Value-Based Competition in Health Care:
Issues for Singapore

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Issues in Health Care Reform

- Health Insurance and Access
- Standards for Coverage
- Structure of Health Care Delivery
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?
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**
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
Principles of Value-Based Competition

1. The focus should be on value for patients, not just lowering costs.
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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”
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.
What is a Medical Condition?

- A medical condition is \textit{an interrelated set of patient medical circumstances best addressed in an integrated way}
  - Patient’s perspective

- \textbf{Includes} most common co-occurrences
- Served through \textbf{Integrated Practice Units} (IPUs)
- Providers can and should define the boundaries of a given medical condition \textit{differently} based on patient populations
- Most providers will serve \textit{multiple medical conditions} through \textit{multiple IPUs}
What Businesses Are We In?

Nephrology practice

• Hypertension Management
• Chronic Kidney Disease
• End-Stage Renal Disease
• Kidney Transplants
The Care Delivery Value Chain
Breast Cancer Care

**Knowledge Management**
- Education and reminders about regular exams
- Lifestyle and diet counseling

**Informing**
- Counseling patient and family on the diagnostic process and the diagnosis
- Explaining and supporting patient choices of treatment
- Counseling patient and family on rehabilitation options and process
- Counseling patient and family on long term risk management

**Measuring**
- Self exams
- Mammograms
- Mammograms

**Accessing**
- Office visits
- Mammography lab visits
- Office visits
- Lab visits
- High-risk clinic visits
- Office visits
- Hospital visits
- Office stays
- Visits to outpatient or radiation chemotherapy units
- Office visits
- Lab visits
- Mammographic labs and imaging center visits

**Monitoring/Preventing**
- Medical history
- Monitoring for lumps
- Control of risk factors (obesity, high fat diet)
- Clinical exams
- Genetic screening

**Diagnosing**
- Medical history
- Determining the specific nature of the disease
- Genetic evaluation
- Choosing a treatment plan
- Mammograms
- Ultrasound
- MRI
- Biopsy
- BRACA 1, 2...

**Preparing**
- Medical counseling
- Surgery prep (anesthetic risk assessment, EKG)
- Surgery (breast preservation or mastectomy, oncoplastic alternative)
- Patient and family psychological counseling
- Plastic or oncoplastic surgery evaluation
- Adjuvant therapies (hormonal medication, radiation, and/or chemotherapy)

**Intervening**
- In-hospital and outpatient wound healing
- Psychological counseling
- Treatment of side effects (skin damage, neurotoxic, cardiac, nausea, lymphedema and chronic fatigue)
- Physical therapy

**Recovering/Rehabilitating**
- Periodic mammography
- Other imaging
- Follow-up clinical exams for next 2 years
- Treatment for any continued side effects

**Monitoring/Managing**
- Breast Cancer Specialist
- Other Provider Entities
Levels of Medical Integration
Within Medical Conditions versus Across Medical Conditions

Integrated Practice Unit
Medical Condition A

Integrated Practice Unit
Medical Condition B

Integrated Practice Unit
Medical Condition C

Integrated Practice Unit
Medical Condition D
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.
The Virtuous Circle in a Medical Condition

- Feed virtuous circles vs. fragmentation of care
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4. High quality care should be less costly.
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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4. High quality care should be **less** costly.
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.
7. **Information** on results, costs, and prices needed for value-based competition must be widely available.
The Information Hierarchy

- **Patient Results**
  (Outcomes, costs and prices)

- **Experience**

- **Methods**
  (For internal improvement)

- **Patient Attributes**
  (For risk adjustment and clinical insight)
### OUTCOMES

#### Patient Outcomes
*(before and after treatment, multiple times)*
- Visual Analog Scale (pain)
- Oswestry 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?")*

### METHODS

#### Medical Complications
- Cardiac
  - Myocardial infarction
  - Arrhythmias
  - Congestive heart failure
- Vascular deep venous thrombosis
- Urinary infections
- Pneumonia
- Post-operative delirium
- Drug interactions

#### Surgery Process Metrics
- Operative time
- Blood loss
- Devices or products used

#### Surgery Complications
- Patient returns to the operating room
- Infection
- Nerve injury
- Sentinel events (wrong site surgeries)
- Hardware failure
Measuring Value
The Outcome Measures Hierarchy

- Survival

- Degree of recovery / health

- Time to recovery / health

- Disutility of care process or treatment (e.g., discomfort, side effects, diagnostic errors, treatment errors)

- Sustainability of recovery / health over time

- Long-term consequences of therapy / care (e.g., care-induced illnesses)
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4. High quality care should be **less** costly.
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.
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
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
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
# The Care Delivery Value Chain

## Chronic Kidney Disease

### INFORMING
- **Lifestyle counseling**
- **Diet counseling**

### MEASURING
- **Serum creatinine**
- **Glomerular filtration rate (GFR)**
- **Proteinuria**
- **Special urine tests**
- **Renal ultrasound**
- **Serological testing**
- **Renal artery angioplasty**
- **Kidney biopsy**
- **Nuclear medicine scans**

### ACCESSING
- **Office visits**
- **Lab visits**
- **Telephone/Internet interaction**

### MONITORING/PREVENTING
- **Monitoring renal function (at least annually)**
- **Monitoring and addressing risk factors (e.g. blood pressure)**
- **Early nephrologist referral for abnormal kidney function**

### DIAGNOSING
- **Medical and family history**
- **Directed advanced testing**
- **Consultation with other specialists**
- **Data integration**
- **Formal diagnosis**

### PREPARING
- **Formulate a treatment plan**
- **Procedure-specific preparation (e.g. diet, medication)**
- **Tight blood pressure control**
- **Tight diabetes control**

### INTERVENING
- **Pharmaceutical**
  - Kidney function (ACE Inhibitors, ARBs)
- **Procedures**
  - Renal artery angioplasty
  - Urological (if needed)
  - Endocrinological (if needed)
- **Vascular access graft at stage 4**

### RECOVERING/REHABING
- **Fine-tuning drug regimen**
- **Determining supporting nutritional modifications**

### MONITORING/MANAGING
- **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)**

### PROVIDER MARGIN
- **Monitoring renal function (at least annually)**
- **Monitoring and addressing risk factors (e.g. blood pressure)**
- **Early nephrologist referral for abnormal kidney function**

### Feedback Loops
- **Nephrology Practice**
- **Other Provider Entities**
Levels of Medical Integration
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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
Moving to Value-Based Competition

Health Plans

"Payor"

→

Value-Added Health Organization
Transforming the Roles of Health Plans

Old Role: culture of denial

- Restrict patient choice of providers and treatment
- Micromanage provider processes and choices
- Minimize the cost of each service or treatment
- Engage in complex paperwork and administrative transactions with providers and subscribers to control costs and settle bills
- Compete on minimizing premium increases

New Role: enable value-based competition on results

- Enable informed patient and physician choice and patient management of their health
- Measure and reward providers based on results
- Maximize the value of care over the full care cycle
- Minimize the need for administrative transactions and simplify billing
- Compete on subscriber health results
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
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**
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
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
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
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