



**EUROPE**

# **EUROPEAN OHDSI SYMPOSIUM**

**June 3rd 2024**

**Rotterdam**



*Scaling up reliable  
evidence across Europe!*



# OHDSI Symposium Agenda

June 3rd, 2024

## The Steam Ship (SS) Rotterdam

Time	Description	Location
8:00	<b>Registration and Coffee</b>	Queen's Lounge
9:00	<b>Welcome to the European OHDSI Journey</b> Prof. Peter Rijnbeek, Chair Department of Medical Informatics, Erasmus MC	Theatre
9:10	<b>Journey of OHDSI: Where have we been and where we can go together?</b> Patrick Ryan, Janssen Research and Development, Department of Biomedical Informatics, Columbia University Medical Center	Theatre
9:40	<b>Selection of European Initiatives Using the OMOP CDM</b> Moderator: Renske Los, Assistant Professor of Medical Informatics, Department of Medical Informatics, Erasmus MC	Theatre
	<ol style="list-style-type: none"><li><b>OHDSI Europe National Nodes building opportunities through collaboration</b> Renske Los, Erasmus MC, The Netherlands</li><li><b>ONCOVALUE: Can Real-World Data Shape the Future of Health Technology Assessment in Oncology?</b> Andreas Henriksen, Copenhagen University Hospital, Denmark</li><li><b>DigiONE: technical challenges and solutions to European cancer OMOP conversions from hospital EHR</b> Piers Mahon, IQVIA, United Kingdom</li><li><b>The PHEMS Project: New Strategies in Health Data Sharing</b> Sofia Bazakou, The Hyve, The Netherlands</li><li><b>Ecraid: European Clinical Research Alliance on Infectious Diseases</b> Ankur Krishnan, Heidelberg University Hospital, Germany</li><li><b>PHederation – the Federated Network of Pulmonary Hypertension Registries</b> Eva Maria Didden, Janssen Pharmaceutica N.V., Belgium</li></ol>	
11:00	<b>Coffee Break</b>	Queen's Lounge

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**11:30 Collaborator Showcase: Rapid fire presentations Theatre**

Moderator: Katia Verhamme, Associate Professor of Use and Analysis of Observational Data, Department of Medical Informatics, Erasmus MC

1. **Adoption of the OMOP Common Data Model in the UK, Health Data Research UK**  
Alex Knight, Health Data Research UK, United Kingdom
2. **Piloting the Transformation of Multiple Sclerosis Real-World Data to the OMOP CDM: Lessons Learned**  
Tina Parciak, UHasselt, Belgium
3. **Annotation-preserving machine translation of English corpora to validate Dutch clinical concept extraction tools**  
Tom Seinen, Erasmus MC, The Netherlands
4. **Using OHDSI standards to host Longitudinal Mental Health Data in a staging database for pushing into OMOP: Lessons from the INSPIRE network Datahub** Bylhah Mugotitsa, African Population and Health Research Center, Kenya
5. **Beyond Diagnosis Codes: A Weakly Supervised Learning Framework for Accurate Multimorbidity Identification in Electronic Health Records**  
Bernardo Neves, Luz Saúde, Portugal
6. **OHDSI meets Flowise to Streamline Biomedical Data Discovery and Analysis**  
João Almeida, University of Aveiro, Portugal
7. **ReportGenerator: Automating study reports and visualization apps for Darwin EU® research**  
Cesar Barboza Gutierrez, Erasmus MC, The Netherlands
8. **Analysis of Lung Cancer Patient Treatment with Immune Checkpoint Inhibitors Using Natural Language Processing for Data Extraction from Electronic Health Records**  
Clara L. Oeste and Annelies Verbiest, Lynxcare, Belgium
9. **An Exploration of Ovarian Cancer Therapy Sequence Utilization in Treatment-naive Women from 2008-2020**  
Whitney Burton, Taipei Medical University, Taiwan
10. **Baseline Characterization and Treatment Pathways of Patients With Alport Syndrome Across Geographies: Exploring a Rare Disease in a Multi-Database Retrospective Cohort Study**  
Katrin Manlik, Bayer AG, Germany

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**12:45 Lunch**

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**13:45**

**La Fontaine  
& Odyssee  
Room**

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<b>13:00</b>	<b>OHDSI Collaborator Showcase</b> Poster presentations, open-source software demonstrations from OHDSI collaborators, and national nodes.	<b>La Fontaine &amp; Odyssee Room</b>
<b>14:00</b>	<b>Early Investigators Mentor Meetings</b> Lead: Ross Williams, Department of Medical Informatics, Erasmus MC Rotterdam	<b>Queen's Lounge</b>
<b>16:00</b>	<b>Large Scale Evidence Generation in EHDEN and DARWIN EU®</b> Dani Prieto Alhambra and Katia Verhamme, Department of Medical Informatics, Erasmus MC	<b>Theatre</b>
	<ul style="list-style-type: none"> <li>• <b>Introduction to EHDEN</b> Dani Prieto Alhambra</li> <li>• <b>Predicting long term cancer survival for Health Technology Assessment: A Multinational Cohort Study Across Europe</b> Jeremy Dietz, National Institute for Health and Care Excellence, United Kingdom</li> <li>• <b>Trends over time in medicines with suggested shortages in Europe</b> Marta Pineda-Moncusi, Oxford University, United Kingdom</li> <li>• <b>Introduction to DARWIN EU®</b> Katia Verhamme</li> <li>• <b>DARWIN EU® - Trend of prescription opioid use in Europe</b> Annika Jodicke, Oxford University, United Kingdom</li> <li>• <b>DARWIN EU® - Treatments of multiple myeloma in Europe from 2012 to 2022: a population-based network cohort study</b> Talita Duarte Salles, Erasmus MC, The Netherlands</li> </ul>	
<b>17:10</b>	<b>What evidence are we going to showcase at OHDSI Europe in 2025?</b> Patrick Ryan, Johnson & Johnson, Columbia University	<b>Theatre</b>
<b>17:30</b>	<b>Closure</b>	<b>Theatre</b>
<b>18:00</b>	<b>Networking Reception</b>	<b>Queen's Lounge</b>
<b>–</b>		
<b>19:30</b>		

## Sponsors

This year's symposium would not have been possible without the generous support of our sponsors. The OHDSI community is grateful for their help and look forward to working closely with these organizations to improve health outcomes for patients around the world.



The Erasmus University Medical Center is the largest of the eight university medical centers in The Netherlands. The Department of Medical Informatics is an interdisciplinary research group within Erasmus MC that studies new methods for acquiring, representing, processing, and managing data and knowledge in health care and biomedical sciences and has developed land marking infrastructure and software for distributed analysis of electronic health records. The group is leading the European OHDSI Chapter, EHDEN, and represents the DARWIN EU® Coordination Centre.

[www.erasmusmc.nl](http://www.erasmusmc.nl)



IQVIA is a leading global provider of advanced analytics, technology solutions, and clinical research services to the life sciences industry. IQVIA creates intelligent connections across all aspects of healthcare through its analytics, transformative technology, big data resources and extensive domain expertise. IQVIA Connected Intelligence™ delivers powerful insights with speed and agility — enabling customers to accelerate the clinical development and commercialization of innovative medical treatments that improve healthcare outcomes for patients. With approximately 86,000 employees, IQVIA conducts operations in more than 100 countries.

