Value-Based Health Care Delivery and the Role of Outcome Measurement

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Working Party on Health Care Quality and Outcomes (HCQO)

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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.
Incremental “Solutions” Have Had Limited Impact

- Evidence-based medicine
- Safety/eliminating errors
- Prior authorization for expensive services
- Patients as paying customers
- Electronic medical records
- Introducing “lean” process improvements
- Care coordinators
- Retail clinics/urgent care
- Programs to address generic high cost areas (e.g. readmissions, post acute)
- Mergers and consolidation

- **Restructuring health care delivery** is needed, not incremental improvements
Value-Based Health Care is Rapidly Diffusing
Peer Reviewed Literature 1990-2017

Journal Articles Related To Value-Based Health Care


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Solving the Health Care Problem

• The fundamental goal and purpose of health care is to improve value for patients

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

• Delivering high value health care is the definition of success

• Value is the only goal that can unite the interests of all system participants

• Improving value is the only real solution

• The question is how to design a health care delivery system that substantially improves patient value
Principles of Value-Based Health Care Delivery

• Value cannot be understood at the level of a hospital, a care site, a specialty, an intervention, a primary care practice or a broad population

• Value is created in caring for a patient’s medical condition (acute, chronic) over the full cycle of care

Value = [The set of outcomes that matter for the condition] / [The total costs of delivering these outcomes over the full care cycle]

• In primary and preventive care, value is created in serving segments of patients with similar primary and preventive needs

• The most powerful single lever for reducing cost and improving value is improving outcomes
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. Expand or affiliate across geography to reinforce excellence

6. Build an enabling information technology platform
Re-organize Care Around Patient Medical Conditions

Headache Care in Germany

Organize by Specialty and Discrete Service

- Imaging Centers
- Outpatient Physical Therapists
- Outpatient Neurologists
- Outpatient Psychologists
- Inpatient Treatment and Detox Units

Integrate Practice Unit for the Condition

- Affiliated Imaging Unit
- Primary Care Physician
- West German Headache Center
  - Neurologists
  - Psychologists
  - Physical Therapists
  - "Day Hospital"
- Affiliated "Network" Neurologists
- Essen Univ. Hospital Inpatient Unit

- IPUs include care for common comorbidities and complications

The Emerging Playbook for Integrated Practice Units (IPUs)

1. Organized around a **medical condition**, or **group of closely related conditions**.
   - And defined patient segments for primary care

2. Care is delivered by a **dedicated, multidisciplinary team** devoting a significant portion of their time to the condition
   - In-house staff as well as affiliated staff with strong working relationships

3. **Co-located in dedicated facilities. Hub and spoke** structure covering multiple or affiliated sites, and incorporating telemedicine where appropriate

4. Takes responsibility for the **full cycle of care**

5. **Patient education, engagement, adherence, follow-up, and prevention** are integrated into the care process

6. The unit has a clear **clinical leader**, a common **scheduling** and **intake process**, and unified **financial structure** (single P + L)

7. A **physician team captain, clinical care manager** or both oversees each patient’s care

8. The IPU **routinely measures** outcomes, costs, care processes, and patient experience using a **common platform**

9. The team **accepts joint accountability** for outcomes and costs

10. The team **regularly meets formally and informally** to discuss individual patient care plans, process improvement, and how to improve results

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The Journey to Value Based Primary Care

1. **Segment** the population based on primary care needs

2. Develop **primary care teams** around patient segments (IPUs)

3. Create **shared infrastructure** across primary care IPUs to increase efficiency and enhance value

4. Measure outcomes and costs by **segment**

5. **Integrate** primary care and with specialty care

6. Move toward **value based payments** by segment
   - Risk adjustment will differ by segment
Shared Primary Care Infrastructure

Primary Care Practices (Population Segmented)

Sites for Low Cost, Convenient Routine Services
- Clinics in retail stores or other convenient, low cost sites
- Shared walk-in clinics in primary care or specialty care sites

