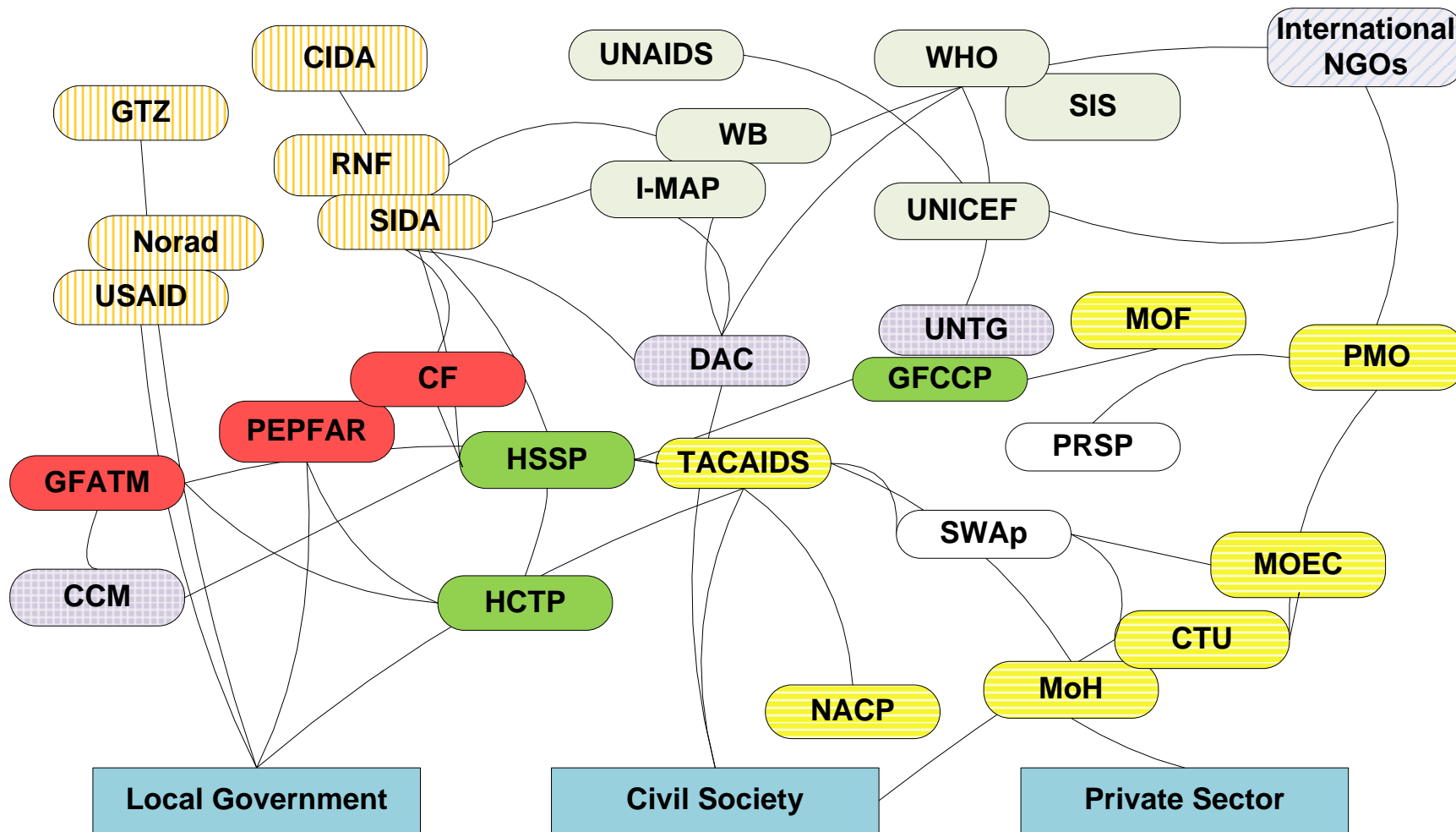
- The product is **treatment**
- Measure **volume** of services (# tests, treatments)
- Focus on overall facilities, **specialties** or **types** of practitioners
- Discrete **interventions**
- **Individual** diseases or overall facilities
- **Fragmented, localized,** pilots. programs and entities