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# The Hyve

The Hyve is an IT company that provides professional services for open source software.

We specialize in the fields of real world data harmonization and analytics, cancer genomics and target discovery, FAIR biomedical data and research data management, large language models and consultancy. Our customers include the majority of top 20 pharmaceutical companies, major academic medical centers in U.S. and Europe as well as biobanks, registries and patient organizations throughout the world.

[www.thehyve.nl](http://www.thehyve.nl)



BIOMERIS was founded in 2012 as academic spin-off of the University of Pavia, from the Laboratory of Biomedical Informatics “Mario Stefanelli”, active since 1982 in the field of medical informatics. We are among the first companies in Europe certified by IMI2-EHDEN. We are actively collaborating with the University of Pavia to run the Italian node of OHDSI Europe. BIOMERIS is UNI EN ISO 9001 and UNI EN ISO 27001 certified, for an OMOP implementation which adheres to state-of-the art security standards.

The technical-scientific know-how of our team, mostly Biomedical Engineers and PhDs in Bioinformatics and Bioengineering, constitutes the real added value of our company: we have more than ten years of experience in data integration projects and construction of infrastructures for the reuse of clinical data for research purposes.

Some summary figures: 130+ Projects, 10.000.000+ Patients, 2.000.000.000+ Clinical observations.

We have experience in many OMOP-related data harmonization and development projects: 12 IMI2-EHDEN projects with clinical research partners; integration with REDCap; HL7 FHIR API layer; ShinyApp for data export and an ETL quality validation framework.

[www.biomeris.it](http://www.biomeris.it)



# edence Health

**edenceHealth** (from 'evidence' and 'Health') is a leading IT service provider to organizations that aim to expand their secondary use of medical data through harmonization and analytics. Our international, multidisciplinary team focuses on developing solutions to support Real World Data (RWD) and Real-World Evidence (RWE) projects, using open source tooling and software. We are experts in leading data harmonisation projects from end-to-end, having supported 30+ data partners with datasets ranging from Electronic Health Record databases to disease specific registries. Expanding beyond data harmonization, our team also has experience in the design and deployment of custom data platform architecture and federated analytical networks. With solid knowledge of the health data market, we are proud to continually participate in and support the open science community, and collaborate with multiple research institutions.

<https://edence.health>



# MTG

MTG Research and Development Lab is a Contract Research Organization specialized in observational studies using electronic healthcare records, covering the full evidence generation lifecycle for studies from grant application, stud design, execution, up to publication. We support healthcare institutions, academia, industry, regulators, governments and digital health companies to generate regulatory-grade evidence to support epidemiological studies, health technology assessments, risk quantification, clinical impact assessment, among others. We are heavily invested in empowering and training institutions that wish to become proficient in participating in evidence generation activities.

[www.mtg.pt](http://www.mtg.pt)

The logo for ITTM consists of the letters 'ITTM' in a bold, sans-serif font. The 'I' is red, and the 'T', 'T', and 'M' are blue.

Information Technology  
for Translational Medicine



ITTM is specialized in data and knowledge management and the mission of ITTM is Making Data Actionable.

ITTM offers interwoven services and solutions to improve data quality, data models, knowledge platform setup and secure hosting for clinical research and digital health. Since its foundation in 2015, ITTM has been involved in various Data Curation and Management projects in the context of previous and ongoing H2020 and IMI projects (more details see: <https://www.ittm-solutions.com/projects/>)

ITTM was and is actively involved in all aspects of data management, data sharing and supports the projects with process understanding and optimization of workflows (strong focus on interoperability aspects). ITTM is a member organization of the i2b2 tranSMART Foundation and ITTM was one of the first SMEs which received training and was certified as EHDEN Certified SME. In 2023 ITTM co-founded the OHDSI-LU node.

<https://www.ittm-solutions.com>



IOMED has developed an AI-powered Natural Language Processing technology that allows hospitals to structure their information identifying clinically relevant variables from medical notes and structuring them into datasets, which can then be easily queried. Thanks to this data structuring, professionals and researchers from the hospitals can access to the information stored in their facilities more quickly thus accelerating patient recruitment by reducing the time invested in this process. At the same time, it allows hospitals to improve the quality of their services.

Data protection is IOMED's priority and we work to ensure a safe and secure environment: each hospital decides and authorizes all data uses and participation in projects, the data is stored entirely within the hospital, and always following international and Spanish legislation.

[www.iomed.es](http://www.iomed.es)

# Odysseus Data Services

A market leader in enabling standardized Real-World Evidence (RWE) data analytics at scale. Odysseus offers full stack RWE services and solutions, including RWD data harmonization into OMOP, healthcare ontology curation, RWE data analytics and data network platforms (Prometheus), RWE software engineering and BI, and data analytics service.

Odysseus is an active OHDSI open science community thought leader and contributor, including design and development of the OMOP CDM standard and OMOP Vocabularies, as well as open source data analytics tools (ATLAS).



**Data Science & Research**



**RWE Engineering Solutions & Services**

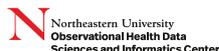


**RWD to OMOP Conversions**



**Medical Vocabularies & Data Semantics**

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## Collaborator showcase: Software demonstrations

### La Fontaine (Deck B): Odysseus Data Services stand

#### **ARACHNE Data Node and Execution Engine runtime to enable network studies**

“ARACHNE Data Node is the application component and a part of the ARACHNE (<https://github.com/OHDSI/Arachne>) platform used to execute network studies. The latest version 2.0.1 has several improvements and new features, including an updated user interface (UI) and improved overall user experience and look and feel. Together with an enhanced ARACHNE Execution Engine (<https://github.com/OHDSI/ArachneExecutionEngine>) version 2.1.0 allows the use of prepared Docker image-based Runtime Environments for study execution, an extensive execution log accessible in real-time, visualization and download of the study results after execution, ability to terminate a job in flight and more. One of the key features to support OHDSI network studies includes uploading of OHDSI Strategus study designs and their execution.

The focus of the demo is on the approach of preparing and utilizing Runtime Environments to execute studies of different types (including the Strategus ones) as well as application configuration settings when ARACHNE Data Node and Execution Engine are deployed on operating systems with or without Docker.”

~ *Alexey Manoylenko*

### La Fontaine (Deck B) breakout rooms – 13.00-14.30

#### **The MOMIS platform: semantic integration and machine learning to improve the OMOP CDM harmonisation process**

“MOMIS is a virtual semantic integration environment designed and developed by DataRiver to semi-automatically aggregate information from heterogeneous data sources, both structured (e.g., databases) and semi-structured (e.g., spreadsheets, json, xml), as well as Big Data and Open Data, while preserving data privacy and confidentiality.

During the demo, the annotation, enrichment, mapping and transformation services of MOMIS will be applied to some harmonisation cases, showing how the automation of the process significantly reduces the high effort required from data partners to perform manual and repetitive annotation and mapping tasks. The knowledge and expertise provided by domain experts can help to improve and standardise harmonisation work.”

