Value-Based Competition in Health Care: Issues for Singapore

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Singapore
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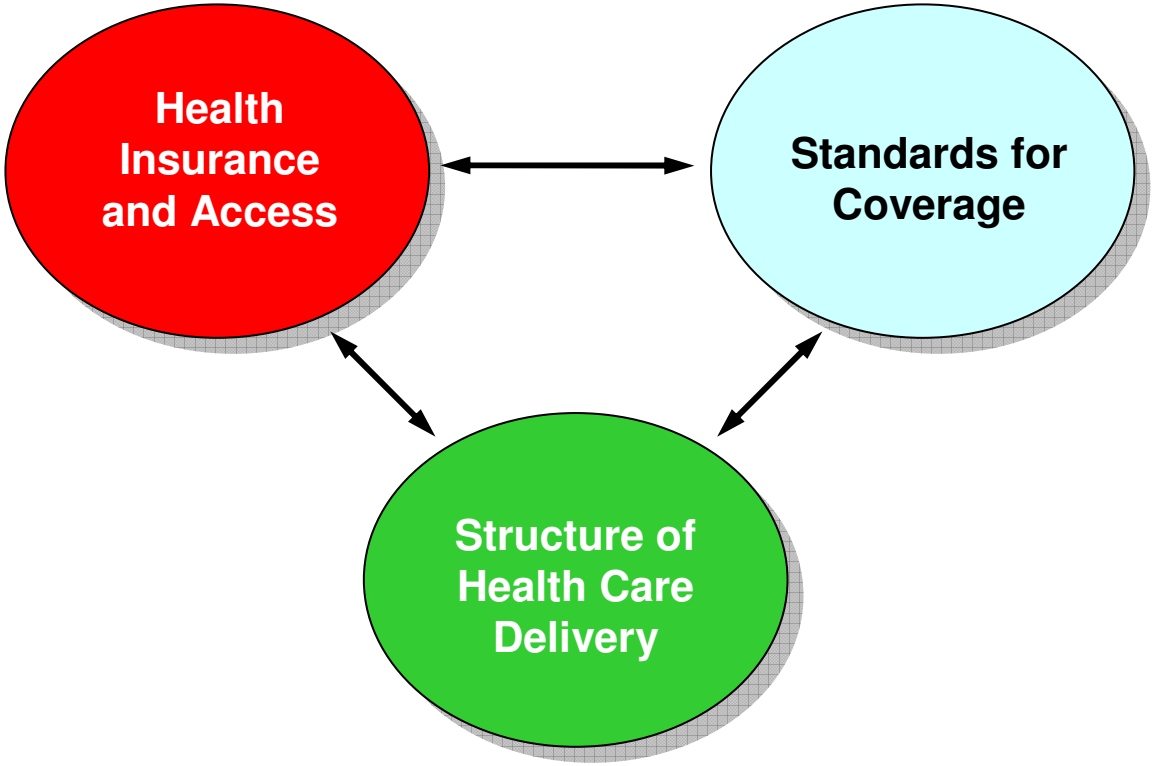
This presentation draws Michael E. Porter and Elizabeth Olmsted Teisberg: Redefining Health Care: Creating Value-Based Competition on Results, Harvard Business School Press, May 2006. Earlier publications about health care include the *Harvard Business Review* article "Redefining Competition in Health Care" (June 2004). 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.

Issues in Health Care Reform



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The Paradox of U.S. Health Care

The United States has a **private system** with **intense competition**

But

- Costs are **high** and **rising**
- Services are **restricted** and often fall well short of recommended care
- In other services, there is **overuse** of care
- Standards of care often **lag** and fail to follow accepted benchmarks
- **Diagnosis errors** are common
- Preventable **treatment errors** are common
- Huge **quality** and **cost differences** persist across **providers**
- Huge **quality** and **cost differences** persist across **geographic areas**
- Best practices are **slow** to spread
- Innovation is **resisted**

- Competition is **not** working
- How is this state of affairs possible?

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Competition on the Wrong Things

Zero-Sum Competition in U.S. Health Care

- Competition to **shift costs**
- Competition to **increase bargaining power**
- Competition to **capture patients** and **restrict choice**
- Competition to **restrict services** in order to reduce costs

- None of these forms of competition increases **value for patients**

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Competition at the Wrong Levels

Too Broad

- Between broad line hospitals, networks, and health plans

Too Narrow

- Performing discrete services or interventions

Too Local

- Focused on serving the local community

- Market definition is **misaligned with patient value**

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Principles of Value-Based Competition

1. The focus should be on **value for patients**, not just lowering costs.

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Principles of Value-Based Competition

1. The focus should be on **value for patients**, not just lowering costs.
2. There must be **unrestricted competition** based on **results**.
   - Results vs. supply control or process compliance
   - Get patients to excellent providers vs. “lift all boats”

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Principles of Value-Based Competition

1. The focus should be on **value for patients**, not just lowering costs.
2. There must be **unrestricted competition** based on **results**.
3. Competition should center on **medical conditions** over the **full cycle of care**.

