



**International Consortium for Health Outcomes
Measurement**

Danish Regions

5th February 2018

Ernest Codman – circa 1915



***"...neither the hospital trustees,
the physician, nor surgeon, nor
administrator consider it their
business to make sure that the
result to the patient is good"***

-Ernest Codman
(1914, Boston)

Agenda

Background

Standard Set Development

Implementation and Benchmarking

Further developments

Variation in health 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

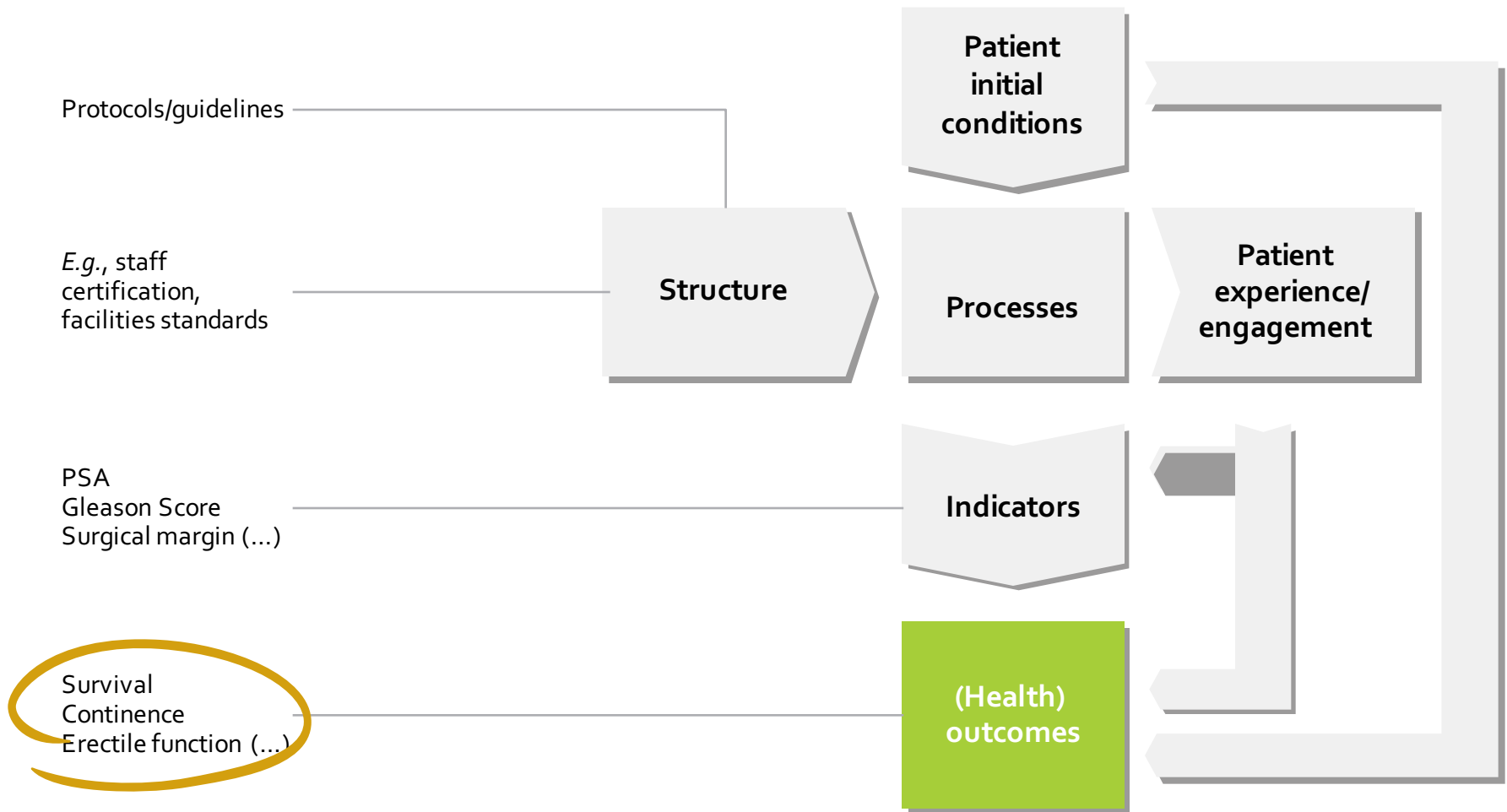


36X variation in capsule complications after cataract surgery in Swedish hospitals



Outcomes are the “real-world” results that matter to patients

Example: Prostate cancer

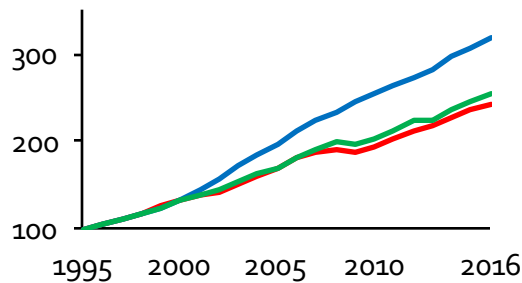


Expenditure on health care is growing at an unsustainable rate



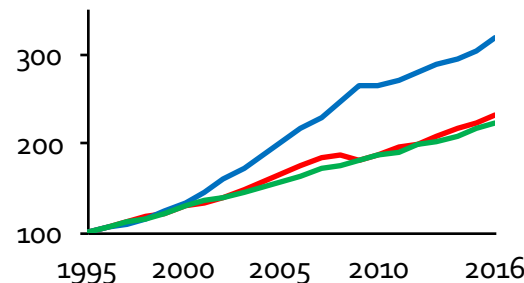
Index
(1995=100)