~ *Enrico Calanchi*

## **OHDSI meets Flowise to Streamline Biomedical Data Discovery and Analysis**

“The strategies implemented by the OHDSI community simplified the execution of multicenter studies. However, the widespread adoption of these strategies has also brought forth new challenges, particularly related to database discovery. We addressed those challenges by proposing the proof-of-concept of a chatbot-like mechanism to help medical researchers identify databases of interest within the EHDEN Network of databases.”

~ *João R. Almeida*

## **CohortSymmetry: an R package for Prescription Sequence Symmetry Analysis using the OMOP CDM**

“CohortSymmetry is a R package that uses OMOP CDM to carry out Prescription Sequence Symmetry Analysis (PSSA). PSSA is a signal detection tool that could be used to assess the association between two initiations of drugs using real world data, which can subsequently detect potential occurrences of prescription cascades. Prescription cascades occur when the side effects of a prescribed drugs are misinterpreted as a genuine new condition, leading to further medications being prescribed to counter such adverse drug events.”

~ *Xihang Chen*

## **omock: an R package for creating mock data in the OMOP CDM format for software testing**

“Omock is an R package developed to simplify the creation of local mock OMOP CDM references for testing in package development for OMOP-related packages. Omock contains functions such as `mockPerson()`, `mockObservationPeriod()`, and `mockVocabulary()` to allow users to create bespoke mock OMOP CDM tables tailored to the users' needs in a few lines of code. Omock is also compatible with `CDMConnector`; hence, the local mock OMOP CDM reference created with Omock can be easily copied to different databases to conduct package testing across different database environments.”

~ *Mike Du*

# La Fontaine (Deck B) breakout rooms – 14.30-16.00

## **omopcept: an R package for querying and visualising omop CONceptS (removing the CONS)**

"I will demonstrate, and answer queries about, the R package omopcept for interacting with the OHDSI/OMOP standardised vocabularies. I am very interested in feedback from users and potential users. This could be your chance to influence development of the package. omopcept is an open-source R package, hosted on Github, for accessing, querying & visualising the OHDSI/OMOP standardised vocabularies. It allows the creation of reproducible code to do much of what can be done with Athena. omopcept is tidyverse compatible and designed to be used in dplyr pipelines, it doesn't require Java. The package stores standardised vocabularies locally (efficiently as parquet files) so it can work offline and to maintain speed. There are options to process vocabulary files downloaded from Athena.

omopcept is designed to be user friendly and quick to operate. Function names are concise and all lower case so they can be typed quickly. Most functions are named omop\_\* to work well with RStudio code completion. omopcept uses the R package arrow so that it doesn't have to read all of the concepts into R's memory (which would be slow). Using arrow, a connection is opened to a parquet file, initial queries are done on the connection, then results are read into memory. omopcept makes a start at allowing visualisation of omop hierarchies. I will demonstrate how we can create meaningful visualisations from hundreds of concepts on big canvases."

~ **Andy South**

## **CohortConstructor - an R package to build and curate cohort tables**

"CohortConstructor is an R package that provides a set of functionalities to construct cohorts in R. The package has two different sets of functions: one for creating cohorts and the other to apply additional inclusion criteria to a cohort. The cohort functions enable the creation of new cohorts from existing cohorts in the database (for instance, by creating matched samples or cohort combinations) or from concept sets. Meanwhile, the inclusion criteria functions focus on refining existing cohorts by applying specific criteria. These inclusion criteria may be based on patient demographics, calendar time of cohort entry/exit, and relationships with other cohorts or tables in the database. In conclusion, CohortConstructor offers a programmatic approach for generating cohorts in R, first by creating base cohorts which is then followed by the application of study-specific inclusion criteria."

~ **Nuria Mercade-Besora**

## **dsOMOP: Federated Analysis of Harmonized Clinical Data Combining OMOP CDM and DataSHIELD in a DATOS-CAT Cohort Use Case**

“This software demo showcases the 'dsOMOP' package, which enables the integration of OMOP CDM databases into the DataSHIELD environment, a tool designed for secure federated clinical data analysis. This session will cover an explanation of how DataSHIELD works, a basic setup, exploration and interaction with an OMOP CDM database using dsOMOP, and a demonstration of simple analysis using these tools.”

~ **David Sarrat-González**

## **DataSHIELD and OHDSI - an opportunity?**

“The demo of DataSHIELD will cover the concept of Federated Analysis and explain how to run federated analytics functions while preserving data privacy using three simulated data nodes. We will specifically highlight a set of exemplary statistical functions as well as decentralized authentication and authorization.”

~ **Jacek Chmiel**

## **Empowering research with seamless data flow and research-ready, anonymised data in OMOP CDM: Learnings from the design of WAYFIND-R, a global precision oncology registry and research platform**

“This demo will showcase the WAYFIND-R data sharing and collaboration platform. Building cohorts of patients, exploration through the use of shiny visualisations and advanced analytics capabilities. The audience will get a taste of how they will be able to use the platform to further research needs.”

~ **Tom Stone**

## Odyssee room (Deck B) – 13.00-14.30

### **CohortSurvival: an R package for survival analysis using the OMOP CDM**

"CohortSurvival contains functions for extracting and summarising survival data using the OMOP common data model."

~ ***Kim López Güell***

## Odyssee room (Deck B) – 14.30-16.00

### **ReportGenerator: Automating study reports and visualization apps for Darwin EU research**

"ReportGenerator it's an R package and web application that automates the creation of visualization dashboards and Word reports for DARWIN EU®. It integrates results from four analytical packages—IncidencePrevalence, PatientProfiles, TreatmentPatterns, and CohortSurvival—using OmopGenerics for standard OMOP data model definitions. The tool enables a dashboard to explore results, and then export them as Shiny apps, and/or produce comprehensive Word reports aligned with DARWIN EU's standards. ReportGenerator will showcase its capabilities in processing, organizing, and visualizing complex study data, streamlining the final steps of the DARWIN EU analytics pipeline."

~ ***Cesar Barboza Gutierrez***

## Collaborator showcase: National nodes



In several European countries, National OHDSI Nodes have been established. Their common goal is to facilitate collaboration on an (inter)national level. More information can be found online at: <https://www.ohdsi-europe.org/index.php/national-nodes>

During this year's symposium, the following National Nodes present their poster during the collaborator showcase (La Fontaine – deck B) :

Node	Node leads
Belgium	Liesbet Peeters & Annelies Verbiest
Denmark	Ismail Gögenur, Martin Høyer Rose & Andreas Weinberger Rosen
Estonia	Sulev Reisberg & Raivo Kolde
Germany	Michele Zoch & Ines Reinecke
Greece	Pantelis Natsiavas & Anastasia Farmaki
Israel	Chen Yanover
Italy	Lucia Sacchi & Matteo Gabetta
Luxembourg	Claudine Backes & Andreas Kremer
Netherlands	Aniek Markus & Renske Los
Norway	Espen Enerly & Siri Larønningen
Portugal	Patricia Couceiro & Carmen Nogueira
Spain	Miguel Angel Mayer & Talita Duarte Salles
United Kingdom	Dani Prieto Alhambra

... ask not what your country can do for you - ask what you can do for your country 😊