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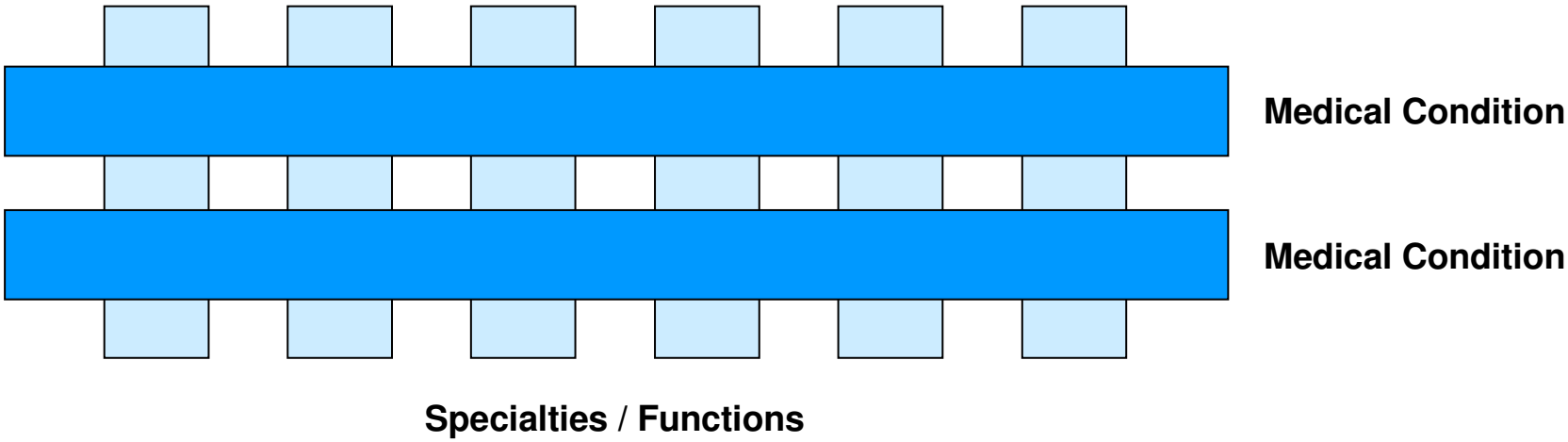
What is a Medical Condition?

- A medical condition is **an interrelated set of patient medical circumstances best addressed in an integrated way**
  - Patient's perspective



- **Includes** most common co-occurrences
- Served through **Integrated Practice Units** (IPUs)
- Providers can and should define the boundaries of a given medical condition **differently** based on patient populations
- Most providers will serve **multiple medical conditions** through **multiple IPUs**

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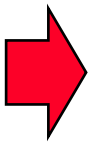
What Businesses Are We In?

Nephrology practice



- Hypertension Management
- Chronic Kidney Disease
- End-Stage Renal Disease
- Kidney Transplants

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The Care Delivery Value Chain
Breast Cancer Care

	MONITORING/ PREVENTING	DIAGNOSING	PREPARING	INTERVENING	RECOVERING/ REHABING	MONITORING/ MANAGING
KNOWLEDGE MANAGEMENT						
INFORMING	• Education and reminders about regular exams • Lifestyle and diet counseling	• Counseling patient and family on the diagnostic process and the diagnosis	• Explaining and supporting patient choices of treatment	• Counseling patient and family on treatment and prognosis	• Counseling patient and family on rehabilitation options and process	• Counseling patient and family on long term risk management
MEASURING	• Self exams • Mammograms	• Mammograms • Ultrasound • MRI • Biopsy • BRACA 1, 2...		• Procedure-specific measurements	• Range of movement • Side effects measurement	• Recurring mammograms (every 6 months for the first 3 years)
ACCESSING	• Office visits • Mammography lab visits	• Office visits • Lab visits • High-risk clinic visits	• Office visits • Hospital visits	• Hospital stay • Visits to outpatient or radiation chemotherapy units	• Office visits • Rehabilitation facility visits	• Office visits • Lab visits • Mammographic labs and imaging center visits
	• Medical history • Monitoring for lumps • Control of risk factors (obesity, high fat diet) • Clinical exams • Genetic screening	• Medical history • Determining the specific nature of the disease • Genetic evaluation • Choosing a treatment plan	• Medical counseling • Surgery prep (anesthetic risk assessment, EKG) • Patient and family psycholo-gical counseling • Plastic or onco-plastic surgery evaluation	• Surgery (breast preservation or mastectomy, oncoplastic alternative) • Adjuvant therapies (hormonal medication, radiation, and/or chemotherapy)	• In-hospital and outpatient wound healing • Psychological counseling • Treatment of side effects (skin damage, neurotoxic, cardiac, nausea, lymphodema and chronic fatigue) • Physical therapy	• Periodic mammography • Other imaging • Follow-up clinical exams for next 2 years • Treatment for any continued side effects

