Value-Based Health Care Delivery: Systems Integration & Growth

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This presentation draws heavily on Professor Porter’s research in health care delivery including Redefining Health Care (with Elizabeth Teisberg), What is Value in Health Care, NEJM, and The Strategy That Will Fix Health Care, HBR (with Thomas Lee). A fuller bibliography is attached. 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. For further background and references on value-based health care, see the website of the Institute for Strategy and Competitiveness.
Creating Value-Based Health Care Delivery
The Strategic Agenda

1. Re-organize care around patient conditions, into integrated practice units (IPUs)
   - For primary and preventive care, IPUs serve distinct patient segments

2. Measure outcomes and costs for every patient

3. Move to value-based reimbursement models, and ultimately bundled payments for conditions and primary care segments

4. Integrate multi-site care delivery systems

5. Allocate and integrate care across geography to improve value

6. Build an enabling information technology platform
Shifting The Strategic Logic of Health Systems

Confederation of Standalone Units/Facilities

- Increase **volume**/bargaining power
- More clout in **contracting** and **purchasing**
- **Spread** “fixed overhead” costs
- **Owned** primary care practices “**guarantee**” referrals

Clinically Integrated Care Delivery System

- Increase **value**
- Value-based **delivery** structure by conditions that **integrate** care across the care cycle
- Integrate **primary care** and **specialty care**
- **Concentrate** care for conditions in fewer sites and integrate care across geography in appropriate IPU sites
- The system is **more than** the sum of its parts
“Population Health”

• Serve a large population
• Meet all the population’s needs

• Focus on prevention
• Appropriateness and reducing overtreatment
• Improve generic quality metrics (e.g. infection rates, readmission)
• Improve population-wide quality metrics

Value-Based Delivery System by Condition and Primary Care Segment

• Deliver unique value for patients
  – By condition and primary care patient segment

• Build IPUs by conditions
• Create segmented primary care
• Measure and improve value by condition and segment
• Embed prevention across all types of care
Four Levels of Provider System Integration

1. Defining the **overall scope of services** for each site and for the system as a whole, based on **value**
   - **Affiliate** when this creates value

2. Concentrate **volume** of patients by condition in **fewer locations** to support IPUs and improve outcomes and efficiency

3. Perform the **right services** in the **right locations** based on acuity level, resource/cost fit, and the benefits of patient convenience for repetitive services (“acuity tuning”)
   - E.g., move **less complex surgeries** out of tertiary hospitals to lower acuity facilities and outpatient surgery centers
   - **Affiliate** when this creates value

4. Integrate the care cycle **across sites** via an **IPU structure**
   - Common **scheduling**
   - **Digital services, telemedicine** and **home care** to can help tie together the care cycle
The Geography of Care

- The Traditional Care Geography Model
  - Care organized around specialties and interventions for each site
  - Reinforced by the fee-for-service model and siloed IT systems
  - Duplication of services across sites/facilities (community and AMCs)
  - Sites provide care for multiple acuity levels
  - Limited integration of care across services and sites

- Geography of Care & Strategic Principles
  - Organize care by condition in IPUs (hubs)
  - Allocate services across the care cycle to appropriate sites based on care complexity, patient risk factors, cost, and patient convenience
  - Integrate telemedicine, affiliation with independent provider sites, and home services into the care cycle
  - IPUs create systems to allow for teams to direct patients to the most appropriate site
Delivering the Right Care at the Right Location
Rothman Institute, Philadelphia

Patient Risk Factors: Age, Weight, Expected Activity, General Health, and Bone Quality

Facility Capability
- Lowest Complexity
- Low Complexity
- Medium Complexity
- Highest Complexity

Price of Total Hip Replacement:
- Ambulatory Surgery Center: ~$12,000 USD
- Rothman Orthopaedic Specialty Hospital: ~$45,000 USD
- Bryn Mawr Community Hospital: ~$45,000 USD
- Jefferson University Academic Medical Center: ~$45,000 USD
Move Appropriate Services Out of High Resource Centers
MD Anderson Regional Cancer Care Centers

