Value-Based Health Care Delivery
Systems Integration and Growth

Professor Michael E. Porter
Harvard Business School
Texas Medical Center
Value Based Health Care Delivery Seminar
www.isc.hbs.edu

April 2014

This presentation draws on Redefining Health Care: Creating Value-Based Competition on Results (with Elizabeth O. Teisberg), Harvard Business School Press, May 2006; “A Strategy for Health Care Reform—Toward a Value-Based System,” New England Journal of Medicine, June 3, 2009; “Value-Based Health Care Delivery,” Annals of Surgery 248: 4, October 2008; “Defining and Introducing Value in Healthcare,” Institute of Medicine Annual Meeting, 2007. Additional information about these ideas, as well as case studies, can be found the Institute for Strategy & Competitiveness Redefining Health Care website at http://www.hbs.edu/rdh/rdh/index.html. 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 O. Teisberg.
Creating a Value-Based Health Care Delivery System

The Strategic Agenda

1. Organize Care into Integrated Practice Units (IPUs) around Patient Medical Conditions
   - For primary and preventive care, organize 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
4. Integrate Care Delivery Systems

Confederation of Standalone Units/Facilities

- Increases volume
- Move clout in contracting and spread “fixed overhead”

Integrated Care Delivery Systems

- Increases value
- The network is more than the sum of its parts
Four Levels of Provider System Integration

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

2. **Concentrate volume in fewer locations** in the conditions that the system treats

3. Choose the **right location for each service** based on the 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 appropriate locations** through IPU structures
4. Integrate Care Delivery Systems

Children’s Hospital of Philadelphia Care Network

The Children’s Hospital of Philadelphia®

Network Hospitals:
- CHOP Newborn Care
- CHOP Pediatric Care
- CHOP Newborn & Pediatric Care

Wholly-Owned Outpatient Units:
- Pediatric & Adolescent Primary Care
- Pediatric & Adolescent Specialty Care Center
- Pediatric & Adolescent Specialty Care Center & Surgery Center
- Pediatric & Adolescent Specialty Care Center & Home Care

Copyright © Michael Porter 2011
Enabling System Integration

Practice Structure

• **IPU structure**
  – "Virtual" IPUs even if providers practice at different locations
  – First step is to increase **consistency** of protocols/processes across sites
  – Create mechanisms for relationships and communications
  – **Case management structure** spanning units where appropriate

Scheduling

• Common or federated **patient scheduling service** across units

Physician Organization

• **Employed** physicians or formal **affiliations** among independent physicians
  – Support service as an inducement for affiliation (e.g. IT, back office)
• **Rotation** of staff across locations

Outcome and Cost Measurement

• Common **outcome** and **process measurement** systems across units
• Ability to accurately accumulate **cost per patient** across the entire care cycle
• Ability to measure **cost by location** for each service/activity

Common or Interoperable Information Systems

• **Common EMR platform** which aggregates information across units

Culture

• Management practices that foster **affiliation** with the parent organization, developing **personal relationships**, and **regular contact** among dispersed staff
• Seed sites with formal trainees or staff steeped in the culture
5. Expand Geographic Reach

Leading Providers

- Grow **areas of excellence across geography:**
  - **Hub and spoke** expansion of satellite pre- and post-acute services
  - **Affiliations** with community providers to extend the reach of IPUs

- Increase **volume** in medical conditions or primary care segments vs. **widening** service lines locally, or adding new **broad line** units

Community Providers

- **Affiliate with excellent providers** in more complex medical conditions and patient segments in order to access expertise, facilities and services to enable high value care
  - New roles for **rural** and **community** hospitals
Growth Principles

• Grow in ways that improve value, not just increase volume

• Grow areas of excellence and leverage integration across locations, rather than adding broad line, stand-alone units

• Culture counts: rotate people and transplant processes, not just expansion in name only
5. Expand Geographic Reach
The Cleveland Clinic Affiliate Programs

- Central DuPage Hospital, IL
  - Cardiac Surgery

- Cheyenne Regional Medical Center, WY
  - Cardiac Surgery

- Chester County Hospital, PA
  - Cardiac Surgery

- Cleveland Clinic
  - Cardiac Surgery

- Cleveland Clinic Florida Weston, FL
  - Cardiac Surgery

- Cape Fear Valley Medical Center, NC
  - Cardiac Surgery

- Kidney Transplant

- Pikeville Medical Center, KY
  - Cardiac Surgery

- McLeod Heart & Vascular Institute, SC
  - Cardiac Surgery

- St. Vincent Indianapolis, IN
  - Kidney Transplant

- St. Vincent Indianapolis, IN
  - Cardiac Surgery

- Charleston, WV
  - Kidney Transplant

- Rochester General Hospital, NY
  - Cardiac Surgery
Models of Geographic Expansion

Affiliations and Knowledge Services

- Affiliation and Partnerships Agreements with Independent Provider Organizations

- Second Opinions and Telemedicine

Dispersed Services

- Dispersed Diagnostic Centers

- Convenience -- Sensitive Services Closer to Patients

- Complex IPU Components (e.g. surgery) in Additional Locations

New Hubs

- New Specialty Hospitals or Referral Centers

- New Broader-Line Hubs
6. Build an Enabling Integrated IT 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**
Creating a Value-Based Health Care Delivery System

The Strategic Agenda

1. Organize Care into *Integrated Practice Units (IPUs)* around Patient Medical Conditions
   - For primary and preventive care, organize 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*
Creating a Value-Based Health Care Delivery System

Implications for Payors

1. Integrated Practice Units (IPUs)
   • Encourage and reward integrated practice unit models by providers
   • Provide advice to patients (and referring physicians) in selecting excellent providers

2. Measure Cost and Outcomes
   • Encourage or mandate provider outcome reporting through registries by medical condition
   • Share information with providers to enable improved outcomes and cost measurement

3. Move to Bundled Prices
   • Design and support implementation of new bundled reimbursement structures for care cycles instead of fees for discrete services

4. Integrate Care Delivery Systems
   • Assist in coordinating patient care across the care cycle and across medical conditions
   • Migrate care to appropriate facilities within provider systems

5. Expand Geographic Reach
   • Create relationships and incentives to increase the volume of care delivered by or affiliated with centers of excellence, including travel where appropriate

6. Build an Enabling IT Platform
   • Create strong incentives for providers to introduce medical records systems and share information
## Creating a Value-Based Health Care Delivery System
### Implications for Government

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Integrated Practice Units (IPUs)</td>
<td>• Reduce regulatory obstacles to care integration across the care cycle</td>
</tr>
<tr>
<td>2. Measure Cost and Outcomes</td>
<td>• Require reporting of provider volume by condition and procedure&lt;br&gt;• Create a national framework of medical condition outcome registries and a path to universal measurement&lt;br&gt;• Tie government reimbursement to outcome reporting&lt;br&gt;• Set accounting standards for meaningful cost reporting</td>
</tr>
<tr>
<td>3. Move to Bundled Prices</td>
<td>• Create a bundled pricing framework and rollout schedule</td>
</tr>
<tr>
<td>4. Integrate Care Delivery Systems</td>
<td>• Introduce minimum volume standards by medical condition</td>
</tr>
<tr>
<td>5. Expand Geographic Reach</td>
<td>• Encourage rural providers and providers who fall below minimum volume standards to affiliate with qualifying centers of excellence for more complex care</td>
</tr>
<tr>
<td>6. Build an Enabling IT Platform</td>
<td>• Set standards for common data definitions, interoperability, and the ability to easily extract outcome, process, and costing measures for qualifying HIT systems</td>
</tr>
</tbody>
</table>