PROVIDER MARGIN

Breast Cancer Specialist
Other Provider Entities

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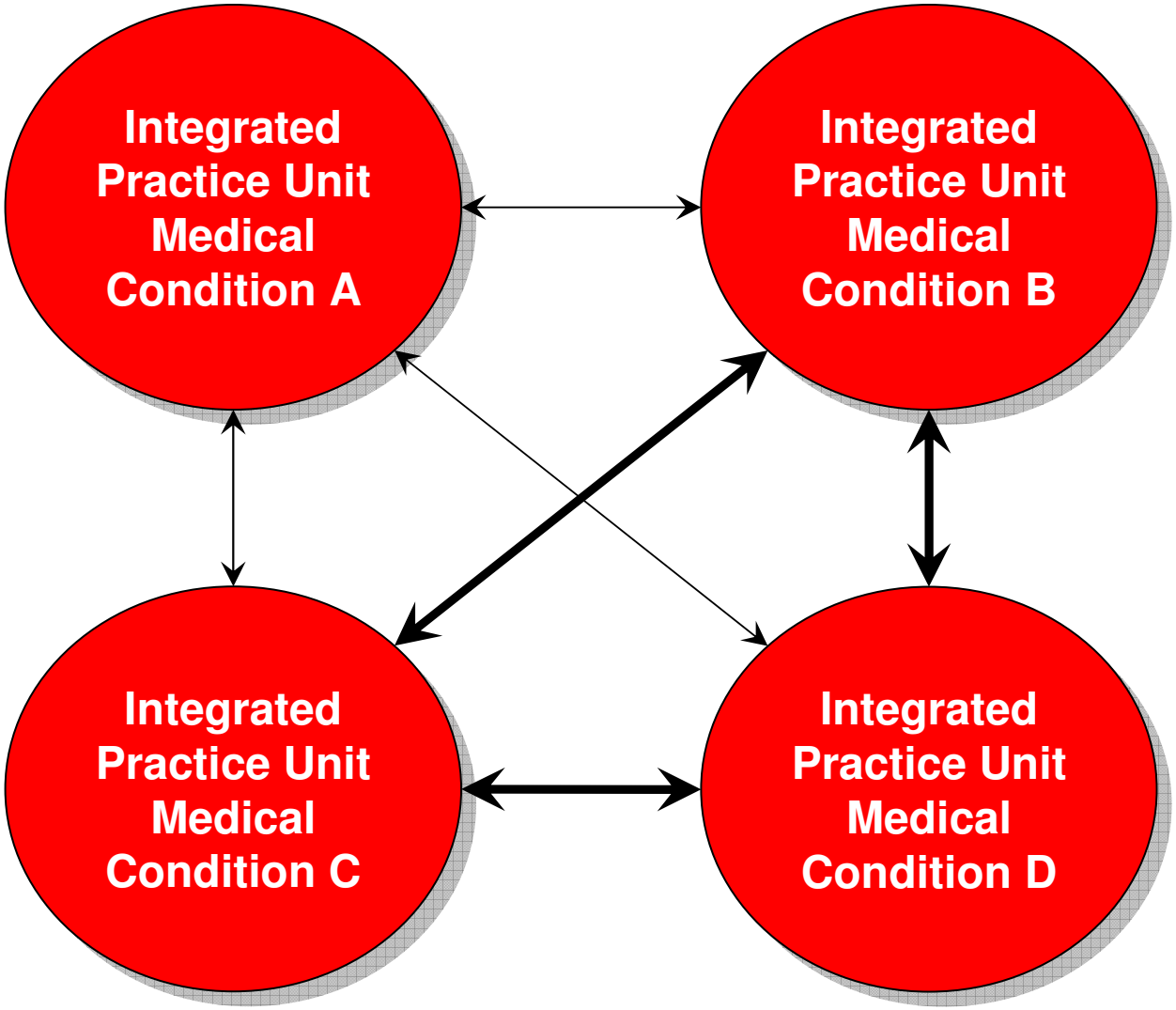
Levels of Medical Integration

Within Medical Conditions versus Across Medical Conditions



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Principles of Value-Based Competition

1. The focus should be on **value for patients**, not just lowering costs.
2. There must be **unrestricted competition** based on **results**.
3. Competition should **center on medical conditions** over the **full cycle of care**.
4. High quality care should be **less** costly.
   - Prevention
   - Early detection
   - Right diagnosis
   - Early treatment
   - Right treatment to the right patients
   - Treatment earlier in the causal chain
   - Fewer mistakes and repeats in treatment
   - Fewer delays in care delivery
   - Less invasive treatment methods
   - Faster recovery
   - Less disability
   - Slower disease progression
   - Less need for long term care

- Better health is **inherently less expensive** than worse health

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5. Value is driven by provider **experience**, **scale**, and **learning** at the **medical condition level.**

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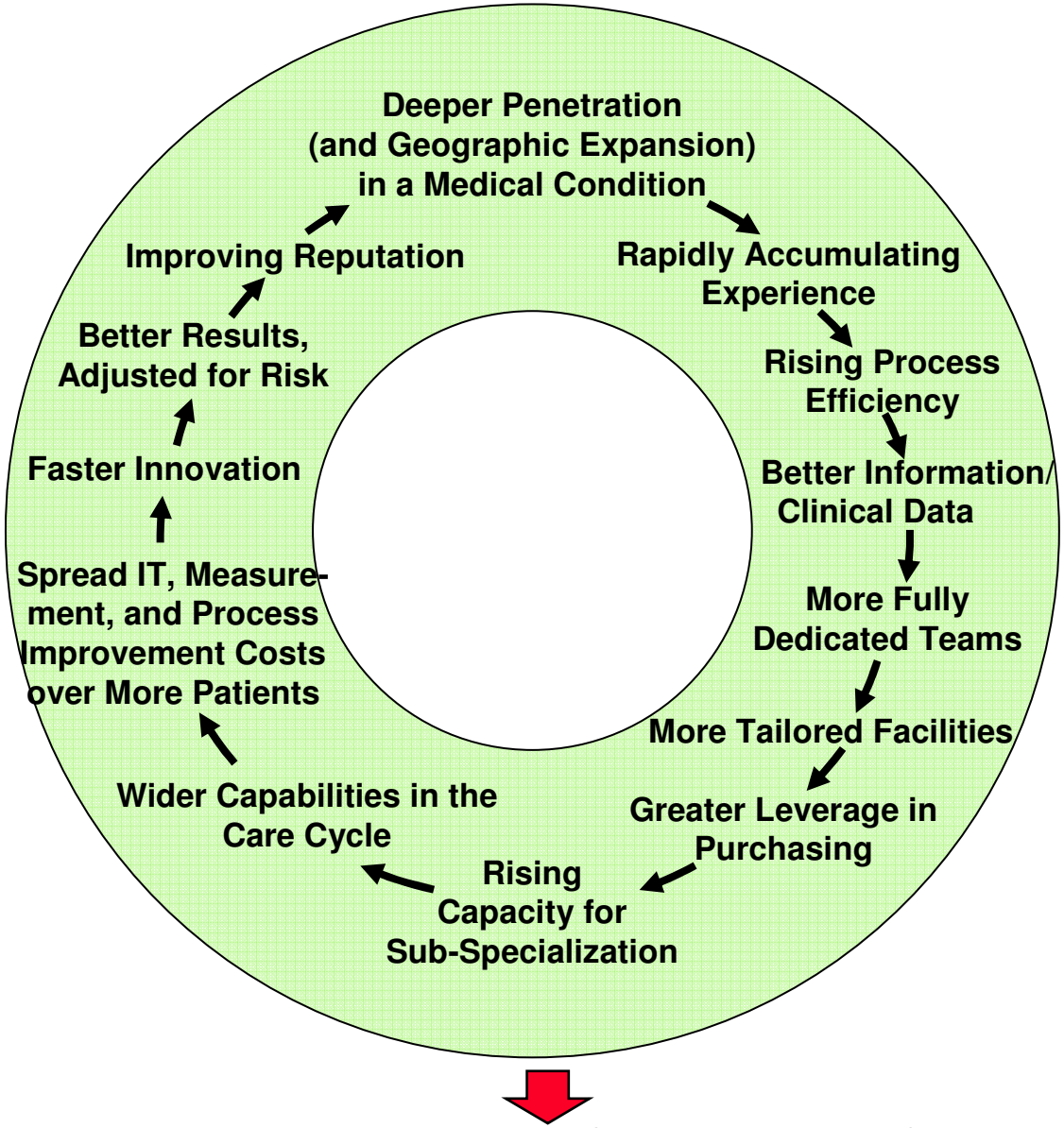
The Virtuous Circle in a Medical Condition