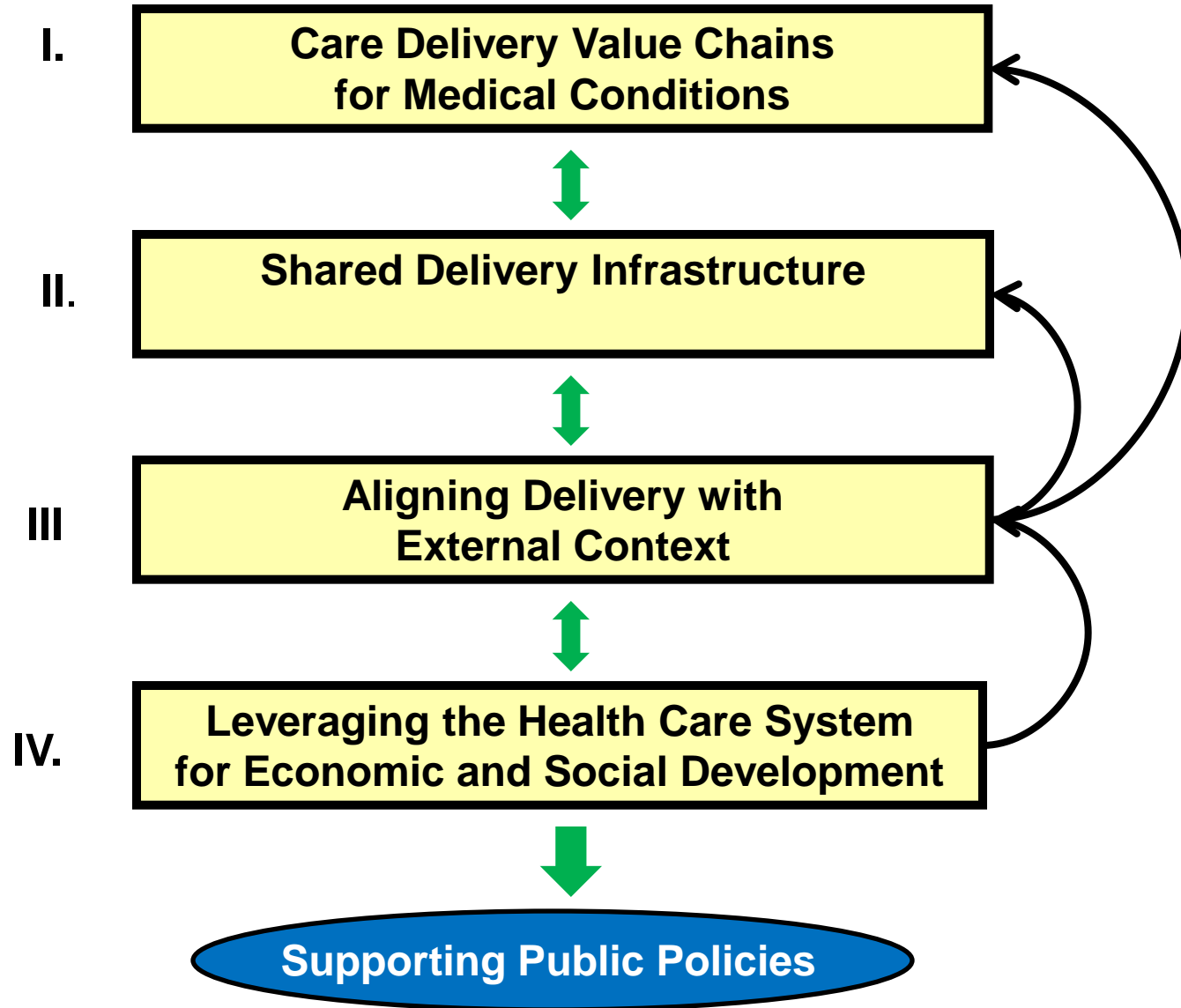
New Model

- 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

Relationships Between Various Stakeholders in Tanzania

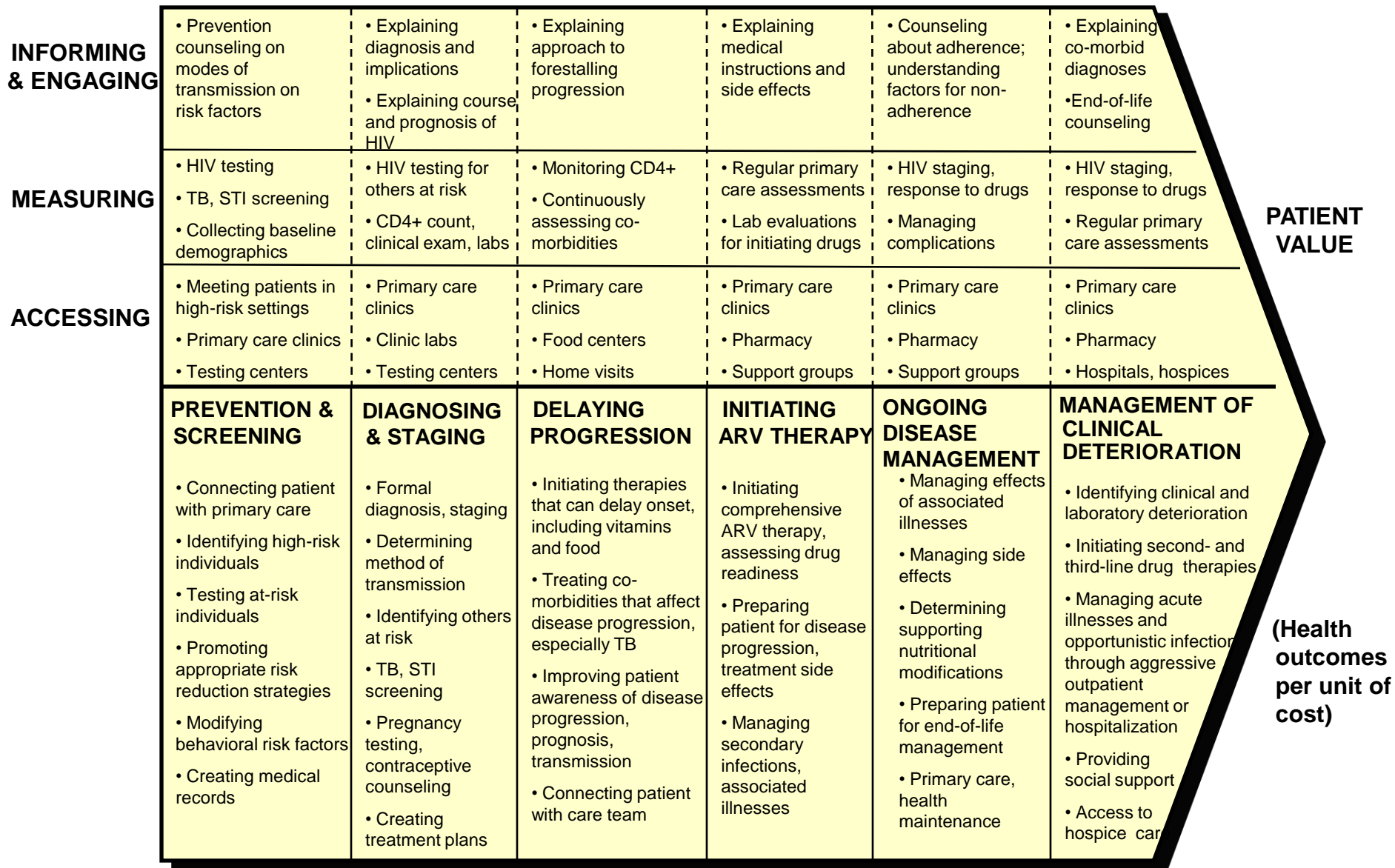


A Framework for Global Health Delivery



The Care Delivery Value Chain