HC expenditure 2016:
17.2% of GDP



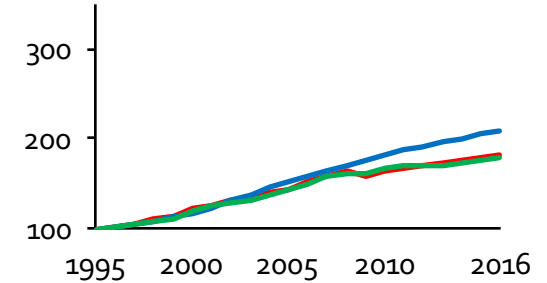
Index
(1995=100)

HC expenditure 2016:
9.2% of GDP



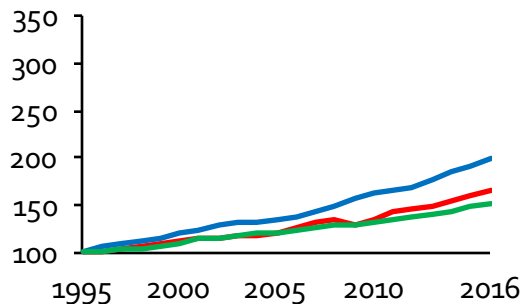
Index
(1995=100)

HC expenditure 2016:
11.6% of GDP



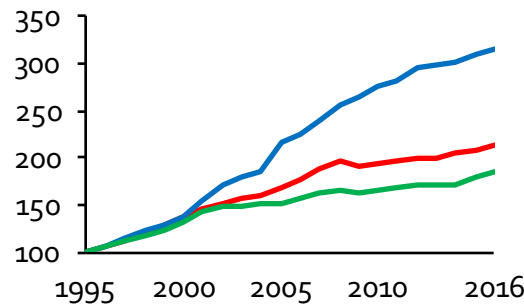
Index
(1995=100)

HC expenditure 2016:
11.4% of GDP



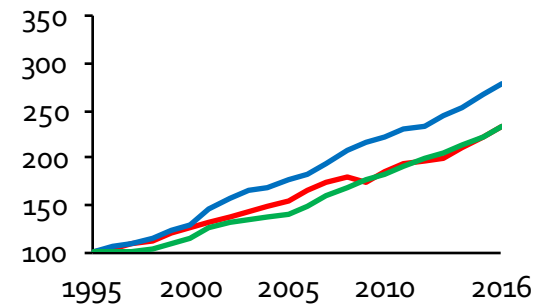
Index
(1995=100)

HC expenditure 2016:
10.9% of GDP



Index¹
(1995=100)

HC expenditure 2016:
11.8% of GDP



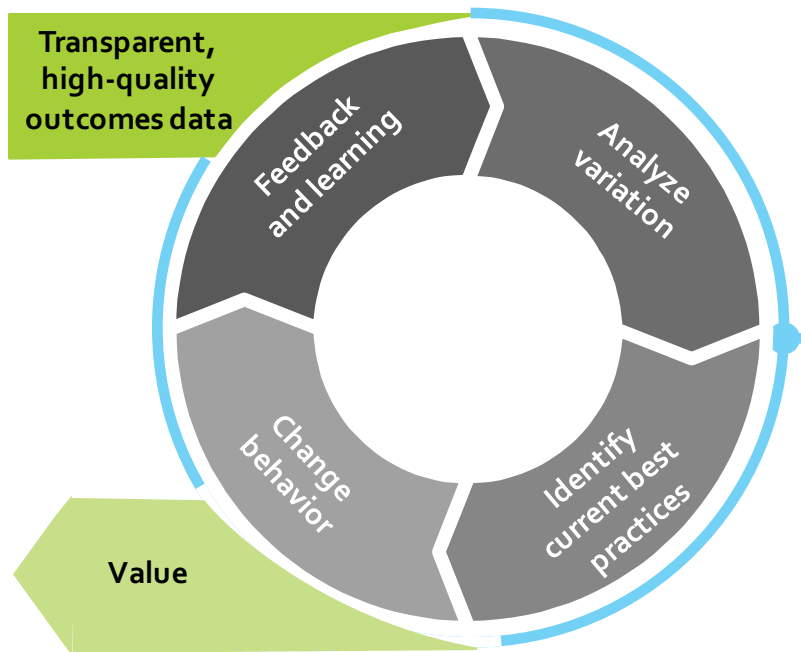
— Personal Disposable Income

— Gross Domestic Product (GDP)

— Health Care Spending

1. Sweden changed reporting methodology and included long-term care spending in 2011, but not prior to 2011; thus HC spend for Sweden is indexed 1995-2010 and 2011-2016 with GDP growth 2010-11. Notes: All indexes based on local currencies; Income = Personal Disposable Income; Source: WHO, EIU (May 2017)

Outcome measurement drives value improvements for all stakeholders



Key stakeholders



- **Patients** will **choose their provider** based on expected outcomes and their share of the cost



- **Clinicians** will improve quality of care by **comparing performance** and learning from each other



- **Hospitals** will **differentiate** into areas where they deliver superior outcomes at competitive prices



- **Payers** will **negotiate contracts based** on results, not volume, and encourage innovation to achieve those results



- **Life science** will **market their products on value**, showing improved outcomes relative to costs

