VBHC and the role of ICHOM
Queensland Clinical Senate Workshop

17th March 2016
Setting the Right Goal

- The core purpose of health care is **value for patients**

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

- Delivering high value for patients must be the **central goal** of every health care organization
  - financial success is the **result** of delivering value, not the end in itself

- Health care delivery must shift from **volume** to **value**
Principles of Value-Based Health Care Delivery

• Value is created in caring for a patient’s **medical condition** over the full cycle of care

  → not by a hospital, a site, a specialty, an episode, or an intervention

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

- Outcomes are the **full set of health results that matter** for the patient’s condition
- Costs are the **total costs of care** for the patient’s condition over the care cycle

• The most powerful single lever for reducing cost is **improving outcomes**
Creating a Value-Based Health Care System

• Significant improvement in value will require **fundamental restructuring of health care delivery**, not incremental improvements.

• Today’s delivery approaches reflect legacy organizational structures, management practices, and payment models that are inconsistent with modern service delivery practices and today’s medical science.

  Care pathways, process improvements, safety initiatives, case managers, disease management and other **overlays** to the current structure are beneficial, but not sufficient.
Creating a Value-Based Health Care Delivery System

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 **Bundled Payments** for Care Cycles

4. Integrate Multi-site Care Delivery **Systems**

5. Expand **Geographic Reach To Drive Excellence**

6. Build an Enabling **Information Technology Platform**
ICHOM was formed to catalyze the industry towards value-based health care by defining global outcome standards

Where we come from

Three organizations with the desire to unlock the potential of value-based health care founded ICHOM in 2012:

ICHOM is a nonprofit
- Independent 501(c)3 organization
- Idealistic and ambitious goals
- Global focus
- Engages diverse stakeholders

Our mission

Unlock the potential of value-based health care by defining global Standard Sets of outcome measures that really matter to patients for the most relevant medical conditions and by driving adoption and reporting of these measures worldwide.
ICHOM plays several roles along the journey that will enable value-based health care: our strategic agenda

ICHOM defines internationally recognized Standard Sets of outcomes and related case-mix factors

ICHOM will provide risk-adjusted international benchmarks on outcomes by medical condition

ICHOM will become a methodological partner with media to publish ratings based on ICHOM outcomes

Define Standards

Measure outcomes

ICHOM facilitates adoption and implementation by sharing knowledge and supporting proof-of-concept

Benchmark on outcomes

ICHOM will enable cooperation to improve value by establishing value collaboratives

Establish outcomes transparency

ICHOM will become a methodological partner with media to publish ratings based on ICHOM outcomes

Develop value-based payment models

ICHOM will engage payers and governments to realign financial incentives and promote transparency

1. We are exploring the inclusion of resources data in benchmarks but the methodology is to be determined
ICHOM organizes Working Groups to define Standard Sets of outcomes we recommend all care providers track

ICHOM facilitates a process with international clinical and registry leaders and patient representatives to develop a global Standard Set of outcomes that really matter to patients, along with corresponding case-mix factors.
Standard Set is defined through series of teleconference calls, supported by research and patient input.

**Working Group Process**
- **Working Group Launch**
- **Call 1** Outcome domains
- **Call 2** Outcome definitions
- **Call 3** Outcome wrap-up
- **Call 4** Case-mix domains
- **Call 5** Case-mix definitions
- **Call 6** StSet and publication wrap-up
- **Call 7** Review & transition to implementation
- **Standard Set Launch**

**Literature input**
- Research & propose scope
- Literature review of outcome domains and definitions
- Literature review of risk factor domains and definitions

**Patient input**
- Patient focus group (FG)
- Validation of outcome domains (distribute survey via pat. org.)

**Open review period**

Survey 2 round Delphi process
ICHOM’s Hip & Knee Osteoarthritis Standard Set was developed by experts representing 10 countries and 5 continents.

Gillian Hawker, University of Toronto

Philip Conagahan, University of Leeds
Sally Lewis, Aneurin Bevan Health Board
John Pearce*, Aneurin Bevan Community Health Council

Leif Dahlberg, Lund University
Henrik Malchau, University of Gothenburg; Harvard Medical School
Ola Rolfson, University of Gothenburg; Harvard Medical School

Rob Nelissen, University of Leiden

Mojieb Manzary, The John Hopkins Aramco Health Care Center

Ilana Ackerman, University of Melbourne
Lyn March, North Sydney Orthopaedic and Sports Medicine Centre
Noel Smith*, Arthritis Victoria

David Ayers, Umass Memorial Medical Center
Thomas Barber, Kaiser Permanente
Kevin Bozic, University of Texas Austin
James Caillouette, Hoag Orthopedic
Patricia Franklin, University of Massachusetts
John Grady-Benson, Connecticut Joint Replacement Institute
Said Ibrahim, University of Pennsylvania
Nader Nassif, Hoag Orthopedic Institute

Jennifer Dunn, University of Otago

Thami Benzakour, Zerkouni Orthopedic Clinic

Nicolaas Budhiparama, Nicolaas Institute of Constructive Orthopaedic Research & Education Foundation for Arthroplasty & Sports Medicine

*Patient representative
The ICHOM Standard Set for Hip and Knee Osteoarthritis: Outcomes

- **DISEASE CONTROL**
  - Administrative/clinical data
  - Need for surgery
  - Treatment progression and care utilization

- **PATIENT REPORTED HEALTH STATUS**
  - SF-12, VR-12, or EQ-5D-3L
  - Overall satisfaction with result
  - Health-related quality of life
  - Work status