- Feed virtuous circles vs. fragmentation of care

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5. Value is driven by **provider experience**, **scale**, and **learning** at the medical condition level.
6. Competition should be **regional** and **national**, not just local.
   - Virtuous circles extend across geography
   - Management of care cycles across geography
   - Partnerships and inter-organizational integration

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6. Competition should be **regional** and **national**, not just local.
7. **Information** on results, costs, and prices needed for value-based competition must be widely available.

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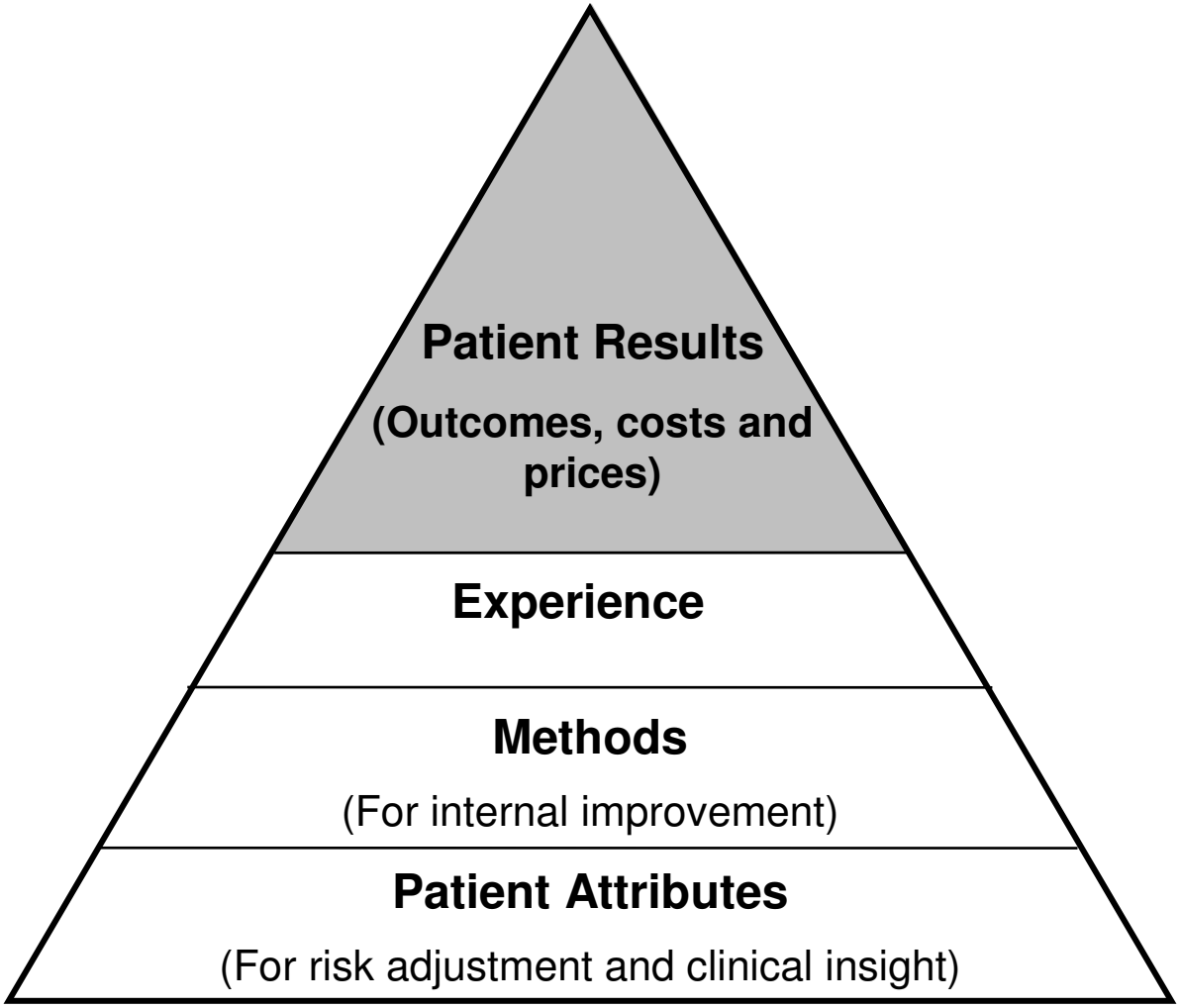
The Information Hierarchy



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Boston Spine Group

Clinical and Outcome Information Collected and Analyzed

OUTCOMES

Patient Outcomes

(*before and after treatment, multiple times*)

Visual Analog Scale (pain)

Owestry Disability Index, 10 questions (functional ability)

SF-36 Questionnaire, 36 questions (burden of disease)

Length of hospital stay

Time to return to work or normal activity

Service Satisfaction

(*periodic*)

Office visit satisfaction metrics (10 questions)

Overall medical satisfaction

("Would you have surgery again for the same problem?")