HIV/AIDS

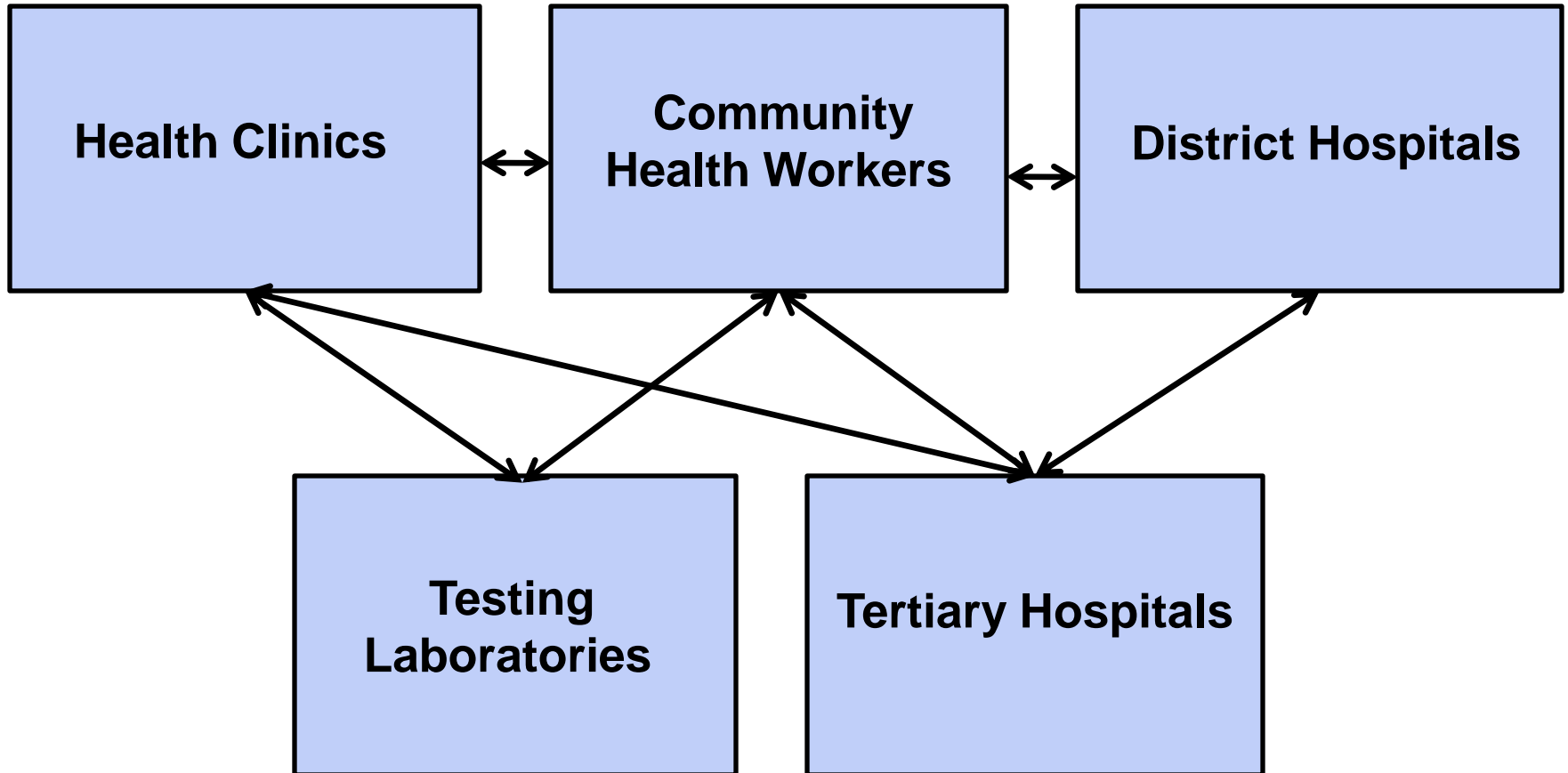


Care Delivery Value Chain

Implications for HIV/AIDS Care

- **Early diagnosis** helps in forestalling disease progression
- **Intensive evaluation and treatment at the time of the 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