*Join your national node today!*

# Collaborator showcase: Posters

## Room Odyssee (Deck B)

### Open-source analytics development

1	The DARWIN EU® Data Network	Maxim Moinat, Montse Camprubi, Sofia Bazakou, Anne van Winzum
2	DARWIN EU® - Trends of prescription opioid use in Europe	Junqing Xie, Mike Du, Yuchen Guo, Cesar Barboza, James Brash, Antonella Delmestri, Talita Duarte-Salles, Jasmin Gratton, Romain Griffier, Raivo Kolde, Wai Yi Man, Nuria Mercade-Besora, Marek Oja, Sarah Saeger, Katia Verhamme, Dina Vojinovic, Edward Burn, Daniel Prieto-Alhambra, Martí Català, Annika M. Jödicke
3	DARWIN EU® - Risk of Thromboembolic Events Associated With COVID-19 During the Omicron Period, and SARS-CoV-2 Vaccination	Xintong Li, Annika Jodicke, Katia Verhamme, Mees Mosseveld, James Brash, Sarah Seager, Laura Pérez Crespo, Nuria Mercade Besora, Talita Duarte Salles, Marek Oja, Raivo Kolde, Edward Burn, Albert Prats-Urbe, Daniel Prieto Alhambra, Marti Catala-Sabate
4	DARWIN EU® - Age-specific burden of RSV-related disease in Europe	Johnmary Arinze, Miguel-Angel Mayer, Guillaume Verdy, Maarten van Kessel, Juan Manuel Ramírez-Anguita, Angela Leis, Romain Griffier, Marek Oja, Raivo Kolde, Antonella Delmestri, James Brash, Laura Pérez-Crespo, Talita Duarte-Salles, Katia Verhamme
5	DARWIN EU® - Drug utilisation study of medicines with prokinetic properties in children and adults diagnosed with gastroparesis	Dina Vojinovic, Johnmary Arinze, Antonella Delmestri, James Brash, Sarah Saeger, Guillaume Verdy, Núria Mercadé, Talita Duarte-Salles, Mees Mosseveld, Miguel-Angel Mayer, Katia Verhamme
6	DARWIN EU® - Characterization of Patients with Chronic Hepatitis B and C	Dina Vojinovic, Johnmary Arinze, Cesar Barboza Gutierrez, Antonella Delmestri, James Brash, Sarah Seager, Vianney Jouhet, Guillaume Verdy, Mees Mosseveld, Miguel-Angel Mayer, Angela Leis, Juan Manuel Ramírez-Anguita, Raivo Kolde, Katia Verhamme
7	Forecasting the prescription rates of antibiotics in the UK between 2013 to 2023 incorporating the impact of COVID-19	Yuchen Guo, Edward Burn, Daniel Prieto-Alhambra, Marta Pineda-Moncusí
8	CdmOnboarding R package for data quality assessment	Sofia Bazakou, Maxim Moinat, Anne van Winzum
9	Trends over time in medicines with suggested shortages in Europe	Marta Pineda-Moncusí, Mees Mosseveld, Edward Burn, Dani Prieto-Alhambra, Theresa Burkard
10	The HMA-EMA Real-World Data Catalogues of data sources and studies: Facilitating data sources discoverability to support research and regulatory decision making	Catarina Moura, Elpida Kontsioti, Jasmine Gratton, Stefania Simou, Paolo Alcini
11	Harmonization to the OMOiP CDM of cancer patient data at the Modena Oncology Center	Enrico Calanchi, Luca Moscetti, Mirko Orsini, Laura Delsante, Enrica Martinelli, Andrea Spallanzani, Federica Bertolini, Elisa Pettorelli, Massimo Dominici
12	OMOPification of real-world cancer data to enable privacy-preserving analytics for cancer research: an implementation at the Maastricht University Medical Centre+ for the Digital Oncology Network for Europe	"Prabash Galgane Banduge, Anne-Lore Bynens, Cédric Gillissen, Alberto Traverso, Petros Kalendralis, Andre Dekker, Lizza Hendriks, Aiara Lobo Gomes "
13	A potentially scalable, sustainable and secure architecture to deploy and maintain ETL pipelines and OHDSI tooling for ECRAID-Base	Marc Padros Goossens, Frank Leus, Ben Burke, Tom Feusels, Jared Houghtaling, Freija Descamps, Lauren Maxwell and Ankur Krishnan
14	Universal Patient Trajectory Extraction from OMOP CDM	Markus Haug, Raivo Kolde

15	Enhancing Clinical Data Management and Utilization with the Data2Evidence Platform	Karthik Seetharaman, Santan Maddi, Satish Anbazhagan, Afreen Sikandara, Brandan Tan, Alicia Jing Wen Koh, Peter Hoffmann
16	Harmonizing Public Research Access Datasets for AI Advancements in Asthma/ COPD Diagnosis	Frédéric Jung, Vangelis Sakkalis, Chang Sun, Mahmoud Ibrahim, Gökhan Ertaylan
17	Automation of STCM Vocabularies Review in OMOP CDM	Wai Yi Man, Antonella Delmestri
18	Development of an Automated and (near) Real-Time (ART) OMOP-CDM ETL System in Taiwan	Alex PA. Nguyen, Muhammad Solihuddin Muhtar, Min-Huei Hsu, Chih-Wei Huang, Jason C. Hsu

## Observational data standards and management

19	Additional technical data protection measures to improve the security of an OMOP/OHDSI infrastructure	"Francesco Pozzoni, Matteo Gabetta, Mauro Bucalo, Anna Alloni, Giorgia Masina, Maurizio Pastore, Lucia Sacchi, Nicola Barbarini"
20	The PHEMS project: New Strategies in Health Data Sharing - Clinical Use Cases	Guus Wilimink, Sofia Bazakou, Lydia Briggs, Roger Domingo Espinos, Aida Felipe Villalobos, Katariina Gehrmann, Liam Glueck, Yolanda Jordan Garcia, Jan Willem Kuiper, Jennifer McIntosh, Cristina Ruiz Herguido, Andrew Taylor, Marja Vaitinen, Arnau Valls Esteve, Gary Zhen Yuan Liew, Azadeh Tafreshiha
21	Towards all-Island sharing of Irish lymphoid blood cancer data: Landscape and gap analysis	Kluyvert Boakye Duah, Michael Quinn, Eva Szegezdi, Lisa Crawford, Aedin C. Culhane, Mark Lawler, Siobhan Glavey, Ruth Clifford, Ian M. Overton
22	Expanding the OUH Clinical Data Warehouse data delivery infrastructure with OMOP CDM and OHDSI tools	Olivier Bouissou, Dan Johansen, Elisabeth Ross
23	Lessons Learned from EHDEN Data Partner Reviews: Improving ETL Processes and Data Quality in OMOP CDM Conversions	Evanette K Burrows, Clair Blacketer, Erica A Voss, Frank J DeFalco, Dmitry Dymshyts, Patrick B Ryan
24	An Exploration of Ovarian Cancer Therapy Sequence Utilization in Treatment-naive Women from 2008-2020	Whitney Burton, Quynh Nguyen, Mohammad Solihuddin Muhtar, Christianus Heru Setiawan, Septi Melisa, Jason Hsu
25	Cloud-based, Automated Solution to Transforming Clinical Datasets to the OMOP CDM	Simon Thompson, Abigail Carter, Remi Shah, Adam Bekele, Myles Jones
26	Automated OMOP-CDM pipeline for the new EBMT Registry	Shirah Cashriel, Nir Assaraf, Ignacio Garcia, Fernando Cid, Freija Descamps
27	Standardization of the French national database SNDS in OMOP-CDM	Gaëlle Collumeau, Cécile Charles, Lorien Benda, Elena Mylonas, Axelle Menu, Gil Lampe, Stéphanie Combes
28	eHealth-Hub For Cancer –OHDSI for Cancer on the Island of Ireland	eHealth-Hub for Cancer Consortium, Ruth Clifford, Katie Crowley, Shirin Moghaddam, William Waston, Clare Donohoe, Eva Szegezdi, Siobhan Galvey, Mary Cahill, Ken Mills, Michael Quinn, Ian Overton, Mark Lawler, Aedin C. Culhane
29	FHIN (Federated Health Innovation Network)	Camille Deltomme, Kim Denturck, Peter De Jaeger, Wouter Willems, Bram De Caluwe, Geert Hellebaut, Noëlla Pierlet, Karel Van Brantegem, Peter Heirman, Yves Thorrez, Mieke Deschepper
30	Is it necessary to include SNOMED CT national extensions in ATHENA? Struggling with adaptation from BIFAP data model to OMOP CDM	Juan Ignacio Díaz-Hernández, Hermenegildo Martínez-Alcalá, Cristina Justo-Astorgano, Ana Llorente, Arturo Álvarez, Miguel Ángel Macía
31	National Drug Code (NDC) code reuse: scope of the problem and methods to solve.	Dmitry Dymshyts, Clair Blacketer, Evanette K Burrows, Anna Ostropolets, Erica A Voss
32	Predicting Colorectal Cancer Liver Metastases using TMUCRD-Mapped OMOP CDM	Yudha E. Saputra, Daniel C.A. Nugroho, Muhammad Solihudin, Jason C. Hsu
33	Mapping NHS Cancer Records to OMOP	Laura Kerr, Abigail Carter