Medical Complications

Cardiac

- Myocardial infarction
- Arrhythmias
- Congestive heart failure

Vascular deep venous thrombosis

Urinary infections

Pneumonia

Post-operative delirium

Drug interactions

Surgery Complications

Patient returns to the operating room

Infection

Nerve injury

Sentinel events (wrong site surgeries)

Hardware failure

METHODS

Surgery Process Metrics

Operative time

Blood loss

Devices or products used

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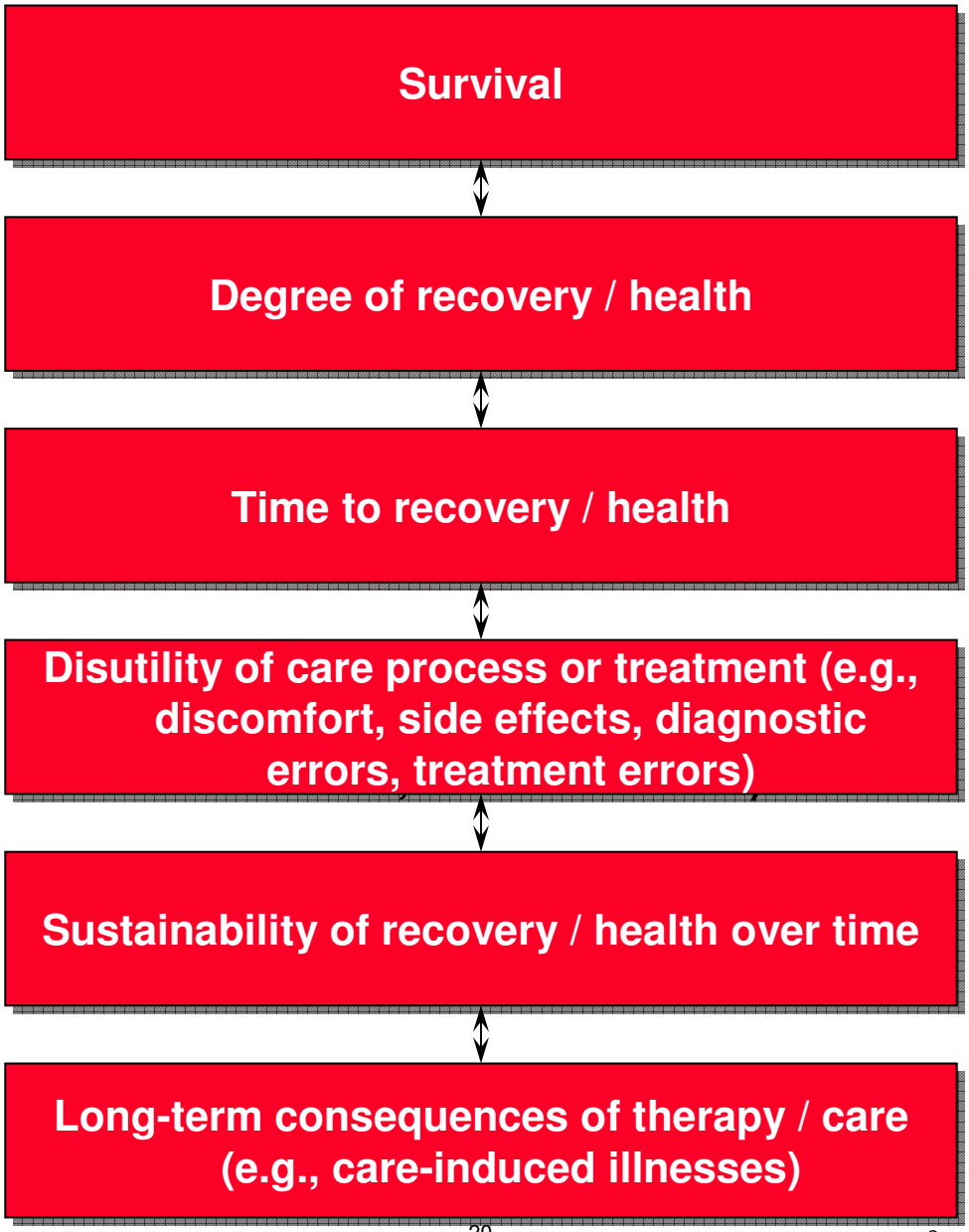
Measuring Value

The Outcome Measures Hierarchy



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6. Competition should be **regional** and **national**, not just local.
7. **Information** on results and prices needed for value-based competition must be widely available.
8. **Innovations** that increase value must be strongly rewarded.
   - Measure value
   - Care cycle reimbursement

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Is Competition Desirable in Health Care?

Good Competition

- Competing to gain market share in medical condition based outcomes and costs
- Integrating services over the care cycle
- Moving care to outpatient facilities
- Expanding across geography in medical conditions

Bad Competition

- Exercising power to shift costs to patients or other actors
- Restricting patients' choice of providers
- Ownership of physician practices to capture referrals
- Hospital mergers with no reallocation and specialization of services

- The essential question is whether competition is aligned with patient value

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Moving to Value-Based Competition

Providers

Defining the Right Goals

- Superior **patient value**

Strategic and Organizational Imperatives

- Redefine the business around **medical conditions**
- Choose the **range and types of services provided**
- Organize around **medically integrated practice units**
- Create a **distinctive strategy** in each practice unit
- Measure **results**, **experience**, **methods**, and **patient attributes** by practice unit
- Move to **single bills** and new approaches to **pricing**
- **Market** services based on excellence, uniqueness, and results
- Grow locally and across geography in **areas of strength**

- Employ **partnerships** and **alliances** to achieve these aims

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The Care Delivery Value Chain