- **Memorial Hermann Memorial City Surgical Center**
  - Day surgery

- **Houston Methodist St. Catherine Hospital**
  - Breast
  - Colorectal
  - Dermatology/Skin
  - Genitourinary
  - Gynecologic
  - Head and neck
  - Thoracic
  - Reconstructive surgery

- **West Houston Imaging Center**
  - Diagnostic imaging and biopsy

- **St. Luke’s Sugar Land Hospital**
  - Breast
  - Gynecologic
  - Dermatology/Skin

- **St. Luke’s Woodlands Hospital**
  - Breast
  - Gynecologic
  - Dermatology/Skin

- **Bellaire Imaging Center**
  - Diagnostic imaging and phlebotomy

- **Houston Methodist St. John Hospital**
  - Breast
  - Head and neck
  - Skin cancer and melanoma

**MD Anderson Main Campus**
Integrate Multi-site Care
Children’s Hospital of Philadelphia Care Network

**Wholly-Owned Outpatient Units**
- ★ Primary Care Practices
- 🔧 Specialty Care Centers
- 🔧 Specialty Care Center, Surgery Center & After-Hours Urgent Care
- 🔧 Specialty Care & Surgery Centers
- 🔧 Specialty Care Center, Surgery Center, After-Hours Urgent Care & Home Care

**Community Inpatient Partnerships**
- 🔴 CHOP Newborn Care
- 🔴 CHOP Pediatric Care
- 🔴 CHOP Newborn & Pediatric Care
- ▲ Hospital & Integrated Specialty Program

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Expand Geographic Reach
The Cleveland Clinic Cardiac Affiliate Program

- Central DuPage Hospital, IL
  Cardiac Surgery
- Chester County Hospital, PA
  Cardiac Surgery
- Cleveland Clinic
- Cape Fear Valley Medical Center, NC
  Cardiac Surgery
- McLeod Heart & Vascular Institute, SC
  Cardiac Surgery
- Fisher-Titus Medical Center, OH
  Cardiac Surgery
- Pikeville Medical Center, KY
  Cardiac Surgery
- The Bellevue Hospital, OH
  Cardiac Surgery
- Rochester General Hospital, NY
  Cardiac Surgery
- Cleveland Clinic Florida Weston, FL
  Cardiac Surgery
- 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

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Affiliation to Upgrade and Allocate Care Across Centers
Regional Strategy at Texas Children’s Heart Center

The Heart Center
Texas Children’s Hospital in Houston
(2.2%)*

Dallas

Covenant Hospital
in Lubbock
(17.1%)**

Regional Strategy at Texas Children’s Heart Center
Children’s Hospital of San Antonio
(4.2%)

Inpatient Mortality Rate
State average: 4.5%

ABC Hospital of Mexico City
(2%)
Partnering to Compete Multi-Regionally or Nationally in Particular Conditions
National Orthopaedic and Spine Alliance (NOSA)

Founding Members
- Cleveland Clinic
- CORE Institute
- OrthoCarolina
- Hoag Institute
- Rothman Institute

National Contracting
- Contract directly with large employers
- Streamlined scheduling at nearest center
- Remote and virtual monitoring using telehealth
- Bundled price
- Care guarantee

Standardized Measurement
- Pre- and post-surgery functional outcomes and pain
- One-year infection rates
- 30-day inpatient readmissions
- 30-day reoperation rates
Enabling System Integration and Affiliation

- IPU hubs to manage integration
- Common EMR
- Unified scheduling of patients by condition
- Standardized TDABC costing
  - Ability to measure and compare cost by location for each service/activity in the care cycle
- Integrated common dashboards, protocols, processes, and financial statements
- Telemedicine to link sites

- Physician alignment
  - Employed or affiliated physicians where feasible
- Explicit mechanisms to forge personal relationships among staff who need to work together
  - Meetings and other steps that create regular contact among dispersed staff
  - Rotation of staff across locations
- Common culture and values
Broad Based Affiliations Across a Region
Vanderbilt Health Affiliated Network (VHAN)
Selected References on Value-Based Health Care

Value-based Health Care


Integrated Practice Units and Primary Care


Outcome Measurement


Cost Measurement


Reimbursement


Regional and National Expansion


Information Technology


Websites