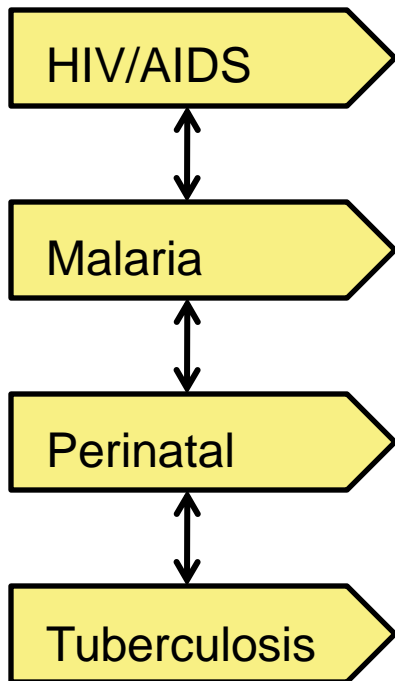


Cross Cutting Issues

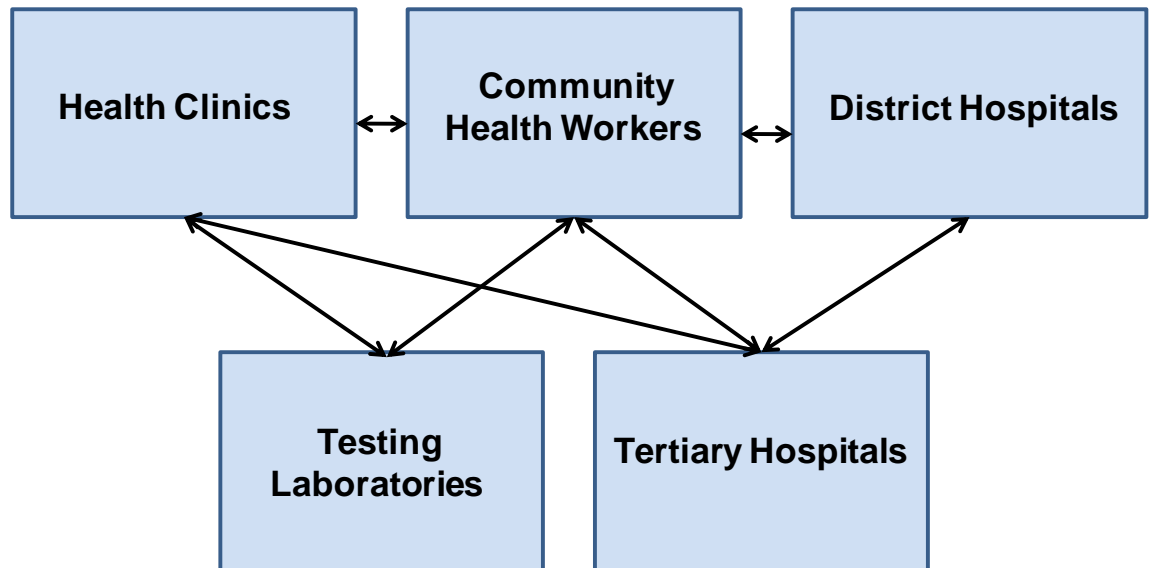
- Supply Chain Management
- Human Resource Development
- Insurance and Financing

Integrating “Vertical” and “Horizontal”