34	Creating clinically meaningful cancer groups from SNOMED for care systems and care quality research: a head and neck case study	Hayley Fenton, Elisabeth Ross, Elin Hallan Naderi, Anne-Lore Bynens
35	Improving vocabulary mapping to OMOP-CDM concepts: an AI-based automated and collaborative mapping platform	João Fonseca, António Bezerra, Gonçalo Teixeira, Miguel Rebelo, Madalena Plácido, Ana Costa, Ivan Pereira
36	Deployment approach for first phase of OMOP CDM harmonization and network study participation at CuSL	Lars Halvorsen, Joëlle Thonnard, Aline Van Maanen, Audrey Timmermans, Yannick Barussaud, Alix Collard, Emma Gesquire, Ben Burke, Mahsa Maleki Nazari, Shirah Cashriel
37	Expanding the Treatment Episode concept in the Observational Medical Outcomes Partnership Common Data Model - Experience from Real-World data modelling in the ONCOVALUE collaboration	Andreas Henriksen, Juho Lähteenmaa, Cecilie Koefoed-Nielsen, Samu Eränen, Andrea Roncadori, Ilaria Massa, Andreas Bjerrum
38	ETL for OMOP CDM v5.4 of large-scale population data using Databricks and Apache Spark	Silvia Jimenez, Mehrdad A. Mizani, Shirah Cashriel, Emma Gesquiere, Jadene Lewis, Angela Wood, Rouven Priedon, Anne Li
39	First steps towards a Danish ICU Data and Research Platform	Kaas-Hansen BS, Placido D, Thorsen-Meyer H-C, Perner A
40	A Modular ETL Framework for Standardized Data Model Conformance in Oncology Real-World Evidence Generation	Danial Kamran, Lisa Merker, Guillaume Azarias, Stefan Schilling
41	SNOMED overhaul and its impact on ETL and phenotypes	Masha Khitrun, Alexander Davydov, Oleg Zhuk
42	Adoption of the OMOP Common Data Model in the UK	Alex E. Knight, Paola Quattroni, David Seymour, Monica Jones, Geoff Hall, Sam Cox, Uwaye Ideh, Emily Jefferson
43	DATOS-CAT: Leveraging OMOP-CDM for the standardization, integration and analysis of population-based biomedical data in Catalonia	Judith Martinez, David Sarrat-González, Xavier Escribà-Montagut, Aikaterini Lymperidou, Alberto Labarga
44	Patient-Level data export based on ATLAS Cohort Definitions	Marc Olivé, Sandra Pulido, Gabriel Maeztu
45	Lessons Learned Mapping UK Pain Datasets to the OMOP Common Data Model	Gordon Milligan, Erum Masood, Phil Appleby, Phil Quinlan, Sam Cox, Armando Mendez Villalon, Tom Giles, Calum MacDonald, Christian Cole
46	Conversion of the Rheumatology Department Data to the OMOP Standard in a Dutch Hospital.	Manon Merkelbach, Tim Jansen, Piet V Riel, Ruud Simons, Menno Hoogeveen
47	Using OHDSI standards to host Longitudinal Mental Health Data in a staging database for pushing into OMOP: Lessons from the INSPIRE network Datahub	Byliah Mugotitsa*, Agnes Kiragga, Jim Todd, Jay Greenfield, Michael Ochola, Evans Omondi, Tathagata Bhattacharjee, David Amadi, Dora Mailosi
48	Conversion of the Papageorgiou General Hospital EHR to the OMOP Common Data Model	Grigoris Papapostolou, Achilleas Chytas, Alexandros Rekkas, Maria Bigaki, Demetrios Zeimpekis, Lampros Dermentzoglou, George Tortopidis, Pantelis Natsiavas
49	Enhancing Healthcare Insights: OMOP Harmonization and Integration of Surgical Procedure Database into EHDEN with BC Platforms' Solutions	Mai TN Nguyen, Stefano Gamage, Serena Ciaburri, Kalle Pärn, Viktoria Sassi-Prantner, Hang T.T. Phan
50	Improving completeness in mapping cancer registry data to OMOP CDM by using alternative source fields	Tapio Niemi, Eloïse Martin, Vincent Faivre, Patrick Arveux, Simon Germann, Valérie Pittet, Jean-Luc Bulliard
51	Piloting the Transformation of Multiple Sclerosis Real-World Data to the OMOP CDM: Lessons Learned	Tina Parciak, Kirstin Tümler, Alexander Stahmann, Emma Gesquiere, Freija Descamps, Liesbet M. Peeters
52	Enhancing Real-World Clinical Data Analysis: Integrating NLP-derived results with OMOP CDM	Mónica Arrúe, Mariona Forcada, María Quijada, Paula Chocrón, Gabriel de Maeztu
53	Expanding the OMOP Common Data Model to support Extracorporeal Life Support research	Clemens Rieder, Oleg Zhuk, Ahmed Said, Peta M.A. Alexander, Dominik J. Hoechter
54	How metadata empowers MedDRA hierarchies and mappings	Mikita Salavei, Oleg Zhuk, Vlad Korsik, Alexander Davydov

