Webinar

The Strategy that Will Fix Health Care

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Solving the Health Care Problem

• The core issue in health care is the **value of health care delivered**

Value: Patient health outcomes per dollar spent

• Delivering high and improving value is the **fundamental purpose** of health care
• Value is the only goal that can **unite the interests** of all system participants
• Improving value is the only **real solution** versus cost shifting or restricting services
Principles of Value-Based Health Care Delivery

Value = \frac{\text{Health outcomes that matter to patients}}{\text{Costs of delivering the outcomes}}

- Value is measured for the **care of a patient’s medical condition** over the full cycle of care
  - Outcomes are the **full set of health results for a patient’s condition** over the care cycle
  - Costs are the **total costs of care for a patient’s condition** over the care cycle
Creating a Value-Based Health Care Delivery System

The Strategic Agenda

1. Organize Care into Integrated Practice Units (IPUs) around Patient Medical Conditions
   - Organize primary and preventive care to serve distinct patient segments

2. Measure Outcomes and Costs for Every Patient

3. Move to Bundled Payments for Care Cycles

4. Integrate Care Delivery Systems

5. Expand Geographic Reach

6. Build an Enabling Information Technology Platform
1. Organize Care Around Patient Medical Conditions

Migraine Care in Germany

Existing Model:
Organize by Specialty and
Discrete Service

1. Organize Care Around Patient Medical Conditions

Migraine Care in Germany

Existing Model: Organize by Specialty and Discrete Service

New Model: Organize into Integrated Practice Units (IPUs)

What is a Medical Condition?

• 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
  – Including common co-occurring conditions and complications

Examples: diabetes, breast cancer, knee osteoarthritis

• In primary / preventive care, the unit of value creation is defined patient segments with similar preventive, diagnostic, and primary treatment needs (e.g. healthy adults, frail elderly)

• The medical condition / patient segment is the proper unit of value creation and value measurement in health care delivery

Attributes of an Integrated Practice Unit (IPU)

1. Organized around a **medical condition** or set of **closely related conditions** (or around defined patient segments for primary care)
2. Care is delivered by a **dedicated, multidisciplinary team** who devote a significant portion of their time to the medical condition
3. Providers see themselves as part of a **common organizational unit**
4. The team takes responsibility for the **full cycle of care** for the condition
   - Encompassing **outpatient, inpatient, and rehabilitative** care, as well as **supporting services** (such as nutrition, social work, and behavioral health)
5. **Patient education, engagement, and follow-up are integrated** into care
6. The unit has a **single administrative and scheduling structure**
7. To a large extent, **care is co-located in dedicated facilities**
8. A **physician team captain** or a **clinical care manager** (or both) oversees each patient’s care process
9. The **team measures** outcomes, costs, and processes for each patient using a **common measurement platform**
10. The providers on the team meet **formally and informally** on a regular basis to discuss patients, processes, and results
11. **Joint accountability** is accepted for outcomes and costs
## The Role of Volume in Value Creation
### Fragmentation of Hospital Services in Sweden

<table>
<thead>
<tr>
<th>DRG</th>
<th>Number of admitting providers</th>
<th>Average percent of total national admissions</th>
<th>Average admissions/provider/year</th>
<th>Average admissions/provider/week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knee procedure</td>
<td>68</td>
<td>1.5%</td>
<td>55</td>
<td>1</td>
</tr>
<tr>
<td>Diabetes age &gt; 35</td>
<td>80</td>
<td>1.3%</td>
<td>96</td>
<td>2</td>
</tr>
<tr>
<td>Kidney failure</td>
<td>80</td>
<td>1.3%</td>
<td>97</td>
<td>2</td>
</tr>
<tr>
<td>Multiple sclerosis and cerebellar ataxia</td>
<td>78</td>
<td>1.3%</td>
<td>28</td>
<td>1</td>
</tr>
<tr>
<td>Inflammatory bowel disease</td>
<td>73</td>
<td>1.4%</td>
<td>66</td>
<td>1</td>
</tr>
<tr>
<td>Implantation of cardiac pacemaker</td>
<td>51</td>
<td>2.0%</td>
<td>124</td>
<td>2</td>
</tr>
<tr>
<td>Splenectomy age &gt; 17</td>
<td>37</td>
<td>2.6%</td>
<td>3</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Cleft lip &amp; palate repair</td>
<td>7</td>
<td>14.2%</td>
<td>83</td>
<td>2</td>
</tr>
<tr>
<td>Heart transplant</td>
<td>6</td>
<td>16.6%</td>
<td>12</td>
<td>&lt;1</td>
</tr>
</tbody>
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2. Measure Outcomes and Costs for Every Patient