Care Delivery Value Chains



Shared Delivery Infrastructure

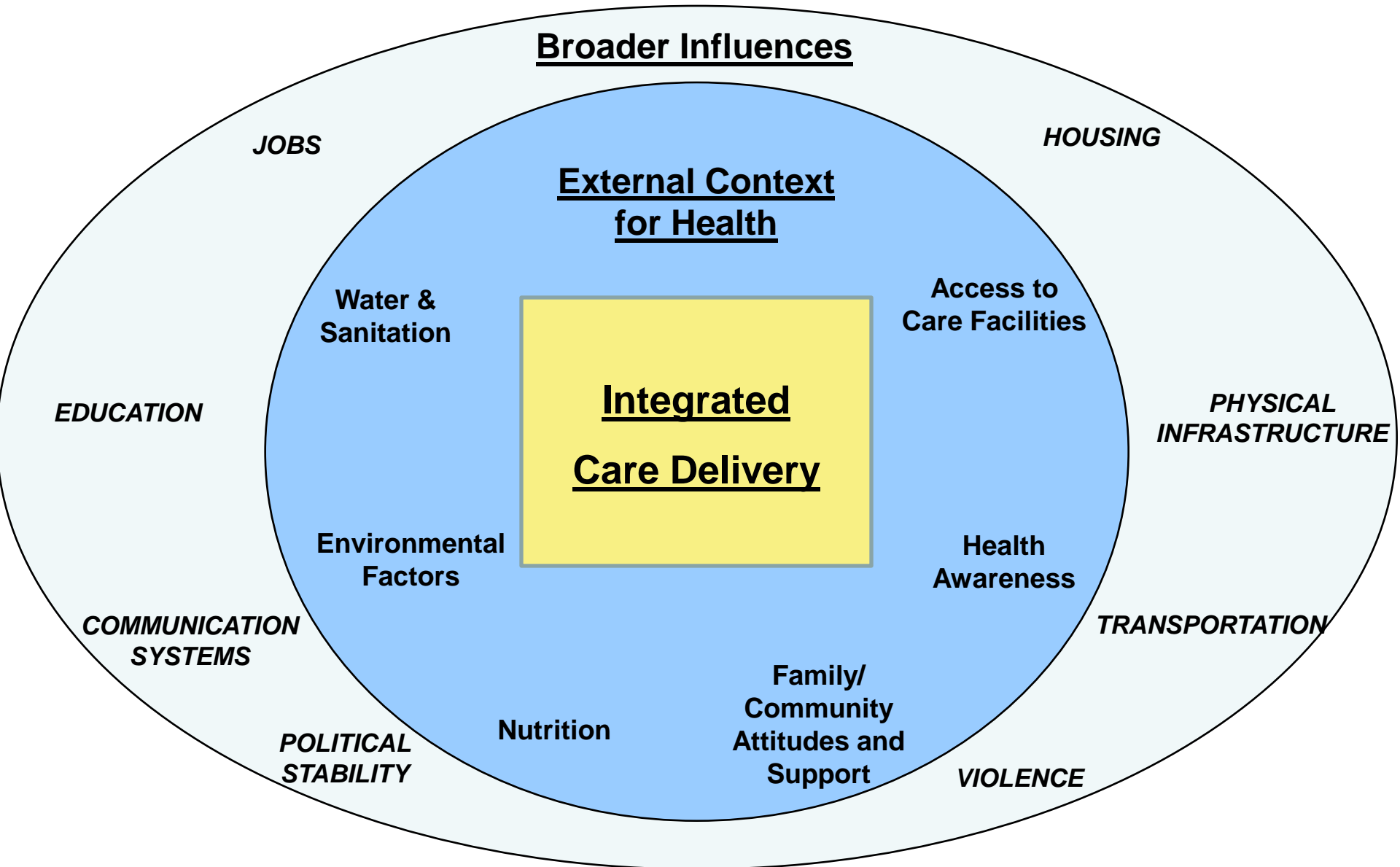


Shared Delivery Infrastructure

Implications for HIV/AIDS Care


- 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**

Integrating Delivery and Context



Integrating Care Delivery and Social/Economic Context

Implications for HIV/AIDS Care

- 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**