Chronic Kidney Disease

	MONITORING/ PREVENTING	DIAGNOSING	PREPARING	INTERVENING	RECOVERING/ REHABING	MONITORING/ MANAGING
INFORMING	• Lifestyle counseling • Diet counseling	• Explanation of the diagnosis and implications	• Lifestyle counseling • Diet counseling • Education on procedures	• Medication counseling and compliance follow-up • Lifestyle and diet counseling	• Medication counseling and compliance follow-up • Lifestyle and diet counseling	• Medication compliance follow-up • Lifestyle & diet counseling • RRT therapy options counseling
MEASURING	• Serum creatinine • Glomerular filtration rate (GFR) • Proteinuria	• Special urine tests • Renal ultrasound • Serological testing • Renal artery angio • Kidney biopsy • Nuclear medicine scans	• Procedure-specific pre-testing	• Procedure-specific measurements	• Kidney function tests	• Kidney function tests • Bone metabolism • Anemia
ACCESSING	• Office visits • Lab visits	• Office visits • Lab visits	• Various	• Office visits • Hospital visits	• Office/lab visits • Telephone/ Internet interaction	• Office/lab visits • Telephone/Internet interaction
				Pharmaceutical • Kidney function (ACE Inhibitors, ARBs)	• Fine-tuning drug regimen • Determining supporting nutritional modifications	• Managing renal function • Managing kidney side effects of other treatments (e.g. cardiac catheterization) • Managing the effects of associated diseases (e.g. diabetes, hypertension, uremia) • Referral for renal replacement therapy (RRT)
	• Monitoring renal function (at least annually) • Monitoring and addressing risk factors (e.g. blood pressure) • Early nephrologist referral for abnormal kidney function	• Medical and family history • Directed advanced testing • Consultation with other specialists • Data integration • Formal diagnosis	• Formulate a treatment plan • Procedure-specific preparation (e.g. diet, medication) • Tight blood pressure control • Tight diabetes control	Procedures • Renal artery angioplasty Urological (if needed) Endocrinological (if needed) • Vascular access graft at stage 4		

PROVIDER MARGIN

Feedback Loops

Nephrology Practice
Other Provider Entities

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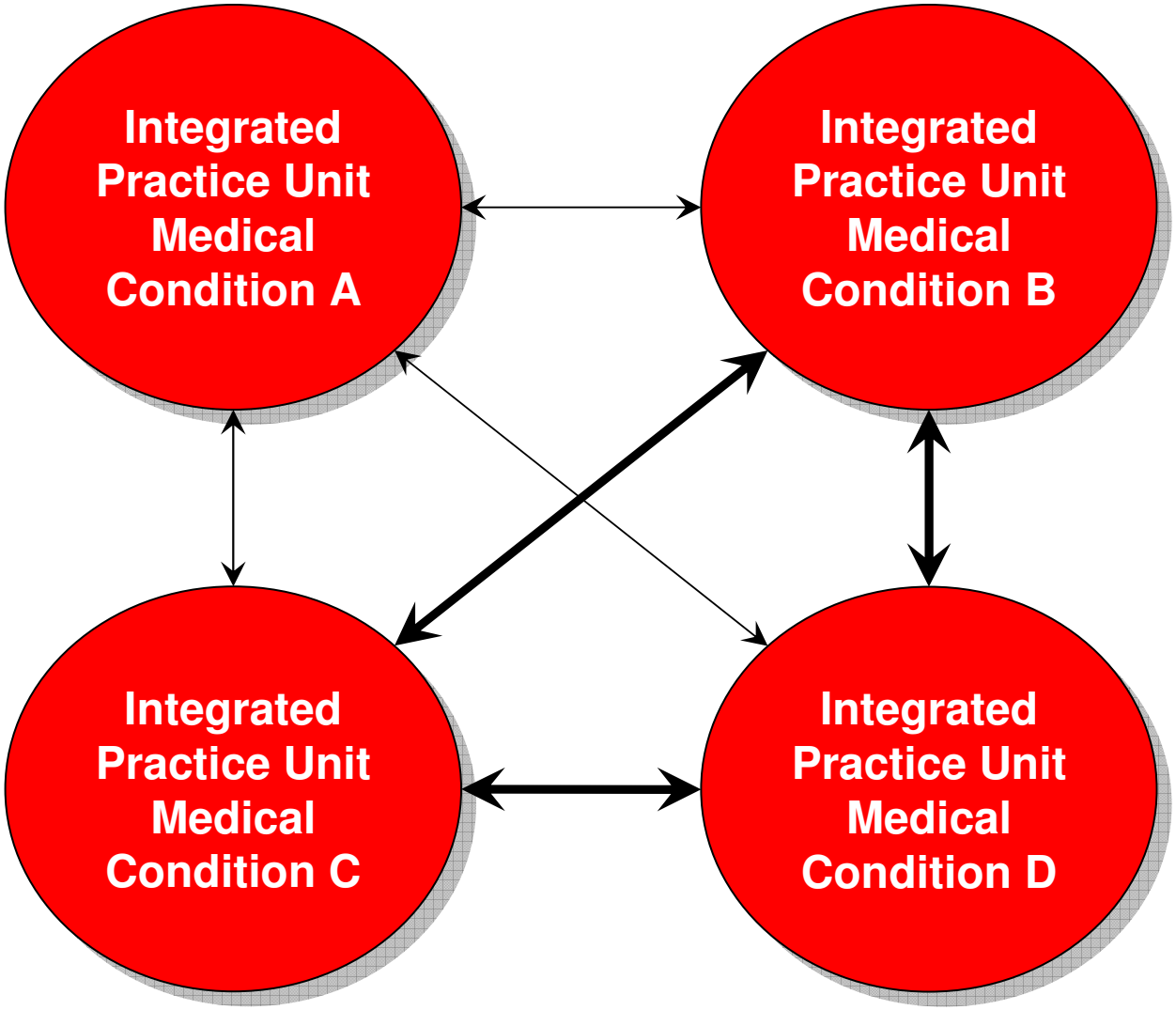