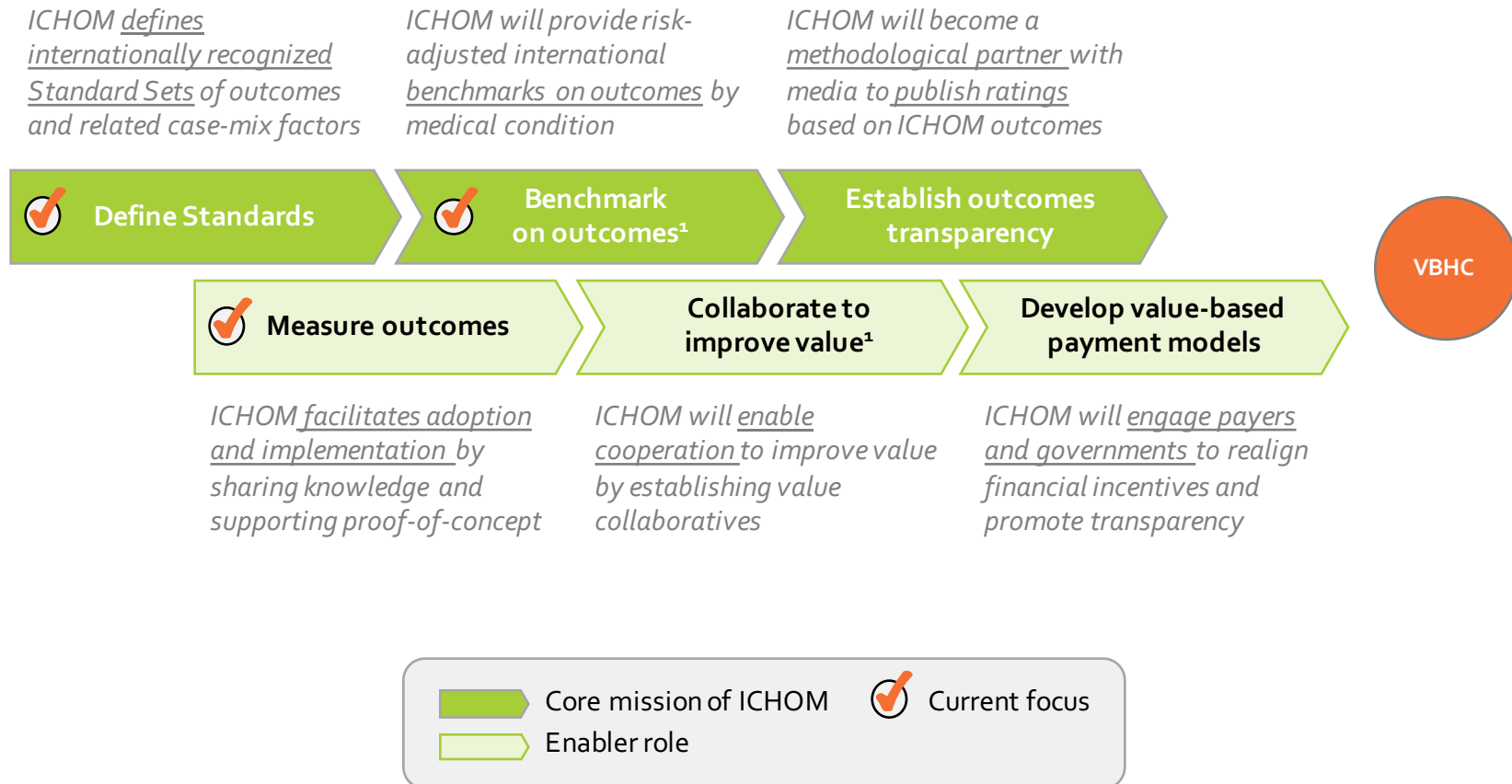
ICHOM was formed as a non-profit catalyst to drive the industry towards value-based health care



Our mission:

- Unlock the potential of value-based health care by **defining global Standard Sets of outcome measures that really matter to patients** 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



1. We are exploring the inclusion of resources data in benchmarks but the methodology is to be determined

Agenda

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We need standardisation so that we can meaningfully and reliably compare the *same* outcomes

Comparing apples with
oranges is a lot harder than....