 - Integrating HIV screening and treatment into routine primary care facilities can help address the **social stigma** of seeking care for HIV/AIDS
 - Gender dynamics **limit the use of prevention options** in some settings
- 
- Management of **social** and **economic barriers** is critical to the treatment and prevention of HIV/AIDS

The Relationship Between Health Systems and Economic Development

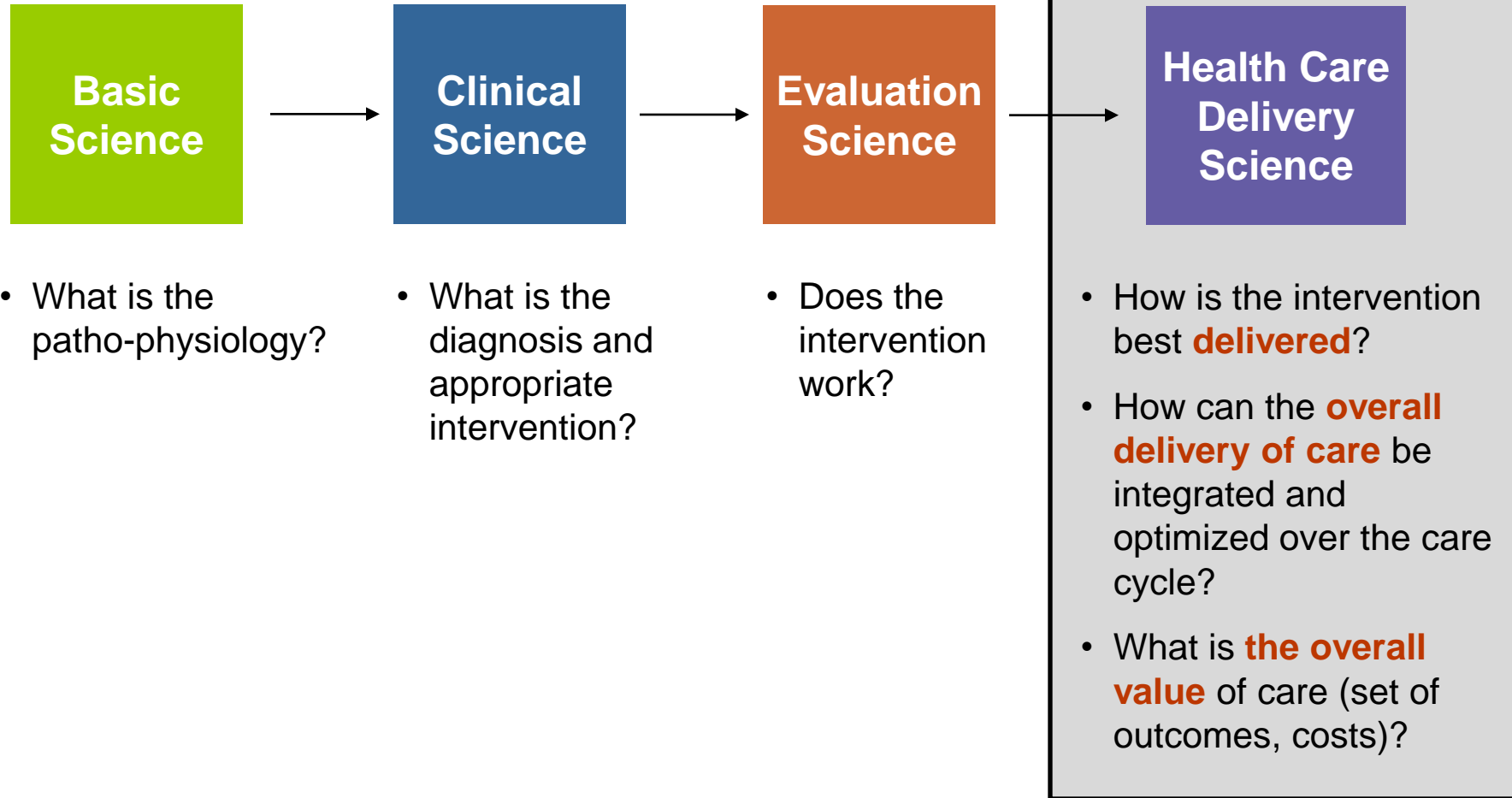
Better Health Enables Economic Development

