



# NATIONAL NODES ANNUAL REPORT

2024



We are pleased to present the first annual report of the OHDSI Europe National Nodes.

2024 was a year in which we saw the number of nodes reach 15 (!) and we started our first collaborative effort together.

Throughout the year, we welcomed Denmark, Finland & Hungary as new national nodes.

In June all nodes were present at the OHDSI Europe symposium. The node leads stole the spotlight on the main stage, briefly highlighting their most eventful activity of the year. During the preceding workshop weekend, the node leads also met to discuss potential collaborative efforts.

Following the OHDSI Europe symposium a team from different nodes worked on preparing a grant application for the COST action call. Unfortunately, the proposal was not awarded a grant, but future applications will be investigated.

2024 also saw the end of the EHDEN project, of which the national nodes were a direct result. It's great to see that there are now 15 active national nodes and that we are striving for more activities together.

In this annual report, the national nodes provide a brief insight into their current status, the activities and highlights of 2024 and their plans for 2025.

If you are reading this, and you work in a country that does not yet have a national OHDSI node, we hope these activities will inspire you to start your own.

Happy reading!

The OHDSI Europe national nodes.



Figure 1. OHDSI EU Node leads at the OHDSI Europe Symposium 2024

National node OHDSI Belgium

Author of this report Ilse Vermeulen – NN Manager

Current # of node members 170

Current # of followers LinkedIn 224

Current # of data partners 15 (cfr. EHDEN Network) incl. 3 large hospital networks

– FHIN , Levilo and INAH



### Which activities did the node organise in 2024?

- 25 Jan 2024 Bootcamp "Harmonization of clinical data harmonization efforts" 38 participants
- 22 Apr 2024 Workshop "How to set-up a Health Data Sharing Initiative" 30 participants <u>full report</u>
- 23 Apr 2024 Symposium "Big Data for Health & Care The Arisal of Data Spaces" 150 participants <u>full report</u>
- 2 June 2024 OHDSI BE All Actors Meet in-person 25 participants
- 10 Sept 2024 Workshop "FHIR x OMOP" over 40 participants full report
- **15 Nov 2024** Workshop "How to put Data Quality on the agenda of your organization's management?" 32 participants report will be disseminated Jan '25
- 16 Dec 2024 OHDSI BE All Actors Meet online winter event

#### Besides the activities, which other highlights occurred for the node in 2024?

- Titan Award Nomination Liesbet M. PEETERS (co-chair OHDSI BE) OHDSI Global
- Contribution COST Action proposal

- Hosting OHDSI Europe Symposium 2025 2
- Contributing to <u>i~HD Health Data Summit</u>
- Writing an OHDSI BE position paper landscaping data partners, maturity, architecture, #datasets mapped to OMOP
- Support local working groups on
  - o oncology (i.e. lung cancer use case)
  - o Belgian-specific vocabularies mapping (i.e. RIZIV)



National node OHDSI Denmark

Author of this report Andreas Weinberger Rosen,

Benjamin Skov Kaas-Hansen, Carsten Utoft Niemann, Charles

Vesteghem, Peter Bjødstrup Jensen, Ismail Gögenur

Current # of node members ~30

Current # of data partners 5

### Which activities did the node organise in 2024?

- Created an overview within Denmark of persons and organizations working with or interested in working with the OMOP CDM or OHDSI tools
- Started collaboration of mapping some commonly used vocabularies publicly

Besides the activities, which other highlights occurred for the node in 2024?

Initiation of the National Node

### What are the node's goals for 2025?

The node's goals for 2025 is to continue collaborating on creating publicly available mappings of Danish vocabularies on identifying organizations interested in participating in OHDSI Denmark

National node OHDSI Estonia

Author of this report Sulev Reisberg

Current # of node members 23

Current # of data partners 3



#### Which activities did the node organise in 2024

We published an article in Estonia's leading medical journal introducing OHDSI and OMOP, which has generated significant interest among physicians. The article was also presented to the Estonian Society of Personalized Medicine. Following this, two studies were initiated: one focused on updating Estonia's treatment guidelines for heart failure, and another investigating epilepsy among statin users. For the first time, these studies were launched in a collaborative "studyathon" format, bringing all interested parties together to work directly with Atlas. The approach received highly positive feedback.

Besides the activities, which other highlights occurred for the node in 2024?