- **ACUTE COMPLICATIONS OF TREATMENT**
  - Mortality
  - Readmissions

- **HIP AND KNEE PAIN**
  - Numeric rating scale or visual analog scale

- **30-day all-cause (administrative data)**

- **REOPERATION OR REVISION**

- **PATIENT REPORTED HEALTH STATUS**

- **NUMERICAL RATING SCALE OR VISUAL ANALOG SCALE**

- **HOOS-PS or KOOS-PS**
By mid-year we will have covered ~45% of the global disease burden

We have already developed 13 standard sets

<table>
<thead>
<tr>
<th>Number</th>
<th>Condition</th>
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<tbody>
<tr>
<td>1.</td>
<td>Craniofacial microsomia</td>
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<td>2.</td>
<td>Heart failure</td>
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<td>3.</td>
<td>Pregnancy and childbirth</td>
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<td>4.</td>
<td>Colorectal cancer</td>
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<td>6.</td>
<td>Older people</td>
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<td>7.</td>
<td>Overactive bladder</td>
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<tr>
<td>8.</td>
<td>Inflammatory bowel disease</td>
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</tbody>
</table>

*Focused on low and middle income countries

In early 2016, 8 more will be completed

1. Craniofacial microsomia
2. Heart failure
3. Pregnancy and childbirth
4. Colorectal cancer
5. Breast cancer
6. Older people
7. Overactive bladder
8. Inflammatory bowel disease

With ongoing discussions to launch...

1. Bipolar disorder
2. End stage renal failure
3. Hypertension*
4. Malaria
5. Adult population health
6. Substance use
7. Oral health
8. Inflammatory arthritis
9. Congenital hand malformations
10. Rotator cuff disease
11. Brain tumors
12. Upper GI cancers
13. Type 1 diabetes

*Numbers not representing prioritization/likelihood
Global demand to measure and compare outcomes is impressive

Institutions and registries around the world are already measuring or implementing ICHOM Standard Sets
We are currently developing a global benchmarking program

Objectives of Global Comparisons project

Pool health outcomes data from 10-15 leading provider organizations – 2 conditions for pilot

Risk-adjust raw data and organize comparisons on key indicators
  - Particular focus on patient-reported outcomes

Provide individual – and confidential – reporting to participating organizations

Identify the “best-in-class” and publish about their performance

Sample output – Hip and Knee

Case mix complexity (risk-adjusted)

Acute complications
- Mortality
- Readmissions

Patient-reported health status
- Knee pain
- Knee functioning
- Work status
- Time to recovery
- Health-related QoL
- Overall satisfaction

Disease progression
- Need for surgery
- Reoperation or revision

Case mix average Complexity = 1.0

Worse
Better

Other organization
Your organizations
World average (for participants)
ICHOM is gaining the support of the health care community
ICHOM’s Strategic and Sponsoring Partners*

**STRATEGIC PARTNERS**

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<tr>
<th>Logo</th>
<th>Name</th>
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<tr>
<td>ACI</td>
<td>NSW Agency for Clinical Innovation</td>
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<td>Santeria Universitary Hospital</td>
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<td>Erasmus MC</td>
<td>University Medical Center Rotterdam</td>
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<tr>
<td>Ramsay Health Care</td>
<td>People caring for people</td>
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<td>University Health Board</td>
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**PLATINUM**

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<tr>
<td>Alliance of Dedicated Cancer Centers</td>
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<td>Norwegian Foundation</td>
<td>UGASTF</td>
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<td>Dutch Institute for Clinical Auditing</td>
<td>American Heart Association</td>
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**GOLD**

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<td>Bowel Cancer Australia</td>
<td>SickKids</td>
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<td>Boston Children's Hospital</td>
<td>The Children's Hospital of Philadelphia*</td>
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<td>Harvard Pilgrim Health Care</td>
<td>NHS Trust</td>
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<td>Clinical Commissioning Group</td>
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**SILVER**

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<td>Massachusetts</td>
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<td>Cedars-Sinai</td>
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<td>MD Anderson Physicians Network</td>
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<td>St. Joseph's Health Center</td>
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<td>Mayo Clinic</td>
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<td>Istituto Clinico Humanitas</td>
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<tr>
<td>Jewish General Hospital Foundation</td>
<td>Instituto Clinico Humanitas</td>
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**BRONZE**

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<tr>
<td>Wills Eye Hospital</td>
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<td>Government of South Australia</td>
<td>Hoag</td>
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<td>CJRI</td>
<td>SJUKHUS</td>
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<tr>
<td>S: T: ERIK SJUKHUS</td>
<td>Texas Children's Hospital</td>
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<tr>
<td>St. Erik's</td>
<td>MD Anderson Cancer Center</td>
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<td>Sahlgrenska Universitetssjukhuset</td>
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<tr>
<td>The University of Texas at Austin</td>
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*As of October 2015

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Additional viewing and reading on value-based health care and ICHOM

Video Documentary
- Measured Outcomes: A Future View on Value-Based Healthcare. Accessible [here](#).

Harvard Business Review
- Porter, M. Lee, T. The strategy that will fix health care. Accessible [here](#).
- Porter, M. Kaplan, B. How to solve the health care cost crisis. Accessible [here](#).
- Stowell, C. Akerman, C. Better value in health care requires focusing on outcomes. Accessible [here](#).
- Lippa, J. Pinnock, C. Aisenbrey, J. What health care leaders need to do to improve value for patients. Accessible [here](#).

New England Journal of Medicine
- Porter, M. What is Value in Health Care? Accessible [here](#).
- Porter, M. Lee, T. Why strategy matters now. Accessible [here](#).
- Porter, M. Larsson, S. Lee, T. Standardizing patient outcomes measurement. Accessible [here](#).