After Hours Access
- After hours clinics in primary care or outpatient specialty sites
- 24 hour nurse hotlines

Prevention Hubs
- Smoking cessation
- Alcohol addiction
- Weight loss
- Other complex addiction (e.g. opioids)

Support Services Reflecting Social and Behavioral Effects on Health
- Housing
- Income support
- Nutrition support
- Domestic violence
- Transportation
- Close contact with social services organizations

Reflecting Social and Behavioral Effects on Health
Integrating Primary With Specialty Care to Improve Value

**Specialty IPUs**

- Embedded specialists in areas prevalent in the population
- Specialist rotation to enable multidisciplinary visits
- Disease specific protocols and training to shift appropriate care to lower cost settings
- PCC team relationships with affiliated specialists to facilitate efficient integration
- Telemedicine consults to efficiently access specialists
- Primary care embedded in specialty IPUs for complex conditions

**Primary Care Practices (Population Segmented)**
Value-Based Primary Care
Oak Street Health

- Focuses **low-income older adults** living in **under-served** urban communities
  - Four severity tiers
- **Multidisciplinary team** covering the full care cycle: physicians, PAs, NPs, RNs, medical assistants, scribes, care managers, social workers, clinical informatics specialists, and others
- Co-located in **dedicated facilities. 19 sites** across the Midwest
- Explicit processes to **engage** patients and reduce **obstacles to accessing** care such as **free rides/home-visits**, **in-house pharmacy** and selected **events** for community residents
- Selected in-house specialty services such as **behavioral health** and **podiatry**. Close relationships with **preferred outside specialists** and **imaging** partners
- **Meet daily and weekly** to discuss patient care plans and process improvement
- **Measure and accountable** for outcomes, cost, and patient experience

- **Single risk-adjusted payment** covering overall care
  - Includes specialty and post-acute care
Measure Outcomes for Every Patient
The Quality Measurement Landscape

- Patient Initial Conditions, Risk Factors
- Processes
  - Protocols/Guidelines
- Structure
  - E.g., Staff certification, facilities standards
- Indicators
  - E.g., PSA, surgical margin
- Outcomes
Measure Cost for Every Patient

Principles

• Properly measuring the cost of care requires **different cost accounting** methods than prevailing approaches such as departmental, charge-based, or RVU-based costing

• Cost should be measured for **each patient** over the **full cycle of care for the condition**, or by **primary care segment**

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

• Cost is driven by the use of **all the resources** involved in a patient’s care (personnel, facilities, supplies, and support services)
  - Time and actual **costs**, not arbitrary allocations

• Understanding costs requires **mapping the care process**

New Slide on Cost
Mapping Resource Utilization
MD Anderson Cancer Center – New Patient Visit

Registration and Verification
- Receptionist, Patient Access Specialist, Interpreter
  - Patient arrives
  - Check-in patient; communicate arrival
  - Verify patient information; complete consent forms
  - Interpreter needed? (5%)
  - Add language translation time for each process (INF, RCPT)

Intake
- Nurse, Receptionist
  - Assess patient; assemble paperwork; place patient in room
  - Laryngoscopy needed? (10%)
  - Perform laryngoscopy (MD, PA, PSC)

Clinician Visit
- MD, mid-level provider, medical assistant, patient service coordinator, RN
  - Initiate patient workup; review patient history; conduct physical exam
  - Discuss plan of care
  - Notify patient of changes (5-10%)

Plan of Care Discussion
- RN/LVN, MD, mid-level provider, patient service coordinator
  - Review plan of care; introduce team; review schedule for return visit

Plan of Care Scheduling
- Patient Service Coordinator
  - Schedule tests and consults; communicate schedule to patient (PSC)

Decision Point
- Time (minutes)

Source: HBS, MD Anderson Cancer Center
Major Cost Reduction Opportunities in Health Care

