



FUNCTIONAL DESCRIPTION OF ICHOM GLOBAL BENCH- MARKING PLATFORM

INTRODUCTION

Access the first ever platform to benchmark patient outcomes internationally, enabling faster learning and improvements of healthcare across the globe. Developed in collaboration with LOGEX MRDM, ICHOM's Global Benchmarking Platform will accelerate the implementation of value-based healthcare worldwide.

THE INTERNATIONAL CONSORTIUM OF OUTCOMES MEASUREMENT (ICHOM)

ICHOM was founded as an independent not-for-profit in 2012 to develop Sets of Patient-Centered Outcome Measures by convening working groups of volunteering clinical leaders and patients. They define the key metrics to assess outcomes that matter most to patients, which are then published in peer-reviewed medical journals. These leading experts will play a central role in the analysis and interpretation of the global data generated by the new ICHOM platform. To further strengthen this academic community, surplus proceeds from the platform will be used to fund academic clinical research.

Why are we building an international benchmarking platform?

The ICHOM Global Benchmarking Platform will help healthcare providers worldwide to collect, validate and compare their outcomes data efficiently and at scale, using quality assured ICHOM Sets of Patient-Centered Outcome Measures.

Our overarching goal is to deliver insightful analytics that improve outcomes of care that matter most to patients. The platform will advance value-based healthcare organizations' ability to improve patient outcomes, reduce unnecessary and sometimes harmful care, and reduce and align healthcare spending to create more value for patients worldwide. To achieve this, healthcare providers securely submit data to the platform, enabling the comparing of outcomes data efficiently and at scale. Data collection made possible by our platform takes away significant hurdles in terms of data collection, privacy and security compliance, and uniformity in calculations.

Practical and actionable comparison of outcomes data is made possible by the platform through its state of the art data visualizations and interactive dashboards.

What does the dashboard offer you?

With the Global Benchmarking Platform we are removing the technical and operational barriers around data access. By facilitating benchmarking across your organization and your peers across the world, we will learn from each other to the ultimate benefit of patients. The platform offers healthcare providers globally, valuable and validated insight in outcomes through (inter)national comparisons. It limits the burden of use to providers through automation and adoption of standards where possible. It is safe, easy-to-use, and updated continuously in practical intervals.

- **Organizations** can improve their performance with a focus on value-based healthcare
- **Clinicians** can collect and compare outcomes data efficiently and at scale
- **Quality officers** can access validated outcomes data and use quality assured ICHOM Sets of Patient-Centered Outcome Measures
- **Healthcare providers** can work collaboratively to improve patient outcomes

Who can participate?

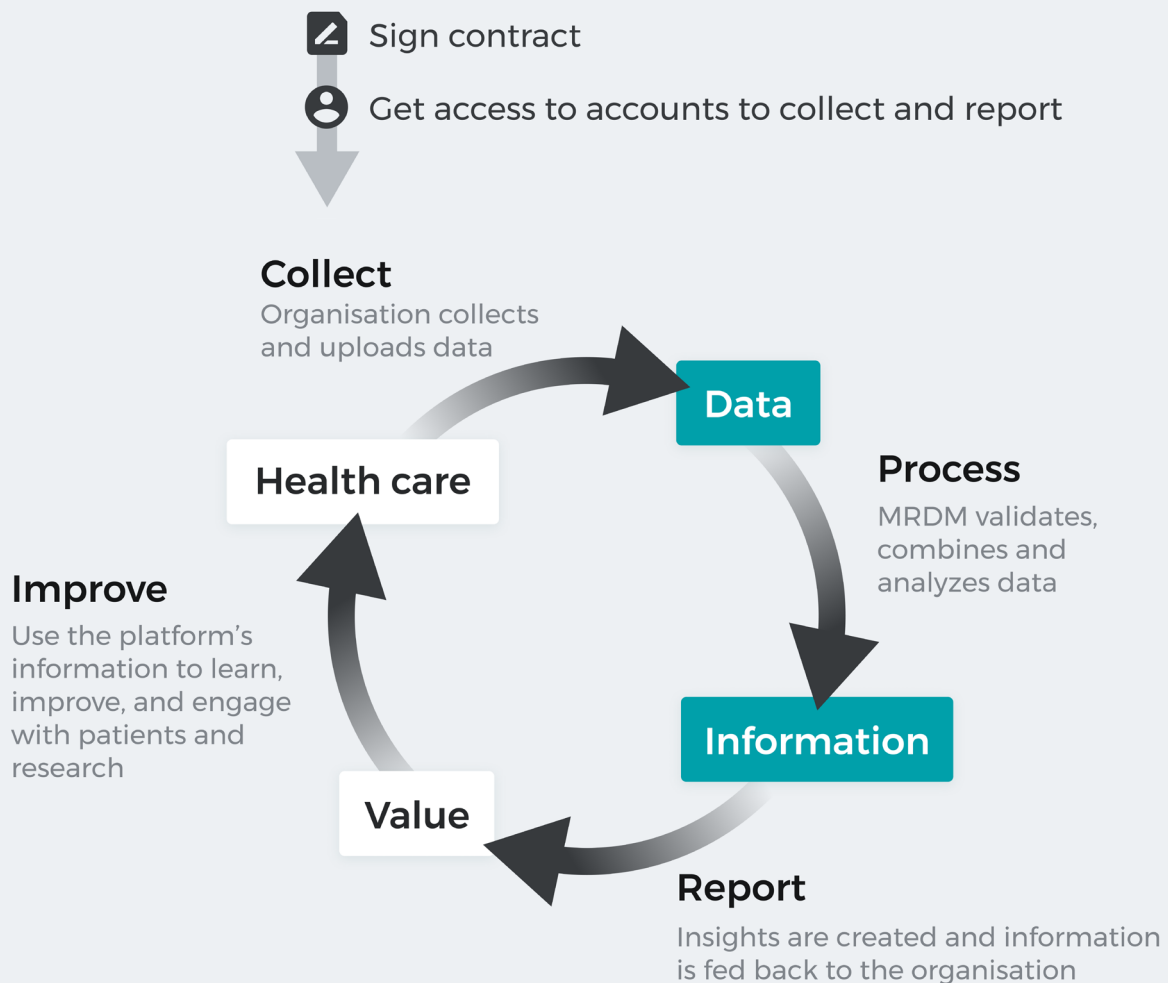
The ICHOM Global Benchmarking Platform will launch with the ICHOM Breast Cancer Set. We are currently having a number of conversations with providers with predominant focus across Canada, the USA and Europe. We continue to meet with providers on a global scale including registries looking to support benchmarking a national level.