...comparing apples with apples

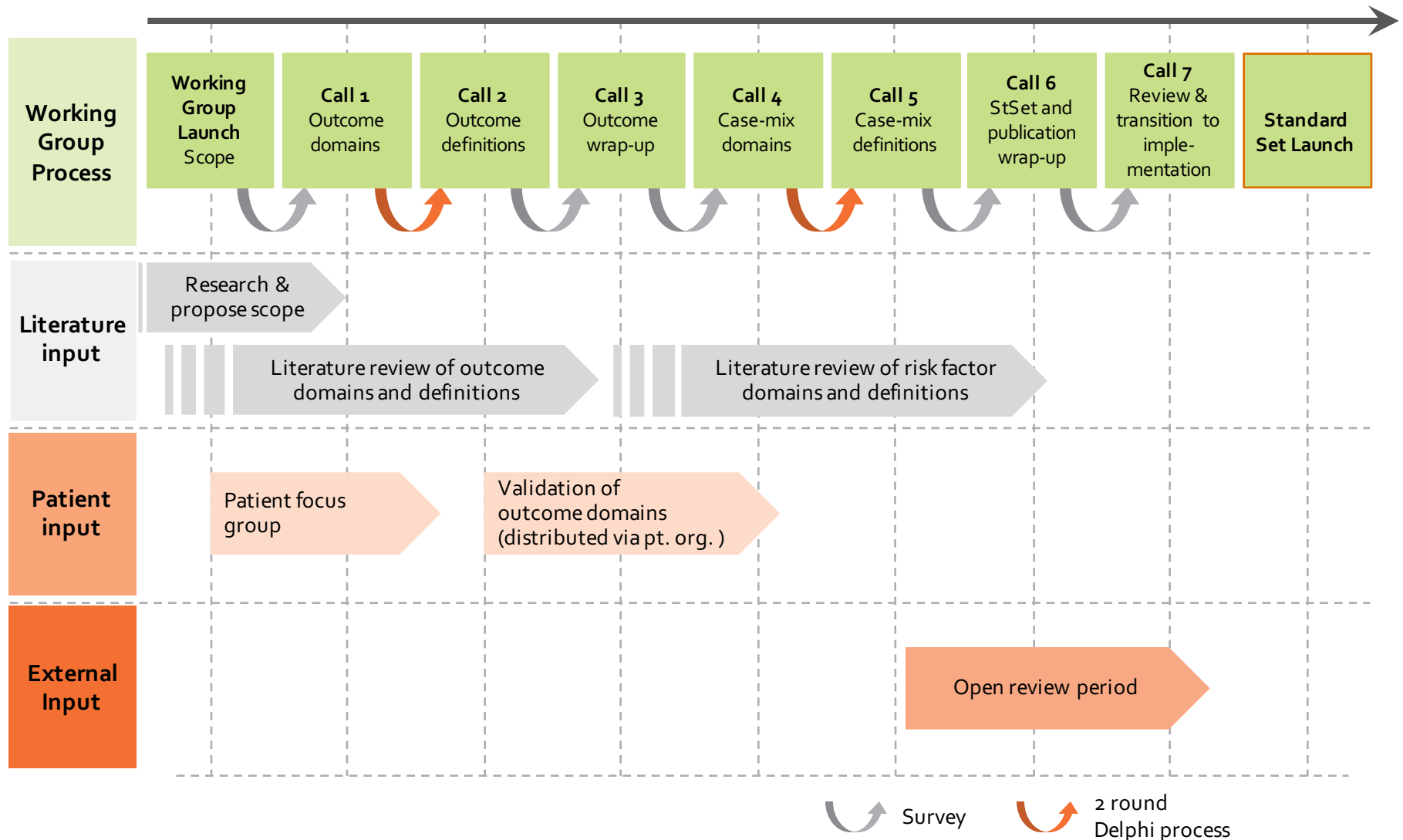


Measuring different outcomes in different ways
makes it impossible to meaningfully compare

Framing principles for ICHOM Working Groups

- 1 Outcomes are defined around the medical condition, not the specialty or the procedure
- 2 The Standard Set is a “minimum set” focused on the outcomes that matter most to patients
- 3 Patients are directly involved in defining the Standard Set
- 4 Patient-reported outcomes are included in every Standard Set to capture symptom burden, functional status and health-related quality of life
- 5 A “minimum set” of initial conditions/risk factors is included to facilitate meaningful comparison
- 6 Time points and sources of data collection are clearly defined to ensure comparability of results

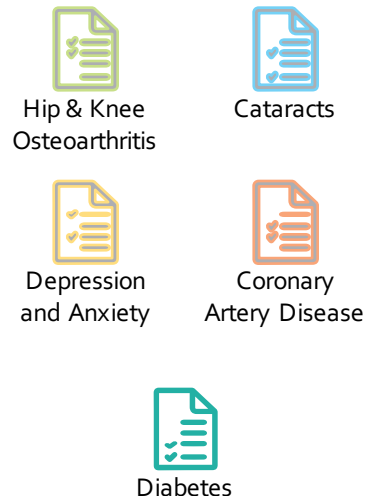
Standard Set is defined through series of teleconference calls, supported by research and patient input



The Overall Adult Health Standard Set challenges conventional thinking, bringing a new paradigm to outcomes measurement

Current (Individual Conditions)

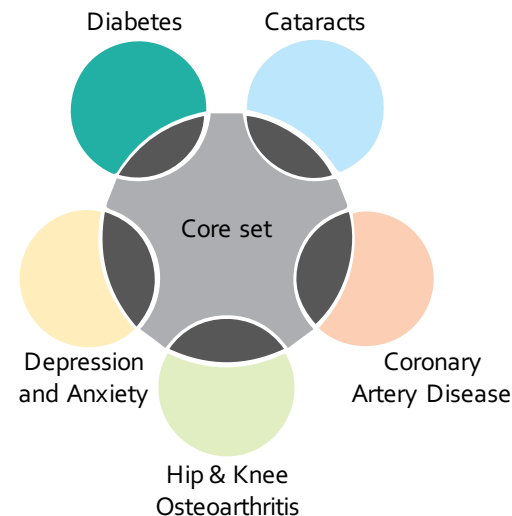
Traditionally, ICHOM's work has focused on outcomes of care for specific medical conditions...