- Utilize physicians and skilled staff at the top of their licenses
- Eliminate low- or non-value added services or tests
- Reduce process variation that increases complexity and raises cost
- Reduce cycle times across the care cycle
- Invest in additional services or higher costs inputs that will lower overall care cycle cost
- Move uncomplicated services out of highly-resourced facilities
- Reduce service duplication and volume fragmentation across sites
- Rationalize redundant administrative and scheduling units
- Increase cost awareness in clinical teams
- Decrease cost of claims management process

- Our work reveals typical cost reduction opportunities of 20-30+% 
- Many cost improvements also improve outcomes
Move to Value-Based Payment Models

**Volume**
- Fee for Service
- Global Budgets

**Value**
- Capitation/Population Based Payments
  - Pay for care for a life
- Bundled Payment
  - Pay for care for conditions (acute, chronic) and primary care segments

- Both approaches create positive incentives for reducing costs and separate payment from performing particular services
- Capitation at the hospital or system level can coexist with bundle payment at the condition level
Emerging Value-Based Payment Models

**Capitation (Population-Based)**
- A single risk-adjusted payment for the overall care for a life
- Responsible for all needed care in the covered population
- Accountable for population level quality metrics
- At risk for the difference between the sum of payments for the population and overall spending
  - Providers take disease incidence risk, not just execution/outlier risk
- Accountable for overall cost and population level quality measures

**Bundled Payment**
- A single risk-adjusted payment for the overall care for a condition
  - **Not** for a specialty, procedure, or short episode
- Covers the full set of services needed over an acute care cycle, or a defined time period for chronic care or primary care
- Contingent on condition-specific outcomes
  - Including responsibility for avoidable complications
- At risk for the difference between the bundled price and the actual cost of all included services
  - Limits of responsibility for unrelated care and outliers
- Accountable for costs and outcomes, patient by patient, and condition by condition
Bundled Payment in Practice
Hip and Knee Replacement in Stockholm, Sweden

- **Components** of OrthoChoice bundle

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<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>All Radiology</td>
<td>Responsible for complications and any</td>
</tr>
<tr>
<td>Surgery &amp; related admissions</td>
<td>additional surgery to the joint within 2 years</td>
</tr>
<tr>
<td>Prosthesis</td>
<td>If post-op deep infection requiring antibiotics occurs, guarantee extends to 5 years</td>
</tr>
<tr>
<td>Drugs</td>
<td></td>
</tr>
<tr>
<td>Inpatient rehab</td>
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</tbody>
</table>

- Initially applied to all **relatively healthy patients** (i.e. ASA scores of 1 or 2)
- **Mandatory reporting** by providers to the joint registry plus supplementary reporting
- The Stockholm bundled price for a knee or hip replacement is about **US $8,300**

**Results:**
- Complications fell 18% after 2 years
- Functional outcomes remained constant
- Length of stay fell 16%
- Volume shifted toward specialty hospitals and away from full service acute hospitals
- Standardization and improvement of care processes and efficiency took place
- Patients were exceptionally satisfied
Adoption of Bundled Payments

• Providers
  – American Hospital Association survey indicated 59% of large hospitals and 33% of small hospitals testing bundles

• Employers
  – 20% of surveyed employers have adopted bundled payments
  – Leaders such as Walmart contract directly with multiple health systems across the country

• Government
  – Medicare and Medicaid programs leading implementation
    – CMS’s BPCI alone covers 48 medical areas and involves 1300 providers
    – Numerous state Medicaid programs are moving to bundles

• Private Insurers
  – Slow in moving to bundles, with exceptions including Horizon Blue Cross Blue Shield in NJ, Cigna, and United HealthCare

• Results
  – Equal or better outcomes, such as shorter length of stay and fewer readmissions leading to improved patient satisfaction
  – Significant cost reduction is common

• The Bundled Payment Playbook is emerging
Integrate Multi-Site Care
Shifting The Strategic Logic of Health Systems

Confederation of Standalone Units/Facilities

- Increase volume
- Broad service line in each facility
- More clout in contracting and purchasing
- Spread “fixed overhead” costs
- Use owned or affiliated primary care practices to “guarantee” referrals