- Enables people to work
- Raises productivity

Health System Development **Fosters** Economic Development

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

A New Field in Global Health



Value-Based Health Care Delivery Curriculum

Advanced Economy

Teaching Materials:

- Case studies
- Teaching notes
- Videos of case discussions
- Videos of guest protagonists
- Videos of topic lectures
- Video footage of profiled organizations

Articles and Course Notes:

- Papers on specific aspects of value-based health care delivery
- A series of white papers evaluating health care systems:
 - Finland
 - Germany
 - Sweden
 - Japan

Value-Based Health Care Delivery

Advanced Economy Case Studies

Completed Case Studies

- Brigham and Women's Hospital: Shapiro Cardiovascular Center
- Commonwealth Care Alliance: Elderly and Disabled Care
- The Cleveland Clinic: Growth Strategy 2008
- The Dartmouth-Hitchcock Medical Center: Spine Care
- Global Health Partner: Obesity Care
- In-Vitro Fertilization: Outcomes Measurement
- The Joslin Diabetes Center
- Partners In Health: HIV Care in Rwanda
- Pitney Bowes: Employer Health Strategy
- ThedaCare: System Strategy
- The University of Texas MD Anderson Cancer Center: Interdisciplinary Cancer Care
- The West German Headache Center: Integrated Migraine Care

Near Completion

- Aetna: Health Insurance Strategy
- The Children's Hospital of Philadelphia: Network Strategy
- DaVita Village Health: Integrating Renal Care
- Highland District County Hospital: Gastroenterology Care
- Koo Foundation Sun-Yat Sen Cancer Center: Breast Cancer Care in Taiwan
- The Nurse Family Partnership: Maternal and Child Health
- Park Nicollet Health Services: Diabetes Care
- The UCLA Health System: Organ Transplantation

Value-Based Health Care Delivery Curriculum

Global Health Delivery

Teaching Materials:

- Case studies
- Teaching notes
- Videos of case discussions
- Videos of guest protagonists
- Videos of topic lectures
- GHD Online

Articles and Course Notes:

- Applying the Care Delivery Value Chain: HIV/AIDS Care in Resource Poor Settings
- Delivering Global Health
- Redefining Global Health Care Delivery

Value-Based Health Care Delivery

Global Health Case Studies

HIV

Haiti

Thailand

Iran

Botswana

Uganda

Zambia

Kenya

Rwanda

HIV Care Delivery Value Chain

Tuberculosis (TB)

Peru

Bangladesh – Rural & Urban

Multi drug-resistant Tuberculosis (MDR-TB)

Peru

Polio

India

Malaria

Kenya

Zambia

Malaria Value Chain

Maternal & Child Health

Botswana

Sierra Leone

PMTCT Value Chain

Global Health Policy

Measles

Nutrition

Tobacco control

Health Insurance

Delivery Infrastructure

Surgical capacity

Information technology

Health Care Delivery Course Offerings

Advanced Economy Delivery

- January 2008 – Intensive Workshop in Value-Based Health Care Delivery
- January 2009 – Intensive Workshop in Value-Based Health Care Delivery
- January 2009 – Strategy For Health Care Delivery: Leadership Workshop
- April 2009 – The Brigham Leadership Program
- May 2009 – Kaiser Permanente Leadership Program
- May 2009 – Leading Health Care Organizations
- October 2009 – Managing Health Care Delivery
- January 2010 – Intensive Workshop in Value-Based Health Care Delivery
- January 2010- Strategy For Health Care Delivery: Leadership Workshop

Global Health Delivery

- Summer 2009 - HSPH/HMS: Global Health Effectiveness Program
- July 2009 - HSPH: Introduction to GHD
- Fall 2009 - HMS: GHD Seminar
- Fall 2009 – Sloan MIT Global Entrepreneurship Lab
- Fall 2009 - Harvard Undergraduate Global Health Course
- January 2010 - HSPH: Introduction to GHD
- Spring 2010 – Malaria Executive Education
- July 2010 – Train the Trainers for Global Health Delivery Educators
- Summer 2010 - HSPH/HMS: Global Health Effectiveness Program