Future (Population Segments)

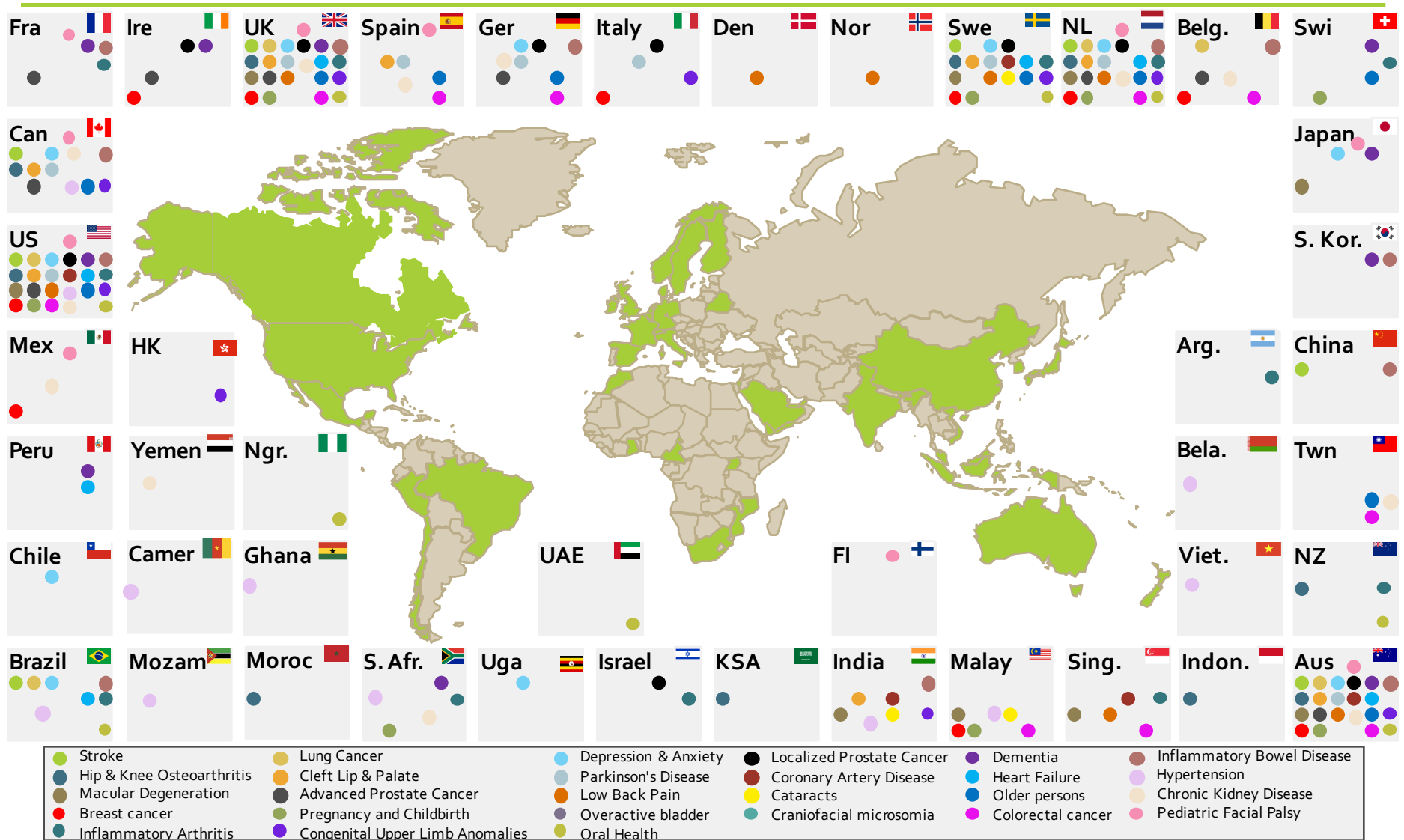
...however, there are compelling reasons for considering outcomes across population segments

The Overall Adult Health Standard Set will provide the core foundation for modular add-ons of more condition-specific Sets.