Clinically Integrated Care Delivery System

- Increase value
- Value-based delivery models
- Concentrate, allocate, and integrate care across the proper sites of care via IPUs
- The system is more than the sum of its parts
Four Levels of Provider System Integration

1. Defining the **overall scope of services** for each unit, and for the facility/system as a whole, where it can deliver **high value**
   - **Affiliate** when this creates value

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

3. Perform the **right services** in the **right locations** based on acuity level, resource fit, and the benefits of patient convenience for repetitive services
   - E.g., move **less complex surgeries** out of tertiary hospitals to smaller facilities and outpatient surgery centers

4. Integrate the care cycle **across sites** via an **IPU structure**
   - **Common scheduling**
   - **Digital services** and **telemedicine** can help tie together the care cycle
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
- Medium
- Highest Complexity

Cost of Total Hip Replacement:
- ~$12,000 USD
- ~$45,000 USD

Ambulatory Surgery Center
Rothman Orthopaedic Specialty Hospital
Bryn Mawr Community Hospital
Jefferson University Academic Medical Center
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
Broad Based Affiliations Across a Region

Vanderbilt Health Affiliated Network (VHAN)

A Clinically Integrated System

- 12 health systems
- 45 hospitals
- Ownership remains with each institution
- Joint efforts to improve outcomes and lower cost
- Referrals across organizations
- Joint ventures on selected service lines
- Shared support services
- Common health plan with >100K lives covered
Expand Geographic Reach
The Cleveland Clinic Cardiac Affiliate Program

Central DuPage Hospital, IL
Cardiac Surgery

Chester County Hospital, PA
Cardiac Surgery

CLEVELAND CLINIC

Fisher-Titus Medical Center, OH
Cardiac Surgery

Pikeville Medical Center, KY
Cardiac Surgery

The Bellevue Hospital, OH
Cardiac Surgery

Cape Fear Valley Medical Center, NC
Cardiac Surgery

McLeod Heart & Vascular Institute, SC
Cardiac Surgery

Cleveland Clinic Florida Weston, FL
Cardiac Surgery

Rochester General Hospital, NY
Cardiac Surgery

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Build an Enabling IT Platform
Attributes of a Value-Based IT Platform

1. Combines **all types of data** for each patient across the full care cycle (notes, lab tests, genomics, imaging, costs) using standard definitions and terminology.

2. Tools to capture, store, and extract **structured data** and eliminate **free text**.

3. Data is captured in the **clinical** and **administrative workflow**.

4. Data is stored and easily extractable from a common warehouse. Capability to **aggregate**, **extract**, **run analytics** and display **data by condition** and **over time**.

5. **Full interoperability** allowing data sharing within and across networks, EMR platforms, referring clinicians, and **health plans**.

6. Platform is structured to enable the capture and aggregation of **outcomes**, **costing** parameters, and **bundled payment** eligibility/billing.

7. Leverages **mobile technology** for scheduling, PROMs collection, secure patient communication and monitoring, virtual visits, access to clinical notes, and patient education.
The Imperative of Outcome Measurement

• Outcomes encourage **multidisciplinary IPUs** and facilitate care improvement

• Outcomes highlight and validate **value-enhancing cost reduction**

• Outcomes enable shifting to true **value-based bundled payments**

• Outcomes guide the delivery of the **right services at the right locations**

• Outcomes define areas for **service line choices and areas for affiliation**

• Outcomes **define success** for the patient, the clinical team and the payor

• **Standardization** of outcomes by condition unlocks comparison and improvement
### Evolution of Outcome Measurement