Posters from the Estonian node were presented at both the OHDSI Europe and OHDSI Global Symposiums.

What are the node's goals for 2025?

To have the EST-Health-30 dataset, a 30% random sample of the Estonian population, prepared for studies. It includes comprehensive data on EHRs, claims, prescriptions, deaths, and cancer cases since 2012.

National node

Author of this report

Current # of node members

Current # of data partners

Finland

Gustav Klingstedt, Eric Fey

approx. 70 individuals

6 + 2 with pending OMOP conversions



### Which activities did the node organise in 2024?

- 2 Face-To-Face community gatherings + online meetings
- 3 working groups (Analytics, Vocabulary and CDM/ETL) with recurring online meetings

### Besides the activities, which other highlights occurred for the node in 2024?

- Many data partners completed Darwin EU onboarding and participated in first studies
- Collaborative improvement of national vocabulary mappings, including an improved process for upgrading national vocabulary mappings to match latest OHDSI release.

- The national node will continue as a networking platform for broadening data partners expertise in OMOP-based analytics and data harmonization.
- Data partners actively participate in federated studies, including through initiatives such as Darwin EU and EHDEN.
- The two remaining University Hospitals in Finland are undertaking OMOP-conversion work. Once finished there will be complete national population coverage of OMOP-mapped hospital data in all key domains of specialized care.

National node

al node Germany

Author of this report

Michele Zoch, Ines Reinecke

Current # of node members

approx. 70 individuals

Current # of data partners

12 (registered at the EHDEN portal)



### Which activities did the node organise in 2024?

- monthly OHDSI Germany meetings
- F2F OHDSI Workshop in Berlin together with the Technology and Methods Platform for Networked Medical Research, registered association (TMF) and Medical Informatics Initiative (MI-I)
- Foundation of the TMF Working Group OHDSI, including advisement on a research proposal
- Several invited presentations on OHDSI for other research groups
- First OHDSI Germany Studyathon in November 2024 that resulted in three study ideas

### Besides the activities, which other highlights occurred for the node in 2024?

- wider OMOP adaption in Germany, gaining attention within large German funding initiatives like the Medical Informatics Initiative
- started working together with other European nodes to expand community activities and develop joint research ideas
- German participation in EHDEN MegaStudy on drug shortage
- extended the local community to include more medical expertise and to create own research questions

- extend knowledge on how to create scripts for network studies and how to run them in a network
- successfully run the first three OHDSI studies with German data partners and own research questions

National node OHDSI-GR

Author of this report Natsiavas Pantelis

Current # of node members 60

Current # of data partners 5



### Which activities did the node organise in 2024?

The OHDSI-GR node organized several educational activities during 2024. The OHDSI-GR community had the opportunity to learn more about the quality control process, the use of the ATLAS tool, and the importance of anonymizing health data. Additionally, the OHDSI-GR node participated in the summer school of the MSc program AI and ML in Biomedical Engineering at the Aristotle University of Thessaloniki (AUTH), where students were introduced to machine learning applications using the OMOP Common Data Model (CDM). The node was also actively involved in the Medical Informatics Europe (MIE) conference, showcasing the results of ETL transformations conducted for the largest hospital in Northern Greece. Furthermore, the node presented its research interests, including transforming OMOP CDM schemas according to RDF principles.

### Besides the activities, which other highlights occurred for the node in 2024?

One of our key milestones showcasing the progress of OHDSI-GR's capabilities was our participation in the Megastudy, the largest study within the OHDSI community. The OHDSI-GR node, in collaboration with Papageorgiou General Hospital, was one of the 41 databases from Europe and North America included in the study, achieving remarkable results. Additionally, OHDSI-GR successfully participated in the IDEAL4OMOP training program, organized by DigiCore and IQVIA. As part of this initiative, the OHDSI-GR node contributed to the design of two OMOP CDM-based study protocols focusing on lung and breast cancer. This participation provided valuable experience, and we are now awaiting the results to determine which protocol will be executed.

#### What are the node's goals for 2025?

**Expand the OHDSI-GR community**: Increase community participation by engaging additional data providers and collaborating with private companies. This expansion aims to strengthen the network and enhance the node's overall research potential.

**Design the first study using greek OMOP CDM data**: Leverage the capabilities of the Greek OMOP CDM dataset to design and execute the first study, demonstrating the utility and value of this standardized data model for research purposes.