Pediatric Overall Health Sets also in development

ICHOM Working Group members originate from 44 countries

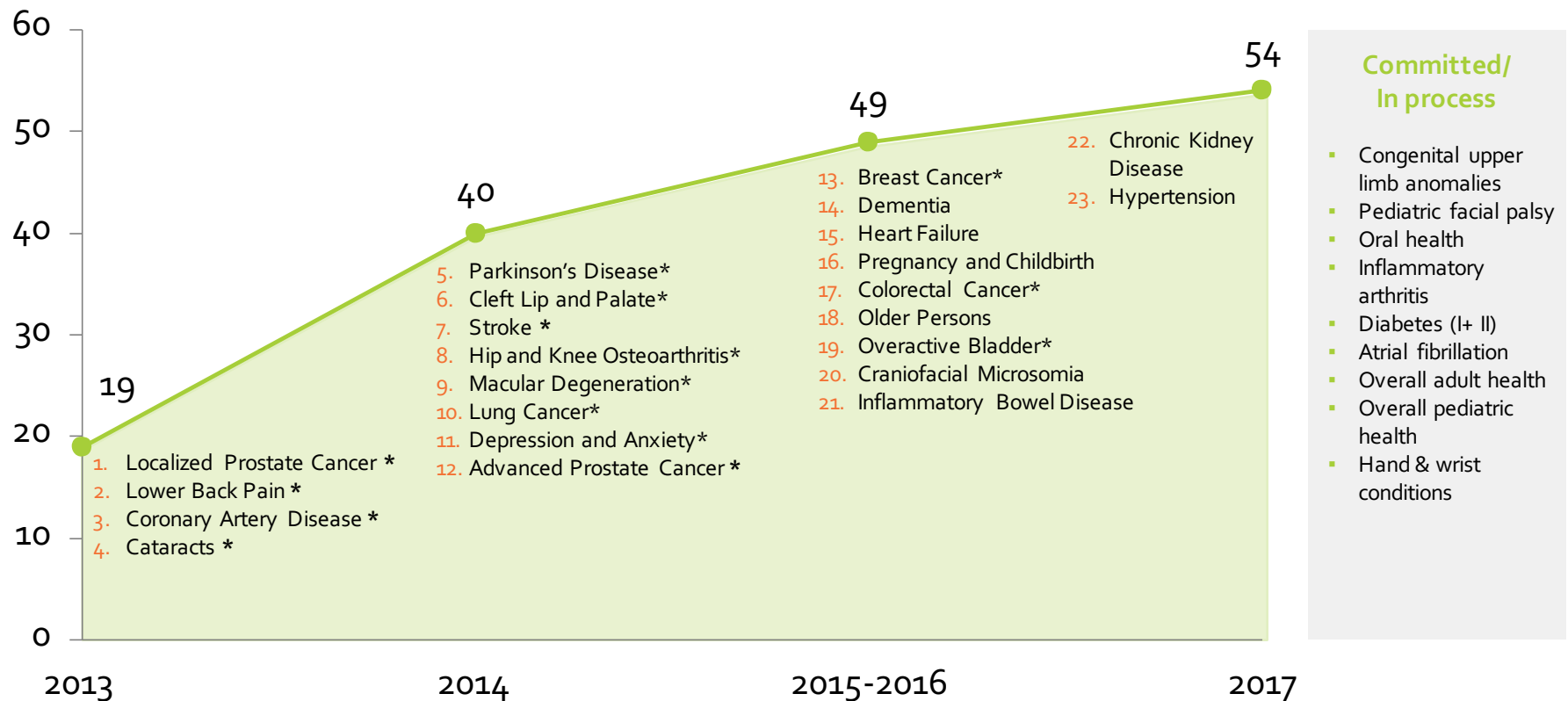


Source: ICHOM; Last Updated: Aug 22, 2017

ICHOM Standard Sets now cover >50% of global disease burden

23 ICHOM Standard Sets to-date

Burden of Disease Covered (%)



15 Standard Sets published to date in peer-reviewed journals

Percentage of global disease burden coverage is based on *Global Burden of Disease Study 2016*. *Global Burden of Disease Study 2016 (GBD 2016) Results*. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2016.

Agenda

Background

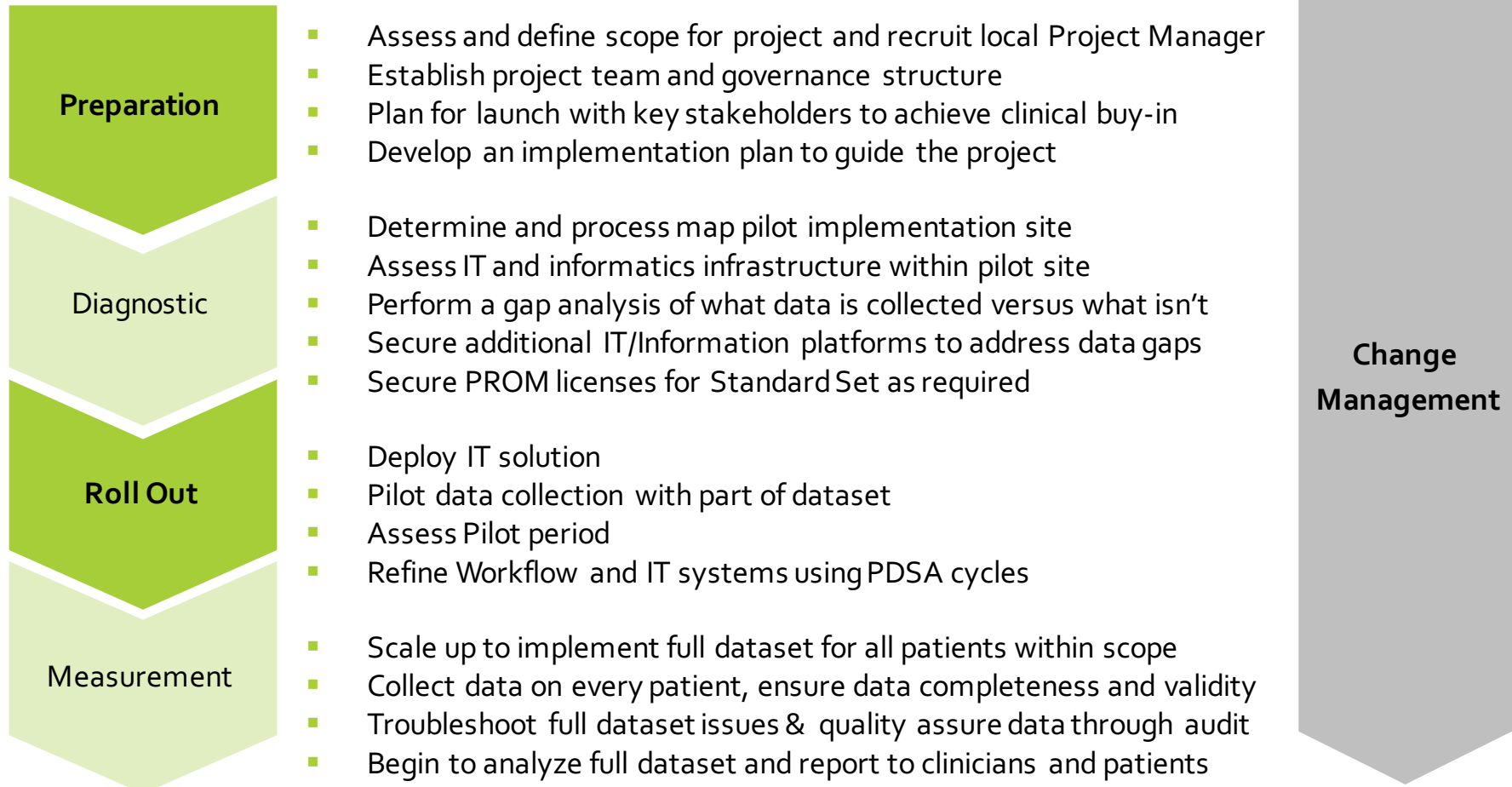
Standard Set Development

Implementation and Benchmarking

Further developments

Successful implementation projects can broadly be split into four phases with continuous change management throughout