<table>
<thead>
<tr>
<th>Emergence of Outcomes</th>
<th>Focus on Quality</th>
<th>Focus on Safety</th>
<th>Focus on High Quality Hospitals</th>
<th>Focus on Performance Improvement</th>
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</thead>
<tbody>
<tr>
<td>Ernest Codman</td>
<td>Avedis Donebedian</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• Father of outcome measurement</td>
<td>• Described the dimensions of health system quality as structure, process, and outcomes</td>
<td>• Significant public pressure to improve after high profile never events (e.g. Libby Zion, Betsy Lehman, Josie King)</td>
<td>• U.S. News – Best Hospitals</td>
<td>• Healthcare looked to other industry to guide improvement including Six Sigma and Lean Management</td>
</tr>
<tr>
<td>• Tracked patients with end result cards</td>
<td>• Led to widespread measurement of structure and process</td>
<td>• Institute for Healthcare Improvement (1991) founded to lead the improvement of health care throughout the world</td>
<td>• First prominent effort to benchmark</td>
<td></td>
</tr>
<tr>
<td>• Surgeons refused to participate</td>
<td>• Little progress on outcome measurement</td>
<td>• Systematic measurement of structural indicators</td>
<td>• Structure, process &amp; outcomes adopted as the measurement framework</td>
<td></td>
</tr>
<tr>
<td>• Codman’s hospital privileges revoked</td>
<td></td>
<td></td>
<td>• Process quality inferred from reputation surveys</td>
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</table>

- Despite recognition of its importance, outcome measurement **limited or nonexistent**
Evolution of Outcome Measurement: New Era of Value

<table>
<thead>
<tr>
<th>Introduction of the Value Agenda</th>
<th>Creation of Standard Outcome Sets</th>
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</thead>
<tbody>
<tr>
<td>2006</td>
<td>2011</td>
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<tr>
<td>• Outline six steps needed to achieve value</td>
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<tr>
<td>• Spearheaded significant efforts around the world to implement value-based health care</td>
<td></td>
</tr>
<tr>
<td>• Non-profit organization founded by individuals from three esteemed institutions</td>
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</tr>
<tr>
<td>• Purpose to transform health care systems worldwide by measuring and reporting patient outcomes in a standardized way</td>
<td></td>
</tr>
</tbody>
</table>
What is a Health Outcome?
The Quality Measurement Landscape

- Patient Experience/Engagement/Adherence
- Patient Initial Conditions, Risk Factors
- Processes
  - Protocols/Guidelines
- Indicators
  - E.g., PSA, surgical margin
- Structure
  - E.g., Staff certification, facilities standards

Outcomes

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Principles of Outcome Measurement

• Outcomes should be measured by condition or primary care segment
  – Not for specialties, procedures, or interventions
• Outcomes are always multi-dimensional and include what matters most to patients, not just to clinicians
  – Patient reported outcomes are important in every condition
• Outcomes cover the full cycle of care
  – Should be continuously collected over time
• Outcome measurement includes initial conditions/risk factors to control for patient differences
• Outcomes should be standardized for each condition to maximize comparison, learning, and improvement
• Outcomes should be measured in the line of care

• Value-based principles differ from the historical focus on provider behavior versus overall patient success
The Outcome Measures Hierarchy

Tier 1

Health Status
Achieved or Retained

Degree of health/recovery

- Achieved clinical status
- Achieved functional status

Tier 2

Process of Recovery

Time to recovery and return to normal activities

- Time to diagnosis and treatment
- Time to return home
- Time to return to normal activities
- Care-related pain/discomfort
- Complications
- Re-intervention/readmission

Tier 3

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

Average hospital
Best hospital

5 year disease specific survival
94%
95%

Source: ICHOM
Measuring Multiple Outcomes
Prostate Cancer Care in Germany

- **5 year disease specific survival**
  - Average hospital: 94%
  - Best hospital: 95%

- **Severe erectile dysfunction after one year**
  - Average hospital: 75.5%
  - Best hospital: 17.4%

- **Incontinence after one year**
  - Average hospital: 43.3%
  - Best hospital: 9.2%

Source: ICHOM
Adult Kidney Transplant Outcomes
1987 - 1989

Number of centers: 219
Number of transplants: 19,588
1 Year Graft Survival: 79.6%
- 16 Greater than expected graft survival (7%)
- 20 Worse than expected graft survival (10%)

Adult Kidney Transplant Outcomes
2011 - 2013

Number of programs included: 209
Number of transplants: 38,370
1 Year Graft Survival: 94.7%