The Measurement Landscape

- **Patient Initial Conditions**
- **Processes**
  - Protocols/Guidelines
- **Indicators**
  - E.g. PSA, Gleason score, surgical margin
- **(Health) Outcomes**

- **Patient Experience/Engagement**

- **Structure**
  - E.g. Staff certification, facilities standards
The Outcome Measures Hierarchy

Tier 1
Health Status Achieved or Retained
Survival

Tier 2
Process of Recovery
Degree of health/recovery
Time to recovery and return to normal activities
Disutility of the care or treatment process (e.g., diagnostic errors and ineffective care, treatment-related discomfort, complications, or adverse effects, treatment errors and their consequences in terms of additional treatment)

Tier 3
Sustainability of Health
Sustainability of health/recovery and nature of recurrences
Long-term consequences of therapy (e.g., care-induced illnesses)

Source: NEJM Dec 2010
The Outcome Measures Hierarchy

Tier 1

Health Status
Achieved or Retained

Survival

Tier 2

Process of Recovery

Time to recovery and return to normal activities

Tier 3

Sustainability of Health

Degree of health/recovery

• Achieved clinical status
• Achieved functional status

Disutility of the care or treatment process (e.g., diagnostic errors and ineffective care, treatment-related discomfort, complications, or adverse effects, treatment errors and their consequences in terms of additional treatment)

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- Achieved clinical status
- Achieved functional status

- Care-related pain/discomfort
- Complications
- Reintervention/readmission
The Outcome Measures Hierarchy

**Tier 1**
- **Health Status Achieved or Retained**
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- **Sustainability of health/recovery and nature of recurrences**
  - Long-term clinical status
  - Long-term functional status

**Sustainability of Health**
- **Long-term consequences of therapy (e.g., care-induced illnesses)***

*Source: NEJM Dec 2010*
Measuring Multiple Outcomes
Prostate Cancer Care in Germany

5 year disease specific survival

Average hospital: 94%
Best hospital: 95%

Source: ICHOM
Measuring Multiple Outcomes -- Continued
Prostate Cancer Care in Germany

- **Average hospital**
  - 5 year disease specific survival: 94%
  - Severe erectile dysfunction after one year: 75.5%
  - Incontinence after one year: 43.3%

- **Best hospital**
  - 5 year disease specific survival: 95%
  - Severe erectile dysfunction after one year: 17.4%
  - Incontinence after one year: 9.2%

Source: ICHOM
Adult Kidney Transplant Outcomes
U.S. Centers, 1987-1989

Number of programs: 219
Number of transplants: 19,588
One year graft survival: 79.6%

- 16 greater than predicted survival (7%)
- 20 worse than predicted survival (10%)
Adult Kidney Transplant Outcomes
U.S. Center Results, 2008-2010

Number of programs included: 236
Number of transplants: 38,535
1-year graft survival: 93.55%

- 8 greater than expected graft survival (3.4%)
- 14 worse than expected graft survival (5.9%)
Measuring the Cost of Care Delivery: Principles

• Cost is the **actual expense** of patient care, not the **charges** billed or collected

• Cost should be measured around the **patient**, not just the department

• Cost should be aggregated over the **full cycle of care for the patient’s medical condition**

• Cost depends on the **actual use of resources** involved in a patient’s care process (personnel, facilities, supplies)
  
  – The **time** devoted to each patient by these resources
  
  – The **capacity cost** of each resource
  
  – The **support costs** required for each patient-facing resource

Mapping Resource Utilization
MD Anderson Cancer Center – New Patient Visit

Registration and Verification
- Receptionist, Patient Access Specialist, Interpreter

Intake
- Nurse, Receptionist

Clinician Visit
- MD, mid-level provider, medical assistant, patient service coordinator, RN

Plan of Care
- RN/LVN, MD, mid-level provider, patient service coordinator

Plan of Care Scheduling
- Patient Service Coordinator

Decision Point
- Time (minutes)
Major Cost Reduction Opportunities in Health Care

- Reduce **process variation** that lowers efficiency and raises inventory without improving outcomes
- Eliminate **low- or non-value added** services or tests
  - Sometimes driven by protocols or to justify billing
- Rationalize redundant **administrative** and **scheduling** units
- **Improve utilization** of expensive physicians, staff, clinical space, inventory, and equipment by reducing duplication and service fragmentation
- Minimize use of **physician and skilled staff** time for less skilled activities
- Reduce the provision of routine or uncomplicated services in **highly-resourced** facilities
- **Reduce cycle times** across the care cycle
- **Optimize total care cycle cost** versus minimizing cost of individual service
- Increase **cost awareness** in clinical teams
- Many cost reduction opportunities will actually **improve outcomes**
3. Reimburse through Bundled Prices for Care Cycles