Value-Based Health Care Delivery HBS Immersion

2009 Schedule

	Monday, January 5	Tuesday, January 6	Wednesday, January 7	Thursday, January 8	Friday, January 9
8:30-9:00am	Welcome & Course Overview <i>Faculty: Michael Porter</i>				
9:00-10:30am	Session 1: Introduction to Value-Based Health Care Delivery Case: ThedaCare: System Strategy <i>Faculty: Michael Porter</i>	Session 3: Defining Medical Conditions and Integrated Care Models Case: The Joslin Diabetes Center <i>Faculty: Elizabeth Teisberg</i>	Session 5: Integrated Care and Health Outcomes Case: Global Health Partner: Obesity Care <i>Faculty: Elizabeth Teisberg</i>	Session 7: Role of Employers in Health Care Case: Pitney Bowes: Employer Health Strategy <i>Faculty: Elizabeth Teisberg</i>	Session 9: Achieving Care Integration Case: Brigham and Women's Hospital: Shapiro Cardiovascular Care <i>Faculty: Robert Huckman</i>
10:30-11:00am	Break	Break	Break	Break	Break
11:00am-12:30pm	Case Protagonist and Topic Lecture ThedaCare video: John Toussaint, former CEO, ThedaCare; President and Founder, ThedaCare Center for Healthcare Value	Case Protagonist and Topic Lecture Guest: Ranch Kimball, President and CEO, Joslin Diabetes Center	Case Protagonist and Topic Lecture Guests: Per Batelson, CEO, and Robert Olbe, Operations Development Manager, Global Health Partner	Case Protagonist and Topic Lecture Guests: Michael Critelli, Executive Chairman, and Jack Mahoney, Director of Strategic Health Initiatives, Pitney Bowes	Case Protagonist and Topic Lecture Guest: Gary Gottlieb, President, Brigham and Women's Hospital
12:30-1:30pm	Lunch and Preparation	Lunch and Preparation	Lunch and Preparation	Lunch and Preparation	(12:30pm) Group Photo (12:40pm) Lunch and Preparation
1:30-3:00pm	Session 2: The Need for Integrated Care Delivery Case: The West German Headache Center: Integrated Migraine Care <i>Faculty: Elizabeth Teisberg</i>	Session 4: Integrated Practice Units: Structure, Process, Management, and Measurement Case: The Dartmouth-Hitchcock Medical Center: Spine Care <i>Faculty: Michael Porter</i>	Session 6: Value-Based Models of Primary Care Case: Commonwealth Care Alliance: Elderly and Disabled Care <i>Faculty: Gary Gottlieb</i>	Session 8: Hospital Structure, Organization, and Service Expansion Case: The U. of Texas MD Anderson Cancer Center: Interdisciplinary Cancer Care <i>Faculty: Michael Porter</i>	Session 10: Hospital Strategy and Growth Case: Cleveland Clinic: Growth Strategy 2008 <i>Faculty: Michael Porter</i>
3:00-3:15pm	Break	Break	Break	Break	Break
3:15-4:45pm	Case Protagonist and Topic Lecture West German Headache Center video: Klaus Bottcher, Senior Manager, and Astrid Gendolla, Senior Physician, KKH	Case Protagonist and Topic Lecture Guests: Jim Weinstein, Chair, Dept. of Orthopedic Surgery, and Bill Abdu, Spine Center Medical Director, Dartmouth-Hitchcock Medical Center	Case Protagonist and Topic Lecture Guests: Lois Simon, COO, and Robert Fallon, CFO, Commonwealth Care Alliance	Case Protagonist and Topic Lecture Guests: Thomas Burke, Physician-in-Chief, and Randal Weber, Chair, Dept. of Head and Neck Surgery, MD Anderson Cancer Center	Case Protagonist and Summary Lecture Cleveland Clinic video: Toby Cosgrove, CEO, Cleveland Clinic
4:45-5:00pm					Course Wrap-Up
		OPTIONAL: 5-6:30pm Health Care Immersion Mixer (jointly held with Prof. Hamermesh's "Science, Delivery, and Regulation" immersion)		For further information, see http://www.hbs.edu/rhc/	OPTIONAL: 5-6:30pm Health Care Immersion Closing Reception (jointly held with Prof. Hamermesh's "Science, Delivery, and Regulation" immersion)