55	Custom vocabulary management in ETL	Tatsiana Skuhareuskaya, Vlad Korsik, Vojtech Huser, Alexander Davydov
56	Transforming Clinical Trial Data to the OMOP CDM	Cynthia Sung, Mike Hamidi, Zhen Lin, Tom Walpole, Rebecca Baker, Melissa Cook, Shital Desai, Priya Gopal, Dan Hartley, Priya Meghrajani, Tra Nguyen, Paul Orona, Katy Sadowski, Sebastiaan van Sandijk, Philip Solovyev, Ramona Walls, Kenneth J. Wilkins, Qi Yang, the Clinical Trial Working Group
57	Enhancing Neuropsychiatric Data Integration with OMOP: A Comprehensive Landscape Analysis by the OHDSI Psychiatry Working Group	Polina Talapova, Dmytro Dymshyts, Andrew E. Williams, Piper A. Ronallo, Shilpa Ratwani, Callum Harding, Dong Yun Lee, Tatiana Skugarevskaya
58	Defining international approaches for the detection of emergent metastasis and the classification of site of metastasis from hospital EHR	Stelios Theophanous, Sue Cheeseman, Elin Hallan Naderi, Elisabeth Ross, Anne-Lore Bynens, Prabash Galgane Banduge, Petros Kalendralis, Aiara Lobo Gomes, Piers Mahon
59	Real-World Hospital Data Integration Processes and Clinical Information System Architectures across European Comprehensive Cancer Centres (ONCOVALUE)	Kevin Tittel, Nora Franzen, Louise Janssen, Wim van Harten, Valesca Retèl
60	Leveraging FHIR for a generic EHR to OMOP-ETL: can we make an ETL process reusable?	Sebastiaan van Sandijk, Renske Los
61	“Health Orphans” - Rare diseases on their way to OMOP and into clinical trials	Michele Zoch, Ines Reinecke, Christian Gierschner, Richard Gebler, Romina Blasini, Josef Schepers, Martin Sedlmayr
62	Integration of Clinical and Genomic Data Mapped to the OMOP Common Data Model in a Federated Data Network in Belgium	Tatjana Jatsenko, Murat Akand, Joris Robert Vermeesch, Dries Rombaut, Michel Van Speybroeck, Martine Lewi, Valerie Vandeweerd
63	VALO Feasibility Study on the OMOP CDM Maturity in the Nordic Countries	Persephone Doupi, Gustav Klingstedt, Saara Malkamäki, Markus Kalliola, Heidi Hakala, Mikko Kaasinen, Janne Kauhanen, Erika Natunen, Pasi Rikala, Anna Virtanen, Elina Sarpola

## Room La Fontaine (Deck B)

### Clinical applications

64	ONCOVALUE - Implementing value-based oncology care at European cancer hospitals	Mads Andersen, Juho Lähteenmaa, Johanna Mattson, Ulrik Lassen, Andreas Bjerrum
65	The Mystery of PHQ-9 Questionnaires' Predictive Accuracy	Yonatan Bilu, Tal El Hay
66	Institute of Analytics for Health	M. Borshchivska, A. Kanfoud, T. Helleputte
67	Analysis of Lung Cancer Patient Treatment with Immune Checkpoint Inhibitors Using Natural Language Processing for Data Extraction from Electronic Health Records	Iege Bassez, Laura Deckx, Vincent Geldhof, Annelies Verbiest, Shahbaz Pervaiz, Dries Hens, Philip Debruyne, Christof Vulsteke, Clara L. Oeste
68	PHederation – the Federated Network of Pulmonary Hypertension Registries	Eva-Maria Didden, Valerie van Baalen, Michel van Speybroeck, Monika Brand
69	Longitudinal trajectories of polypharmacy in older people, and their association with the risk of mortality: A joint latent class model analysis of real-world data from the UK and the Netherlands	Leena Elhussein, Ross D Williams, Wai Yi Man, Edward Burn, Antonella Delmestri, Victoria Y Strauss, Daniel Prieto-Alhambra
70	Deep learning for patient-specific modelling of Acute Myeloid Leukemia based on longitudinal clinical laboratory data and the OMOP common data model	Eric Fey, Salma Rachidi, Alexey Ryzhenkov, Valtteri Nieminen, Tomi Mäkelä, Oscar Brück, Kimmo Porkka
71	Harmonising Surgical Data: Experience from the Hip Fracture Mini Federated Network of Registries	Marissa G. Fiorello, Kristin Kostka, Justin Manjourides, Xavier L. Griffin, Jennifer C.E Lane
72	IODA, an ATLAS-based software for the INAH Community	A. Kanfoud, M. Borshchivska, T. Helleputte

73	Using Real-world to Unlock the Potential of Artificial Intelligence in Enhancing Diagnostic-Therapeutic Care Pathways in Pediatrics	Diana Ferro, Silvia Capuzzi, Francesco Fabozzi, Antonella Cacchione, Andrea Carai, Alberto Tozzi, Angela Mastronuzzi
74	An Industry Partner experience of an EHDEN multi-country federated study characterising an alopecia areata cohort	Abaigeal Jackson, Genevieve Gauthier, Griffith Bell, Ioannis Biblias, Jimmy Toulas, Yi-Chien Lee, Erwin Bruninx
75	Adaption of the OMOP CDM for Rheumatology: A Portuguese experience.	Catarina Tomé, Enrico Calanchi, Laura Delsante, Ângela Afonso, Daniel Silva, Ana Rita Lopes, João Eurico Fonseca
76	Incorporating Temporal Electronic Health Records (EHRs) into Clinical Prediction Models	Estelle Lampel, Aniek Markus, Tom Seinen
77	An international multi-centre federated-network data analysis using routine health data investigating disparities in care for patients with scaphoid fractures.	Usama Rahman, Gongliang Zhang, Benjamin Martin, Paul Nagy, Avi Giladi, Dawn Laporte, DS Edwards, Xavier Griffin, Jennifer Lane
78	Developing a Clinical Decision Support System Software Prototype that Assists in the Management of Patients with Self-Harm based on the use of national registries harmonized in OMOP CDM: the PERMANENS Project.	"Philippe Mortier, Franco Amigo, Madhav Bhargav, Susana Conde, Montserrat Ferrer, Oskar Flygare, Busenur Kizilaslan, Laura Latorre Moreno, Angela Leis, Miguel Angel Mayer, Víctor Pérez Sola, Ana Portillo van Diest, Juan Manuel Ramírez-Anguita, Ferran Sanz, Gemma Vilagut, Jordi Alonso, Lars Mehlum, Ella Arensman, Johan Bjureberg, Manuel Pastor, Ping Qin "
79	Baseline Characterization and Treatment Pathways of Patients With Alport Syndrome Across Geographies: Exploring a Rare Disease in a Multi-Database Retrospective Cohort Study	Katrin Manlik, Glen James, Andrea Scalise, Charlie Scott, Daloha Rodriguez Molina, David Vizcaya
80	Challenges in harmonising data across multiple biobanks	Karyn Mégy, Rebecca Akhanemhe, Ben Hollis, Ali Abbasi, Amanda O'Neill, Shikta Das, Stewart MacArthur, Sean O'Dell, Sebastian Wasilewski, Quanli Wang, Slavé Petrovski, Jen Harrow
81	The Paradox of Precision Medicine - Challenges and approaches to solutions at Oslo University Hospital	Elin Hallan Naderi, Elisabeth Ross
82	Enhancing Pediatric Care Data Collaboration through Privacy-Enhanced Federated Learning and Anonymization	Timo Miettinen, Mehreen Ali, Tuomo Pentikäinen
83	Prediction of Incident Dementia Among Chronic Disease Patients: A Multi-Cohort Multi-Center Observational Patient-Level Prediction Study	Phan Thanh-Phuc, Sunny Lin, Daniel C.A. Nugroho, Muhammad Solihuddin Muhtar, Nguyen Phung-Anh, Seng Chan You, Christine Y. Lu, Nicole Pratt, Jason Hsu
84	Characterization of Heavy Menstrual Bleeding in 11 data sources from 9 countries using OMOP-CDM: a European Health Data Evidence Network study	Marta Pineda Moncusí, Siir Su Saydam, George Argyriou, Ronald Herrera, Eric Fey, Kimmo Porkka, Angela Leis, Miguel Angel Mayer, Juan Manuel Ramírez-Anguita, Zsolt Bagyura, Loretta Kiss, Peter Rijnbeek, Marcel de Wilde, Saeed Hayati, Hedvig Nordeng, Nhung Trinh, Asieh Golozar, Mariana Schiffer Acar, Bettina Althoff, Carina Dinkel-Keuthage, Carsten Moeller, Gianmario Candore
85	Standardizing European sarcoma registry data to the OMOP Common Data Model: the retroperitoneal sarcoma use case	Peter Prinsen, Paolo Lasalvia, Roberto Lillini, Vittoria Ramella, Anna Alloni, Joanna Szkandera, Espen Enerly, Maaïke van Swieten, Siri Larønningen, Julien Bollard, Audrey Pons, Thomas Gaudin, Claire Chemin-Airiau, Alric Sans, Jean-Yves Blay, Arnaud Malfilatre, Danielle Newby, Gijs Geleijnse, Annalisa Trama
86	Daily dose assessment of medicines administered in intensive care unit and inpatient settings in a general hospital	Juan Manuel Ramírez-Anguita, Miguel A. Mayer, Angela Leis, Martí Català
87	External Validation of the Revised Cardiac Risk Index (RCRI) Clinical Prediction Model in observational health care databases	Alexander Saelmans, Evan Minty, Peter Rijnbeek, Jenna Reys, Ross Williams

