International Consortium for Health Outcomes Measurement

Värdebaserad vård
Dagens Medicin

26th May 2016
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An Introduction to ICHOM

What we do

- Standard Set development
- Implementation
- Benchmarking

Our work with the Life Sciences sector

ICHOM 2016 Conference
Variation in outcomes is a worldwide problem

2x variation in 30-day mortality rate from heart attack in US hospitals

4x variation in bypass surgery mortality in the UK hospitals

5x Variation of major obstetrical complications among US hospitals

9x variation in complication rates from radical prostatectomies in the Dutch hospitals

18x variation in reoperation rates after hip surgery in German hospitals

20x variation in mortality after colon cancer surgery in Swedish hospitals

36x variation in capsule complications after cataract surgery in Swedish hospitals

“Despite achievements in areas of patient safety, the problem of variation remains endemic, and unmeasured.”

Source: ICHOM analysis, Martin Makary, How Health Care’s Successes Became Distractions”, Health Affairs August 2014
This is why measuring and reporting meaningful outcomes matters
Comparing outcomes of prostate cancer care

Focussing on mortality alone...

...may obscure large differences in outcomes that matter most to patients

Swedish data rough estimates from graphs; Source: National quality report for the year of diagnosis 2012 from the National Prostate Cancer Register (NPCR) Sweden, Martini Klinik, BARMER GEK Report Krankenhaus 2012, Patient-reported outcomes (EORTC-PSM), 1 year after treatment, 2010
ICHOM was formed to drive 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.

Value = Patient health outcomes achieved / Cost of delivering those outcomes
The key to value-based health care reform is to measure meaningful outcomes
ICHOM plays several roles along the journey that will enable value-based health care: our strategic agenda

1. We are exploring the inclusion of resources data in benchmarks but the methodology is to be determined
Support for our work is growing rapidly
Support for our work is growing rapidly
A special thank you to our 9 strategic partners

- Erasmus MC
- GIG CYMRU NHS WALES
- ACI NSW Agency for Clinical Innovation
- Ramsay Health Care
- Santeon
- Providence Health & Services
- Region Västra Götaland
- Karolinska University Hospital
- HCF Research Foundation
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ICHOM 2016 Conference
ICHOM organizes Working Groups to define Standard Sets of outcomes we recommend all care providers track.

ICHOM facilitates a process with international physician and registry leaders and patient representatives to develop a global Standard Set of outcomes that really matter to patients.

**A few facts**
- 400+ physicians, patient representatives and outcomes experts involved so far
- All participants volunteer their time, 2-3 hours per month
- 8-10 months to develop a Standard Set
ICHOM Standard Sets are freely available to promote global adoption

**Flyers**
- Two-page overview of ICHOM Standard Set and Working Group
- Flyers are available at [www.ichom.org](http://www.ichom.org)

**Reference Guides**
- Full detail of Standard Set for institutions interested in collecting
- Includes measure definitions, coding instructions, and sample questionnaires
- Reference Guides available at [www.ichom.org](http://www.ichom.org)

**Academic Publications**
- Several peer-reviewed publications
- Explains process to arrive at Standard Set and motivation for selected measures
- Click [here](http://www.ichom.org) for example
Example: the ICHOM coronary artery disease standard set

- Major Cardiac Surgery Complications
- Major Interventional Cardiology Complications
- Minor Cardiac Surgery Complications
- Procedural Complications
- Perioperative Complications
- Major Complications

Cardiovascular Disease Progression

- Need for Revascularization Procedure
- Renal Failure
- Heart Failure
- Stroke
- Reinfarction
- Health Related Quality of Life

Survival

- Overall Survival

Acute Complications

- Angina
- Dyspnea
- Depression
- Functional Status
- Health Related Quality of Life
Example: the ICHOM coronary artery disease standard set

ICHOM standard sets are differentiated for the focus on what really matters for the patient.
Our current 13 Standard Sets