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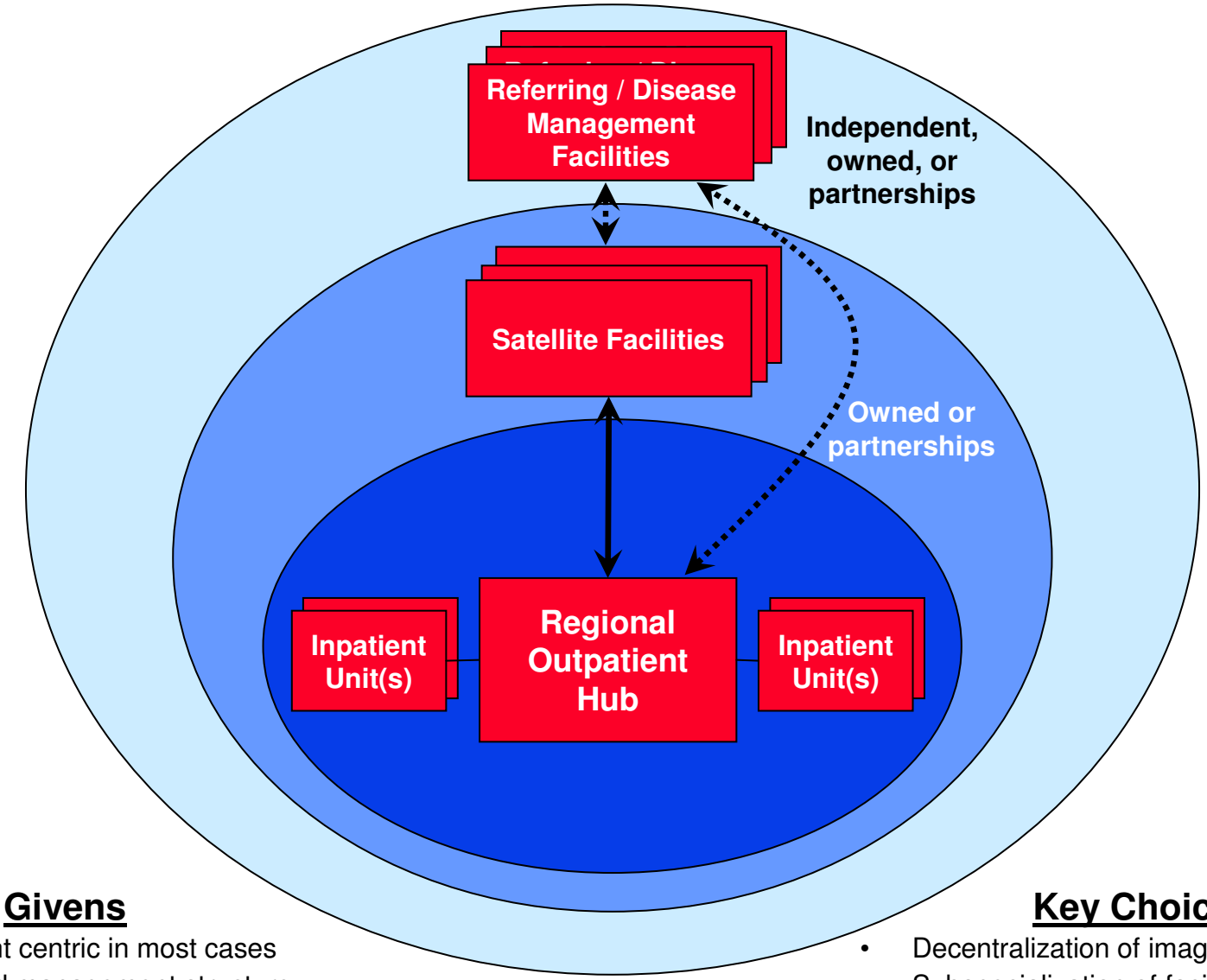
Configuring a Regional Integrated Practice Unit for a Medical Condition



Givens

- Outpatient centric in most cases
- Integrated management structure
- Common information platform

Key Choices

- Decentralization of imaging / testing
- Subspecialization of facilities / locations
- Extent of ownership of the care cycle vs. partnering

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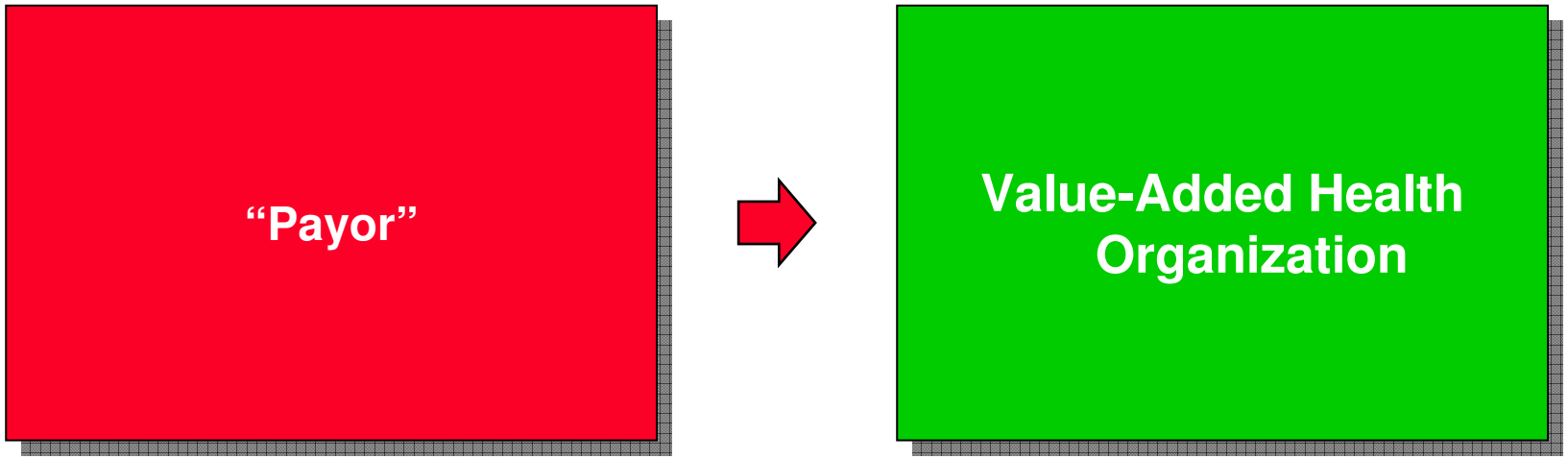
Moving to Value-Based Competition