- 4 Greater than expected graft survival (1.9%)
- 5 Worse than expected graft survival (2.4%)
Standardizing Minimum Outcome Sets
ICHOM Standard Sets

**Standard Sets Complete (2013)**
1. Localized Prostate Cancer *
2. Lower Back Pain *
3. Coronary Artery Disease *
4. Cataracts *

**Standard Sets Complete (2014)**
5. Parkinson’s Disease *
6. Cleft Lip and Palate *
7. Stroke *
8. Hip and Knee Osteoarthritis *
9. Macular Degeneration *
10. Lung Cancer *
11. Depression and Anxiety *
12. Advanced Prostate Cancer *

**Standard Sets Complete (2015-16)**
13. Breast Cancer *
14. Dementia
15. Frail Elderly
16. Heart Failure
17. Pregnancy and Childbirth
18. Colorectal Cancer *
19. Overactive Bladder
20. Craniofacial Microsomia
21. Inflammatory Bowel Disease

**Standard Sets Complete (2017)**
22. Chronic Kidney Disease
23. Congenital upper limb malformations
24. Pediatric facial palsy

**Burden of Disease Covered**
- 18%

*Published Thus Far in Peer-Reviewed Journals (14)*

**Committed/ In Process**
- 59%
- 25. Oral Health
- 26. Inflammatory Arthritis
- 27. Hypertension
- 28. Diabetes
- 29. Atrial Fibrillation
- 30. Overall adult health

Learn more about ICHOM at [www.ichom.org](http://www.ichom.org)
Institutions and Registries Implementing ICHOM Standard Sets

Every week, organizations interested in measuring Standard Sets reach out to ICHOM.
Broader Aims of Outcome Measurement

1. **Risk Stratification**
   - Controlling for the complexity of patients

2. **Mandated Reporting**
   - Requirements outlined by accrediting organizations (e.g. JHACO)

3. **Quality Improvement**
   - Metrics collected to improve care processes at the local level (e.g. department, hospital)

4. **Prognostication**
   - Predicting outcomes based on patient, disease and treatment characteristics
Barriers to Outcome Measurement

• Resources devoted to **non-outcome quality measures**

• Lack of a **clear definition** of outcomes

• The need for **standardized outcomes** at the condition level

• Need for **IT tools** to enable seamless outcome collection and aggregation as part of the clinical workflow and from patients

• **Limited mandates** and **incentives** for outcome collection
  - Need to move value-based payment model (e.g. bundled payments)
  - Mandatory collection and reporting
Accelerating Outcome Measurement and Diffusion of ICHOM Measures

- **ICHOM Standard Sets**
  - >30 Countries; >650 Organizations; >15 National Registries

- **Centers for Medicare and Medicaid Services (CMS)**
  - Outcomes embedded in value based reimbursement
  - CMS administered Merit-Based Incentive Payment System (MIPS) includes requirement for outcome reporting

- **National Quality Forum**
  - Measures are shifting from process and structure to outcome measures
  - New focus on outcomes

- **Suppliers**
  - Leaders like Medtronic are shifting competition to outcomes

- **Employers**
  - Major employers like Walmart and Boeing are contracting directly with providers and incorporating outcomes

- **OECD** is adopting ICHOM standards for comparing outcomes across developed nations (PaRIS Initiative)

- **World Economic Forum** has launched a global program on value-based health care centered on outcome measurement
The Health Care Transformation is Well Underway

• We know the path forward

• Value for patients is the True North

• Value based thinking is restructuring care organization, health system strategy and payment models

• Standardized outcome measurement and new costing practices are beginning to accelerate value improvement

• Employers, suppliers, and insurers can be the next accelerators

• Government policy is beginning to reinforce value improvement

• We are anxious to work with all of you in accelerating this transformation
Appendix: Selected References

Value-Based Health Care

• Websites Including Videos
  – http://www.isc.hbs.edu/
  – https://www.ichom.org/