<table>
<thead>
<tr>
<th>Category</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
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<tr>
<td>Advanced prostate cancer</td>
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</tr>
<tr>
<td>Lung cancer</td>
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<tr>
<td>Cleft lip &amp; palate</td>
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</tr>
<tr>
<td>Hip &amp; knee osteoarthritis</td>
<td><img src="image" alt="Hip &amp; Knee Osteoarthritis" /></td>
</tr>
<tr>
<td>Depression &amp; anxiety</td>
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<tr>
<td>Parkinson's Disease</td>
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<tr>
<td>Cataracts</td>
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<tr>
<td>Macular degeneration</td>
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<tr>
<td>Coronary artery disease</td>
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</tr>
<tr>
<td>Dementia</td>
<td><img src="image" alt="Dementia" /></td>
</tr>
</tbody>
</table>

By mid-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. Chronic kidney disease
2. Oral health
3. Inflammatory arthritis
4. Congenital hand malformations
5. Facial palsy
6. Bipolar disorder
7. HIV/AIDS
8. Pediatrics epilepsy
9. Pediatric overall health
10. Adult overall health
11. Substance use disorders
12. Burns
13. Head and neck cancer

*Numbers not representing prioritization/likelihood

*Focused on low and middle income countries
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ICHOM 2016 Conference
32 Countries
400 Organizations
13 National Registries
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ICHOM 2016 Conference
Global benchmarking program will assess outcome variation to enable powerful comparisons

Objectives of global comparisons project

- 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

- Other organization
- Your organizations
- World average (for participants)
Global comparisons will set the stage for more rapid learning and significant quality improvements.

Striking outliers exist in all areas of medicine.

Recognizing and studying outliers can help us to improve together.

Mean change in ODI

Note: Adjusted for age, sex, race, body mass index, diagnosis, education, any neurological deficit, stomach problem, joint problem, other comorbidities, baseline treatment preference, and baseline scores; Source: Desai et al, Variation in Outcomes Across Centers After Surgery for Lumbar Stenosis and Degenerative Spondylolisthesis in the Spine Patient Outcomes Research Trial, Spine 2013.
GLobal Outcomes BEnchmarking (GLOBE) pilot in the coming 18 months: Cataract and Hip & Knee Osteoarthritis

Program Design (2~3 months)
- Overcome barriers to collecting and transferring data

Data Collection (1 year)
- Design risk adjustment, analytics, and visualization
- Assess variation between participating sites

Reporting (1~2 months)
- Examine the utility of benchmarking outcomes
- Provide reporting

Key objectives
ICHOM working with an international network of providers to deliver the first phase of the GLOBE Pilot

Connecticut Joint Replacement Institute (CJRI), Connecticut, USA
Brigham and Women’s hospital, Massachusetts, USA

Sahlgrenska, Gothenburg, Sweden
St Erik’s, Stockholm, Sweden

Imperial Hospital, London, UK
Royal Free, London, UK
West Suffolk, Suffolk, UK
Aneurin Bevan Health Board, UK
Ramsay UK Healthcare, UK

Humanitas, Milan, Italy

Mayo Clinic, Florida, USA

HOAG Orthopedic Insititute, California, USA

Royal Melbourne Hospital, Melbourne, Australia

Leiden University Medical Center, Leiden, Netherlands
Martini hospital, Groningen, Netherlands
Medisch Spectrum Twente, Enschede, Netherlands
Bergman clinics, Naarden, Netherlands
Catharina Ziekenhuis, Eindhoven, Netherlands
Erasmus, Rotterdam, Netherlands
OLVG Santeon, Amsterdam, Netherlands

Malaysian National Registry, Malaysia
Singapore National Eye Center, Singapore

Prospective HKO Sites
Prospective CAT Sites

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In 2016, ICHOM is launching several areas of work in collaboration with the Life Sciences sector

1. Innovative Medicines Initiative (IMI)
   - ICHOM is part of a consortium of 16 organisations for the Cardiovascular Diseases IMI grant – currently under review.

2. MedTech Europe
   - ICHOM is working closely with MedTech Europe to catalyse value-based procurement.
   - Specifically, ICHOM is developing a value based procurement pilot in the UK.

3. Pilot Projects
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ICHOM 2016 Conference
In 2016, the ICHOM team held our largest conference to date
May 16th and 17th, University College London

800 Attendees (capped registration)
35 Countries
400 Organizations

“Ideas don’t move mountains, bulldozers do.”