Health Plans



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Transforming the Roles of Health Plans

Old Role: culture of denial	New Role: enable value-based competition on results
• Restrict patient choice of providers and treatment	• Enable informed patient and physician **choice** and patient **management** of their health
• Micromanage provider processes and choices	• Measure and reward providers based on **results**
• Minimize the cost of each service or treatment	• Maximize the value of care over the **full care cycle**
• Engage in complex paperwork and administrative transactions with providers and subscribers to control costs and settle bills	• **Minimize** the need for administrative transactions and simplify billing
• Compete on minimizing premium increases	• Compete on subscriber **health results**

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Moving to Value-Based Competition

Roles of Health Plans

Provide Health Information and Support to Patients and Physicians

1. Organize around **medical conditions**, not geography or administrative functions
2. Develop measures and assemble results **information** on providers and treatments
3. Actively **support provider** and **treatment choice** with information and unbiased counseling
4. Organize information and patient support around the **full cycle of care**
5. Provide comprehensive **disease management** and **prevention** services to all members, even healthy ones

Restructure the Health Plan-Provider Relationship

6. Shift the nature of **information sharing** with providers
7. Reward provider **excellence** and value-enhancing **innovation** for patients
8. Move to **single bills** for episodes and cycles of care, and **single prices**
9. Simplify, standardize, and eliminate **paperwork** and **transactions**

Redefine the Health Plan-Subscriber Relationship

10. Move to **multi-year subscriber contracts** and shift the nature of plan contracting
11. **End cost shifting practices**, such as re-underwriting, that erode trust in health plans and breed cynicism
12. Assist in managing **members' medical records**

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Moving to Value-Based Competition

Employers

- Set the goal of increasing **health value**, not minimizing health benefit costs
- Set new expectations for health plans, including **self-insured** plans
- Provide for health plan **continuity** for employees, rather than plan churning
- Enhance provider competition on **results**
- Support and motivate employees to **make good health care choices** and **manage their own health**
- Find ways to **expand insurance coverage** and advocate reform of the insurance system
- Measure and hold employee benefit staff accountable for the company's **health value received**

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Moving to Value-Based Competition

Consumers

- Participate actively in **managing personal health**
- Expect **relevant information** and seek advice
- Make treatment and provider **choices** based on **excellent results** and **personal values**, not convenience or amenities
- Choose a health plan based on **value added**
- Build a **long-term relationship** with an excellent health plan
- Act **responsibly**

- Consumers cannot (and should not) be the **only** drivers

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Roles of Government in Value-Based Competition

- Require the collection and dissemination of the **risk-adjusted outcome information**
- Open up **value-based competition** at the right level
- Enable bundled prices and price **transparency**
- Limit or eliminate **price discrimination**
- Develop information technology standards and rules to enable **interoperability** and **information sharing**
- Invest in medical and clinical **research**

- Medicare can be a driver

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Issues for Singapore

Insurance / Coverage

+ Near **universal** insurance
+ Individual role in **medical savings** and **payment for care**
- Little **individual responsibility** for healthy living, screening, and compliance
- **Hospital centric** focus in terms of coverage

Delivery System

+ **Free choice** of providers by patients / referring physicians (except outside of Singapore)
+ **Competition** among providers and provider groups
+ **Competition** among health plans
- No / little **results** or **outcome information** across all medical condition / care cycles
- **Hospital centric** delivery system
- Limited / non-existent **medical condition integration**
- **Discrete services** versus care cycle structure
  - Delivery
  - Pricing
- **Limited / passive** role of health plans
- **Limited / passive** role of employers

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Implications for Developing Countries

- Avoid copying the outmoded delivery systems of advanced economies
- Prevention, early detection, and disease management are the highest-value areas for investment
- Organize delivery using an outpatient-centric model versus the traditional hospital-centric model
- Organize hub and spoke systems around medical conditions versus proliferate local broad line hospitals and clinics
- Adopt a common IT platform using international definitions of diseases and interventions as well as interoperability standards to support value-based delivery models and integration across the country
  - Take advantage of the absence of legacy systems

- Singapore can provide integrated health management services for medical conditions throughout the region
- Singapore can serve as a hub for complex services
- Singapore providers can operate integrated regional delivery networks

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Backup

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Value-Based Competition in Health Care
Observations on Singapore

Insurance and access

- Combination of private accounts (MediSave), insurance (MediShield), and government safety net (MediFund)
- Additional private payments, private insurance, and direct government subsidies to health care providers

Standards for Coverage

- MediShield reform has improved competition between insurance schemes
- Coverage defined by service, not provider
- Coverage differs by need and amenities, not service quality

Delivery

- Competition between different provider groups
- Outcome information effective in changing behavior of suppliers
- Increasing focus on integrated care along the care cycle, starting with diabetes

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Issues for Singapore's Health Care System

- Improve availability of **outcome data in primary and elderly care**, not just tertiary care
- Support further **integration of services** along the care cycle and across out- and in-patient services
- Develop the **role of private insurers** as guides in choosing health care providers, not just efficient administrators

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- Strengthen **regional co-operation** (coverage of treatment outside of Singapore, regional specialization, joint offering to foreign patients)
- Prepare for effects of **changing demographics** (elderly care, chronic diseases)

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Value-Based Competition in Health Care
Developing Countries

- Provision of health care services **crucial to competitiveness**, not just a social objective
- Delivery system often with **more de-facto competition** than in advanced economies, as public systems are unable to serve demand
  - However, lack of supply can also lead to monopoly situations, especially in rural regions
- Danger that **competition is misperceived** to mean less public funding, not more efficient delivery mechanism

- **Avoid copying** advanced economies health care delivery structures
- Leverage the potential for **regional cooperation**
  - E.g., Singapore as hub for advanced treatments and neighboring countries for longer-term care or standard procedures
- Develop **appropriate mechanisms** for collecting and distributing outcome data on institutions

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