88	Implementation and Updating of Artificial Intelligence Clinical Prediction Models: a Systematic Review	Alexander Saelmans, Tom Seinen, Victor Pera, Aniek Markus, Egill Fridgeirsson, Henrik John, Peter Rijnbeek, Jenna Reys, Ross Williams
89	The association between comorbid depression and insulin initiation in type 2 diabetes: A cohort OHDSI study	Christianus Heru Setiawan, Daniel C.A. Nugroho, Phan Thanh-Phuc, Septi Melisa, Muhammad Solihuddin Muhtar, Nguyen Phung-Anh, Jason C. Hsu
90	OHDSI in Africa and Partnerships with European Institutions	Cynthia Sung, Agnes Kiragga, Kofi Agayre, OO Aluko, Daniel Ankrah, Chidi Asuzu, Adam Bouras, Geert Byttebier <sup>8</sup> , Aize Cao, Ahmed El-Sayed, Chris Fourie, Nega Gebreyesus, Jay Greenfield, Lars Halvorsen, Jared Houghtaling, Katherine Johnston, Andrew S. Kanter, Mack Kigada, Sylvia Muyingo, Henry Ogoe <sup>8</sup> , Bolu Oluwalade, Mariette Smith, Amelia Taylor, Marleen Temmerman, Jim Todd, Marc Twagirumukiza, Daniel M Wanga, Andrew Williams, the OHDSI Africa Chapter
91	Imminent Subsequent Fractures In Postmenopausal Women With Fragility Fractures: Incidence And Patient Characteristics From Six European Countries	Xihang Chen, Trishna Rathod-Mistry, Gianluca Fabiano, Antonella Delmestri, Alireza Moayyeri, Joshua Warden, Carlen Reyes, James Brash, Katia Verhamme, Mees Mosseveld, Sarah Seager, Rafael Pinedo-Villanueva, Eng Hooi Tan
92	The risk of immune- and inflammatory post-acute sequelae of COVID-19 (PASC): a network study in 6 European countries, the US, and Korea	Theresa Burkard, Kim López-Güell, Martí Català, Raivo Kolde, Anneli Uusküla, Daniel Dedman, Jessie O Oyinlola, Juan Manuel Ramírez-Anguita, Miguel A. Mayer, Talita Duarte-Salles, Laura Pérez-Crespo, Alicia Abellan, Kristin Kostka, <sup>8</sup> Núria Mercadé-Besora, Lourdes Mateu, Cora Loste, Roger Paredes, Mees Mosseveld, Jaime Meléndez-Cardiel, Nhung TH Trinh, Hedvig ME Nordeng, Chungsoo Kim, Ji-Woo Kim, Dominique Delseny, Gregoire Mercier, Edward Burn, Antonella Delmestri, Wai Yi Man, Annika M Jödicke, Daniel Prieto-Alhambra, Junqing Xie

## Methodological research

93	Dimension Reduction Techniques for Clinical Prediction Models using Electronic Health Record data	Roëlle Bänffer, Aniek Markus, Tom Seinen
94	Context: the value of matched sampling for large-scale characterisation during phenotype diagnostics	Edward Burn, Mike Du, Yuchen Guo, Núria Mercadé-Besora, Albert Prats-Urbe, Daniel Prieto-Alhambra, Martí Català
95	Exploring Embedding Representations for Structured Data in the OMOP CDM: Use-Case for Long Hospitalization Prediction	Jorge Cerejo, Simão Gonçalves, Bernardo Neves, José Maria Moreira, Nuno A. da Silva, Francisca Leite
96	Transforming lung cancer EHR data into the OMOP CDM: A case study of Non-Small Cell Lung Cancer	Evangelos Chandakas, Ping Sun
97	Predicting long term cancer survival for Health Technology Assessment: A Multinational Cohort Study Across Europe	Jeremy Dietz, Ian Koblbauer, Ravinder Claire, James Love-Koh, Jamie Elvidge, Irene López-Sánchez, Laura Pérez-Crespo, Anna Palomar Cros, Asieh Golozar, Antonella Delmestri, George Corby, Marta Alcalde Herraiz, Abigail Robinson, Marti Catala Sabate, Edward Burn, Wai Yi Man, Xihang Chen, Miguel-Angel Mayer, Juan Manuel Ramirez Anguita, Maria Angeles Leis Machin, Nicola Symmers, Mahéva Vallet, Colin McLean, Peter Hall, Mees Mosseveld, Katia Verhamme, Espen Enerly, Peter Prinsen, Jelle Evers, Marek Oja, Raivo Kolde, Eric Fey, Tiago Taveira Gomes, Alberto Moreno Conde, Evelyne Fournier, Tommi Kauko, Rafael Marcos Gragera, Talita Duarte Salles, Dalia Dawoud, Danielle Newby