Key Tasks



Erasmus MC has implemented the ICHOM Standard Set for Cleft Lip and Palate as part of their broader VBHC strategy

Background

- Erasmus MC has a long-term VBHC strategy, which began in 2013
- A key part of this strategy is global benchmarking
- As one of their leading pilots, Erasmus MC has implemented the ICHOM Standard Set for CLP

Summary

- Dedicated VBHC project team to support implementation
- Piloting in single 2-weekly outpatient clinic
- Developed in-house, user-friendly data collection platform
- PROMs data collected remotely via web portal & in waiting room
- Changes to patient flow and appointment schedules to fit data collection and streamline care

Early results

- 90% compliance for PROMs
- 100% compliance for clinician-reported outcomes and administrative metrics

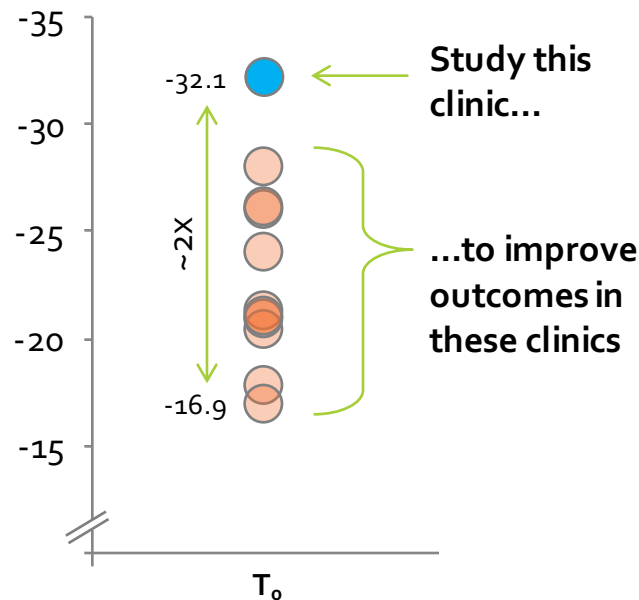
Next steps

- Scale to all CLP patients in other clinics at Erasmus MC
- Shift care pathways to match the ICHOM Standard Set for all CLP patients
- Openly share electronic data collection platform with other global cleft care providers to facilitate international benchmarking

Global comparisons will set the stage for more rapid learning and improvement

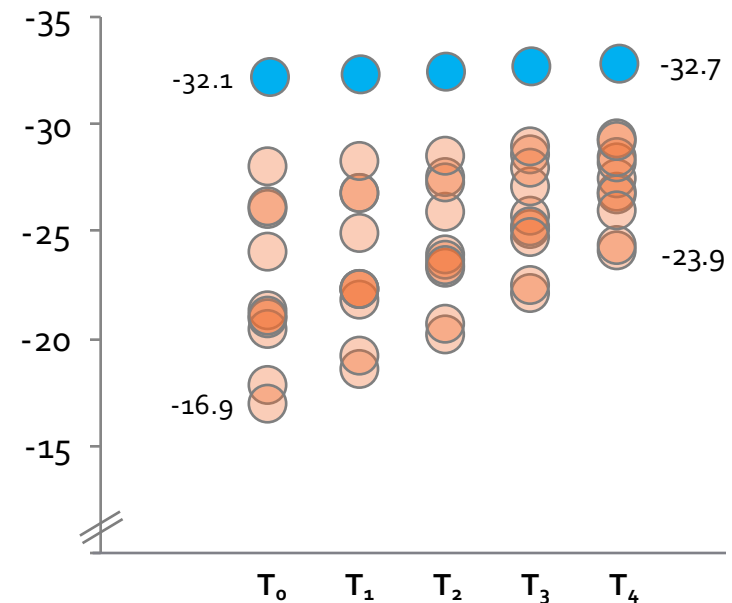
Outliers exist in all areas of medicine

Mean change in ODI



(each dot represents one clinic)

Over time, we expect variation to narrow and performance to improve globally



Note: Adjusted for age, sex, race, body mass index, diagnosis, education, any neurological deficit, stomach problem, join 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 Benchmarking

First global outcome benchmarking projects in hip/knee/osteoarthritis and cataracts

Project set up



Hip/Knee/ Osteoarthritis

Cataracts

Countries

5

8

Reporting
Sites

25

53

Patients
(Since 2016)