Timeline

The platform's provision will grow by adding more sets in the years to come. We are seeing significant interest in multiple ICHOM Sets and including: Stroke, Cataract, Hand and Wrist, Hip and Knee, and Prostate Cancer. In deciding on the next sets, we will take into consideration what participating hospitals need.

Journey of the healthcare provider to start improving outcomes

The figure below shows the process of onboarding after exploratory conversations with ICHOM have taken place, and the evaluation of data readiness has happened. Also, it illustrates the data uploading cycle and steps towards benchmarking and visualizations. The steps are explained more in depth on the next page.



Sign contract

When you have decided that you want to join, ICHOM will provide a documentation package consisting of a master agreement with ICHOM and a data processor agreement with MRDM as an annex to that master agreement.

Get access to accounts

We kindly ask you to determine who will be the primary contact person for your organization. Once the agreements are signed, the contact person can apply for accounts to access the data upload applications, the ICHOM Benchmarking Platform, relevant documentation, and customer support.

Collect and upload data

Data can be collected in a predefined standardized way and can be uploaded through one of the two possible methods:

- Batch
- Manual data entry

The preferred solution is batch-entry, to prevent organizations from re-entering data manually. However, if organizations prefer to start entering data manually for a certain reason (e.g. temporarily to get the batch-upload organized, insufficient IT capacity to arrange the batch delivery on short notice, low patient numbers or the requested data is not registered in the source system), manual entry will be available as a fallback-option.

The manual data-entry option can also be used in addition to batch-upload, to check or to complement the batch-upload. This is a hybrid method using a combination of batch-upload and manual data-entry. Providers can upload batches from one (minimum) to four (maximum) times a year in the first year of the platform.

The platform supports the import of historical data. Providers can upload one batch (one successful upload) of historical data for a specific unit (provider-set combination) within the first year of joining the benchmark for that set.

For more information about data uploads, please see **[technical implementation documentation](#)**

Process information

The different data-entry modes of the platform make use of sophisticated validation tools and are based on continuously increasing data quality, in every step of the process.

Capabilities include:

- The validation engine is synchronized and centrally managed for different data-entry modes
- Validations are performed real-time (manual data entry) or semi real-time (batch).
- Workflow for design of validations:
 - Validations are built in co-operation with ICHOM using shared documents, as an iterative process
 - Data validation reports

The different data-entry routes all offer the possibility to check (manual entry) or download (batch) validation reports. The validation reports provide the data-entry user with validation feedback about the data that has been entered.

For more information about data processing and validation, please see **technical implementation documentation**.

Report

The interactive dashboards present health outcome KPIs. Data visualizations consist of trends of indicators; benchmarks with other healthcare providers; and actionable analytics. The dashboarding module offers the following key functionalities:

- Presenting indicators
 - KPIs will only be presented when the number of patients is more than 10 on an individual hospital basis due to GDPR regulation
- Benchmarking indicators against the global benchmark
- Interactive dashboard
 - Offers the possibility to filter on case-mix variables (e.g. age, type of treatment), period, zooming in on specific patient groups. Filters can only be applied when the minimal number of patients ($n > 10$) is reached. In the first year(s), we will start with just a few filters for different subsets of patients, to be elaborated with additional case-mix filters later.
- Language: available in English

In addition, standardized data extracts of providers' own data can be exported in .csv format. Exports can be requested by authorized persons of the provider organization twice a year. Standardized data exports consist of processed and analyzed data. The file will not include additional calculations, or a subset of the calculations.

Improve outcomes

Unlock the potential of value-based healthcare by using the platform's information to learn, improve, and engage with patients and research.