**Continue Educational Initiatives**: Build on the success of previous educational courses by attracting more students, researchers, and professionals. The aim is to

foster a deeper understanding of OHDSI tools, methods, and applications, ensuring the growth of a skilled and knowledgeable community.

**And of course...continue searching for financial support**: Identify and obtain suitable financial resources to sustain and expand the node's activities.





### Data Analytics on OMOP CDM ATLAS P1

Grigoris Papapostolou











National node OHDSI IL

Author of this report Chen Yanover, Pini Akiva

Current # of node members 50

Current # of data partners 1



#### Which activities did the node organize in 2024?

On May 2024, more than 50 participants from Israeli health organizations (hospitals, HMOs), government, academia, and industry attended the inaugural meeting of OHDSI Israel National Node.

Besides the activities, which other highlights occurred for the node in 2024?

Recently, the Israeli Parliament passed the Medical Information Mobilization Law which will allow (by 2027) individuals to transfer their medical information between health organizations. The FHIR standard will play a key role in facilitating the required data exchange. We explore opportunities to transform such FHIR structured data to OMOP Common Data Model and, consequently, use it to support OHDSI research

### What are the node's goals for 2025?

- Select an existing FHIR-based use-case and implement an OHDSI study using the data it transfers
- Help researchers and organizations to transform their data into OMOP CDM and carry out an OHDSI research; look into tools that may empower researchers in these processes, specifically within the Israeli healthcare ecosystem

Establish a forum for discussions and assistance throughout the OHDSI research process

National node Italy

Author of this report Lucia Sacchi, Matteo Gabetta

Current # of node members 62

Current # of data partners 21



### Which activities did the node organise in 2024?

The Italian National node has organized periodic online meetings every three months. In addition, 2 meetings were organized with the DPOs of the data partners to finalize the DPIA template.

Since some of the data partners were interested into the possible integration of RedCap and OMOP, we organized one meeting to explore the possibility of creating a working group within the node.

The main results achieved by the node in 2024 are:

Finalizing a DPIA template for OMOP to be shared among all the node members.

Approval and start of two multicentric national studies that involve 14 data partners:

- Feasibility study to describe the readiness of the data partners to participate to a federated study
- Study on predictive models to discover determinants of hospital sepsis

Besides the activities, which other highlights occurred for the node in 2024?

Participation to the Privacy Symposium, Venice

Presentation of the Node activities at the Ispor Italy Rome Chapter conference

What are the node's goals for 2025?

Finalization of the two national studies and analysis of the results

Mapping a national drugs terminology (AIC – market authorization code) to OMOP

Dissemination in the Italian community and stakeholders

National node Luxembourg

Author of this report Andreas Kremer, Maria

Quaranta

Current # of node members approx. 15 individuals

Current # of data partners 1 + (1) with pending OMOP conversions

### Which activities did the node organize in 2024?

- 2 presentations towards national stakeholders (Face 2 Face)
- 1 co-participation in national conference (Health Week Luxembourg)

### Besides the activities, which other highlights occurred for the node in 2024?

- Consulting of several national and international scientists in the use of OMOP-CDM in their projects.
- Activities started towards a potential extension with regards to Medical Devices.
- Alignment with and between EHDEN SMEs to build a relationship with the new EHDEN Foundation

- The national node will continue as a networking platform for broadening data partners expertise in OMOP-based analytics and data harmonization.
- Data partners actively participate in federated studies and SMEs being active partners of the EHDEN foundation and the OHDSI community.
- LIH is continuing activities in the context of CLINNOVA (Development of integrated digital and AI-supported health solutions in a European health data space).

National node Netherlands

Aniek Markus & Renske Los

Current # of node members 67

Current # of data partners 8

Author of this report



### Which activities did the node organise in 2024?

In 2024 OHDSI NL focussed on two main tracks:

- 1. Map BGZ (Dutch IPS) data to the OMOP CDM; this eventually led to a nationwide hackathon (see highlights below).
- 2. Run our first study-a-thon: characterizing breast cancer patients in multiple databases.