6k

60k

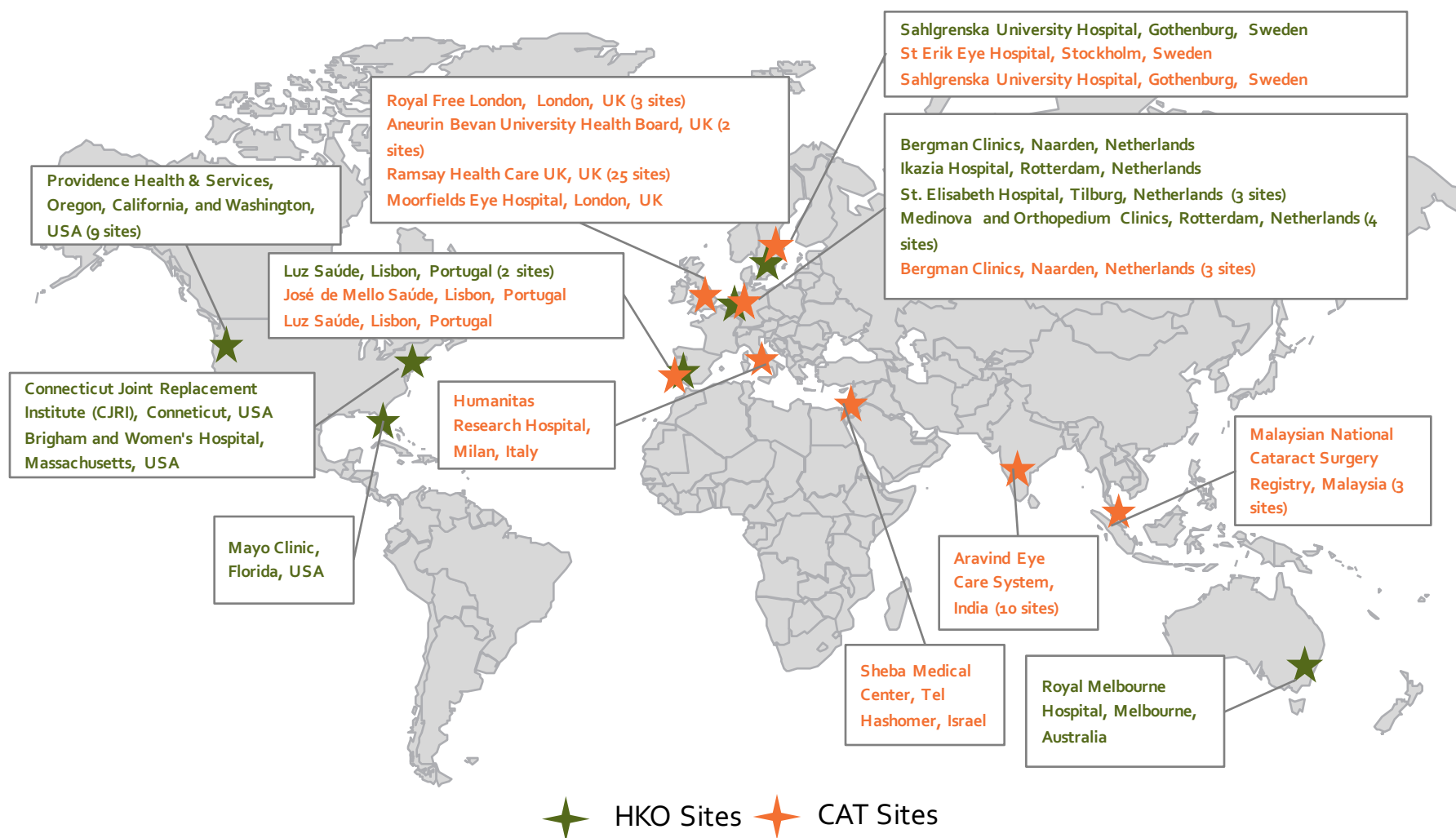
- ✓ Risk-adjustment of raw data
- ✓ Benchmark on key indicators—focusing on patient-reported outcomes
- ✓ Individual reporting to participating organizations
- ✓ “Best-in-class” organizations identified with intent to publish analyses of relative performance

Sample output

(Hip/Knee/Osteoarthritis)



GLOBE Participants in HKO and CAT Pilots



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ICHOM is leading the development of Value Based commissioning and procurement programs



Erasmus MC Value Based Payment, Netherlands

ICHOM and Erasmus MC have worked together to establish bundled payments for stroke services



- **Aim:** Bundled-payment system for integrated stroke services in Rotterdam
- **Progress:** Stroke care partners (6) have agreed to formally work together to measure a set of outcomes and costs
- **Next steps:** Explore how payments can be linked to outcomes in 1 contract in 2018



Menzis Value Based Payment, Netherlands

ICHOM and Menzis have worked together to develop value based bundled payments

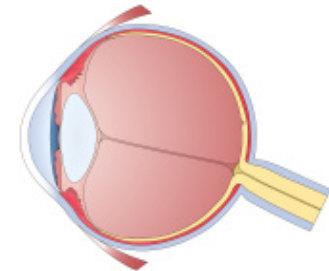


- **Aim:** Bundled payment system for hip and knee replacements, incorporating improvement cycles and supporting care integration
- **Progress:** Payment system on track to go live in early 2018
- **Next steps:** Launch the contract in early 2018



Wales Value Based Procurement, UK

ICHOM and NHS Wales have worked together to conduct a value based procurement pilot



- **Aim:** Link payment for cataract supplies to outcomes
- **Progress:** Supplier preliminary proposals/ideas received
- **Next steps:** Formally launch the value-based procurement tender

ICHOM is catalyzing the introduction of Value Based Health Care into medical education



Opportunity

The medical education initiative presents a unique opportunity to increase the **awareness and practice** of value based healthcare (VBHC)



Objective

The **objective** of the medical education initiative is to mobilize a multi-stakeholder committee to **develop a VBHC curriculum** for undergraduate and post-graduate students



Stakeholders

Key stakeholders include **Swansea Medical School** (UK), **Erasmus MC** (Netherlands), and **Cascais Medical School** (Portugal)



Completion of curriculum anticipated in 2018 – materials will serve as a model for future VBHC education initiatives