- Fee for service
- Global capitation
- Bundled reimbursement for medical conditions
- Global budgeting
Bundled Payment in Practice

Hip and Knee Replacement in Stockholm, Sweden

• **Components** of the bundle

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
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<tbody>
<tr>
<td>Pre-op evaluation</td>
<td>All physician and staff fees and costs</td>
</tr>
<tr>
<td>Lab tests</td>
<td>1 follow-up visit within 3 months</td>
</tr>
<tr>
<td>Radiology</td>
<td>Any additional surgery to the joint within 2 years</td>
</tr>
<tr>
<td>Surgery &amp; related admissions</td>
<td>If post-op infection requiring antibiotics occurs, guarantee extends to 5 years</td>
</tr>
<tr>
<td>Prosthesis</td>
<td></td>
</tr>
<tr>
<td>Drugs</td>
<td></td>
</tr>
<tr>
<td>Inpatient rehab, up to 6 days</td>
<td></td>
</tr>
</tbody>
</table>

• Currently applies to all **relatively healthy patients** (i.e. ASA scores of 1 or 2)

• The same **referral process** from PCPs is utilized as the traditional system

• **Mandatory reporting** by providers to the joint registry plus supplementary reporting

• Applies to **all** qualifying patients. Provider participation is **voluntary**, but all providers are continuing to offer total joint replacements

• The Stockholm bundled price for a knee or hip replacement is about **US $8,000**
4. Integrate Care Delivery Systems
Four Levels of Provider System Integration

1. Define overall scope of services where the provider can achieve high value

2. Concentrate volume in fewer locations in the conditions that providers treat

3. Choose the right location for each service based on medical condition, acuity level, resource intensity, cost level and need for convenience
   – E.g., shift routine surgeries out of tertiary hospitals to smaller, more specialized facilities

4. Integrate care across locations
5. Expand Geographic Reach
The Cleveland Clinic Affiliate Programs

- Rochester General Hospital, NY
  Cardiac Surgery
- Chester County Hospital, PA
  Cardiac Surgery
- Central DuPage Hospital, IL
  Cardiac Surgery
- St. Vincent Indianapolis, IN
  Kidney Transplant
- Charleston, WV
  Kidney Transplant
- Pikeville Medical Center, KY
  Cardiac Surgery
- Cape Fear Valley Medical Center, NC
  Cardiac Surgery
- McLeod Heart & Vascular Institute, SC
  Cardiac Surgery
- Cleveland Clinic Florida Weston, FL
  Cardiac Surgery
6. Build an Enabling Information Technology Platform

Utilize information technology to enable restructuring of care delivery and measuring results, rather than treating it as a solution itself.

- Common data definitions
- Combine all types of data (e.g. notes, images) for each patient
- Data encompasses the full care cycle, including care by referring entities
- Allow access and communication among all involved parties, including with patients
- Templates for medical conditions to enhance the user interface
- “Structured” data vs. free text
- Architecture that allows easy extraction of outcome measures, process measures, and activity-based cost measures for each patient and medical condition
- Interoperability standards enabling communication among different provider (and payor) organizations
A Mutually Reinforcing Strategic Agenda

1. Organize into Integrated Practice Units (IPUs)

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Why Is This So Hard?
(And What Do We Do About It?)
“Magic Bullets” Have Had Limited Impact

• Examples:

  – Evidence-based medicine/clinical effectiveness research/guidelines
  – Eliminating fraud
  – Eliminating errors
  – Adding layers (care coordination, prior authorization)
  – Turning patients into consumers
  – Electronic health records
  – New low cost models of primary care
  – Capitation
Why We Are Stuck
Legacy System

1. Organized around specialties and departments, with private-practice physicians
2. Measures process compliance and charges
3. Fee-for-service payments based on volume of services delivered
4. Each hospital or practice offers a full line of services
5. Providers limited to serving their immediate geographic area
6. Build an Enabling IT Platform
Getting Unstuck

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This Won’t Be Easy …

Common Reactions

• “How can we create real teams if our physicians are not our employees?”
  – “… or even if they are employees, but are paid by RVU?”

• “We can’t ask anyone to stop doing anything as long as we all have our own bottom lines.”
... But We Have to Get Going

Common Reactions

• “How can we create real teams if our physicians are not our employees?”
  – “… or even if they are employees, but are paid by RVU?”
• “We can’t ask anyone to stop doing anything as long as we all have our own bottom lines.”

First Steps

• Measure what matters to patients – benchmark and report
• Use narrative (patient stories) to create organizational shared purpose
• Create financial and nonfinancial incentives for improvement of value