Feb: Node meeting & brainstorm study-a-thon @ Astellas, Leiden

Jun: Study-a-thon meeting – Protocol & poster at OHDSI Europe symposium in Rotterdam

Aug: Study-a-thon meeting – Defining cohorts @ Erasmus MC, Rotterdam
Oct: Study-a-thon meeting – Discussion first results @ The Hyve, Utrecht

#### Besides the activities, which other highlights occurred for the node in 2024?

OHDSI NL joined the Health RI hackathon where the aim was to extract (in FHIR format) a standard patient data set from EHRs (BasisGegevensset Zorg (BGZ), similar to the International Patient Summary) and create a pipeline to map these data directly, and via OpenEHR, to an OMOP CDM. More info: Mini-Hackaton ontsluiten Bgz data voor onderzoek | Health-RI.

- Finish and disseminate results of study-a-thon
- Work together on other issues (e.g. mapping practices)
- Develop roadmap with OKRs
  - Increased exposure
  - More data partners
  - More internal collaboration
- Professionalize OHDSI NL organization (branding & website)
- Organize dedicated work sessions to stimulate involvement of members

National node

Norway

3

Author of this report

Siri Larønningen & Espen Enerly

Current # of node members

6 organizations, 30 members

Current # of data partners

Which activities did the node organise in 2024?

Monthly Teams calls

An annual in-person seminar

Besides the activities, which other highlights occurred for the node in 2024?

Represented at the OHDSI Europe symposium

Growth of the node

Increased Nordic collaboration

What are the node's goals for 2025?

Improve sharing of mapping efforts.

Increase national awareness of OMOP.

Increase Nordic cooperation on OMOP.

Advise new data partners.



National node

Author of this report

Portugal

João Marques



### Which activities did the node organise in 2024?

The activities developed in Portugal have the primary objective of facilitating secure and scalable access to data, enabling the advancement of research and innovation projects. In this context, a network of partners has been built in Portugal, including reference hospitals, whose databases have been harmonized to a common vocabulary, OMOP. This allows for the creation of an infrastructure that enhances the development of multicentre studies with federated approaches – research questions go to the hospitals, conclusions are drawn from the aggregated data, but the data never leaves the hospitals.

#### Besides the activities, which other highlights occurred for the node in 2024?

In this regard, it is important to highlight two activities that were developed throughout 2024, leveraging the network of secure data environments, which are worth noting:

- The first is a project to build a National Oncology Observatory for generating evidence in the areas of prostate and breast cancer;
- The second initiative concerns the European project ONCATS Federated Real-World Data Space for Assessing Health Technologies and Drugs in Oncology. More precisely, the project's scope is to create a framework for generating clinical, scientific, and economic information and knowledge that are strategic in the context of oncology treatments.

National node Spain

Author of this report Talita Duarte-Salles, Miguel Angel Mayer, Angela Leis

Current # of node members 25

Current # of data partners 20



### Which activities did the node organise in 2024?

- OHDSI Spanish node meeting (Rotterdam, June'24)
- Setup of several working groups, including drugs, costs and environmental information.
- Organised a course on Intruduction to data analysis with OMOP data in Spanish

#### Besides the activities, which other highlights occurred for the node in 2024?

- XXVII National Congress of Health Informatics 2024 (Spain, March'24). Presentation.
- Coordination Committee Meeting of the Innovative Medicines Platform of Farmaindustria (Spain, Madrid'24). Presentation.
- RWE Working Group of the Innovative Medicines Platform (Spain, April'24).
   Presentation.
- XLIII Health Economics Conference (AES) (Spain, June'24). Presentation.
- OHSIRIS Project. Collaboration between several Spanish Node members.

- Study-a-thon for characterizing databases form the Spanish Node Partners.
- INNODATA 2025 (Spain, September'25).
- Working on common mappings in different domains such as drugs.

National node United Kingdom

Author of this report Daniel Prieto-Alhambra

Current # of node members 25

Current # of data partners 19



### Which activities did the node organise in 2024?

- OHDSI UK annual meeting, co-hosted with Health Data Research UK (London, Sep'24)
- Monthly OMOP UK Special Interest group meetings, hosted by Health Data Research UK
- RWE using OMOP Oxford Summer School (Oxford, June'24)

### Besides the activities, which other highlights occurred for the node in 2024?

 Health Data Research UK Real World Evidence network set up and onboarding of 7 data partners from different healthcare settings and UK geographies and nations

- Securing funding to sustain the RWE network going forward
- Maximising technical interoperability with NHS Secure Data Environments