98	OMOP concept code selection with GPT-4	Vita De Vos, Michiel Larmuseau, Jana Labeau, Nicky Van Der Vekens, Peter De Jaeger
99	A collaborative neuroscience research program on Cluster Headache across a standardized health data network	Christian Laut Ebbesen, Kristine Harsen
100	Evaluating Regulatory Actions with Time Series Methods: A Study on Fluoroquinolones Usage in UK Primary Care and Hospitals	Yuchen Guo, Berta Raventós, Leena Elhussein, Kim López-Güell, Eng Hooi Tan, Martí Català, Albert Prats-Urbe, Dan Dedman, Wai Yi Man, Hezekiah Omulo, Antonella Delmestri, Jennifer Lane, Usama Rahman, Xavier Griffin, Chuang Gao, Christian Cole, Patrick Batty, John Connelly, Helen Booth, Alison Cave, Katherine Donegan, Daniel Prieto-Alhambra, Edward Burn, Annika M. Jödicke
101	Exploring Drug Utilization Patterns in Osteoporosis Therapy	Balqis Istiqomah Gusbela, Septi Melisa, Ming-Hung Teng, Daniel C.A Nugroho, Jason C. Hsu
102	Structured and unstructured data from first and second line care combined in OMOP datawarehouses	T. Helleputte, M. Borschivska, A. Kanfoud, G. Vanhalst, T. Klein, P. Olivier
103	Transfer learning for rare disease prediction	Luis H John, Jenna M Reys, Egill A Fridgeirsson
104	Advancing Certification and Evaluation of Medical Device Software in the EU using OMOP	Frédéric Jung, Chang Sun, Mahmoud Ibrahim, Gökhan Ertaylan
105	Method for Discovering Cohort-based Trajectories from OMOP CDM	Kunnar Kukk, Angela Kannukene, Sulev Reisberg
106	Advancing Value-Based Cancer Care: BC Platforms' Systematic Approach to OMOP Oncology Federated Query and Analytical Solutions in the ONCOVALUE consortium	Mai TN Nguyen, Inka Lehtonen, Kalle Pärn, Mark Heffernan, Anni Ahonen-Bishopp, Hang T.T. Phan
107	Cancer Survival: A Multinational Cohort Study Using the OMOP Common Data Model	Irene López-Sánchez, Laura Pérez-Crespo, Ravinder Claire, Anna Palomar, Ian Koblbauer, Jeremy Dietz, Jamie Elvidge, James Koh, Asieh Golozar, Juan Manuel Ramírez-Anguita, Angela Leis, Miguel-Angel Mayer, Nicola Symmers, Mees Mosseveld, Espen Enerly, Peter Prinsen, Jelle Evers, Marek Oja, Raivo Kolde, Eric Fey, Tiago Taveira-Gomes, Alberto Moreno Conde, Evelyne Fournier, Kauko Tommi, Dalia Dawoud, Rafael Marcos Gragera, Talita Duarte Salles, Danielle Newby
108	Trade-offs in the design of explainable prediction models for health care	Aniek F. Markus, Jan A. Kors, Katia M.C. Verhamme, Peter R. Rijnbeek
109	Preparatory work for efficient mapping of Hungarian drug codes	Ágota Mészáros, Tibor Héja, Zsolt Bagyura
110	The Onco Health Data Dock: A Data Lake for Real-Time Mapping and Harmonization in Pediatric Oncology	Diana Ferro, Silvia Capuzzi, Francesco Fabozzi, Antonella Cacchione, Andrea Carai, Alberto Tozzi, Angela Mastronuzzi
111	Beyond Diagnosis Codes: A Weakly Supervised Learning Framework for Accurate Multimorbidity Identification in Electronic Health Records	Bernardo Neves, Jorge Cerejo, Simão Gonçalves, José Maria Moreira, Nuno A. da Silva, Francisca Leite, Mário J. Silva
112	Annotation-preserving machine translation of English corpora to validate Dutch clinical concept extraction tools	Tom M Seinen, Jan A Kors, Erik M van Mulligen, Peter R Rijnbeek
113	Common Data Environment and ICD family mappings implications	Irina Zherko, Oleg Zhuk, Vlad Korsik, Timur Vakhitov, Alexander Davydov

# Workshop and Workgroup Meeting Agenda

## Saturday June 1st, 2024

### Educational Center, Erasmus MC

(Rooms are shared at the location)

Sessions with a focus on learning (Yellow)

Session with a focus on contribution (Blue)

Time	Workshops	Workgroup Meetings
9:30	Coffee, tea & registration	
10:00	<p><b>Introduction to OHDSI tutorial</b> Aniek Markus, Renske Los</p> <p><u>Description:</u></p> <ul style="list-style-type: none"><li>History &amp; philosophy behind OHDSI</li><li>How does the community work</li><li>What can currently be done with the OHDSI tools</li><li>What does it take to be able to use the tools</li><li>Where and how can you learn more about OHDSI</li></ul> <p><u>Target Audience:</u> Anyone <b>new</b> to OHDSI, interested in data standards, methods research, open-source development or clinical evidence generation</p>	<p><b>Open-source development workshop</b> Adam Black, Cesar Barboza, Maarten van Kessel</p> <p><u>Description:</u> Introduces participants to the OMOP CDM and how to contribute to the OHDSI community. Participants will learn practical skills, related to the OHDSI ecosystem and how to contribute meaningfully to ongoing projects. By the end of the workshop, attendees will be equipped with the knowledge to actively participate in the OHDSI community, enhancing both the tools and research impacting real-world health outcomes.</p> <p><u>Target audience:</u> Designed for beginners with no prior coding experience, the session covers the basics of using open-source software to engage in collaborative health data science.</p>
12:30	Lunch and registration	

<p><b>13:30</b></p>	<p><b>Phenotyping workshop</b> Katia Verhamme, Talita Duarte-Salles</p> <p><u>Description:</u></p> <ul style="list-style-type: none"> <li>• What is a phenotype?</li> <li>• Why do we need phenotypes?</li> <li>• How to create phenotypes in ATLAS</li> </ul> <p><u>Target audience:</u> Anyone new to cohort building in ATLAS.</p>	<p><b>HADES tutorial part 1</b> Martijn Schuemie, Egill Fridgeirsson</p> <p><u>Description:</u> Tutorial on how to use the HADES tools to query databases, create cohorts and perform simple characterizations.</p> <p><u>Target audience:</u> Anyone new to HADES and interested to use the tools. Good to have some familiarity with R.</p>
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**15:00**

**Coffee & tea break**

<p><b>15:30</b> – <b>17.00</b></p>	<p><b>Natural language processing workgroup</b> Tom Seinen</p> <p><u>Description:</u></p> <ul style="list-style-type: none"> <li>• Short introduction to the use of NLP in the OMOP CDM.</li> <li>• Recent highlights. <i>(If you have interesting NLP applications /research to share during the meeting please let me know: t.seinen@erasmusmc.nl)</i></li> <li>• General discussion: Possible/future applications and use-cases of NLP in the OMOP CDM and possible issues.</li> </ul> <p><u>Target audience:</u> Anyone interested in NLP and eager to discuss its use in the OMOP CDM.</p>	<p><b>Oncology workgroup</b> Asieh Golozar</p> <p><u>Description:</u> There are several debates on the utility of the OMOP oncology model in supporting large-scale observational cancer research. These discussions are, however, barely use-case driven. Analytic use case should be the guiding principles for assessing the model's utility and identifying its potential shortcomings. During this session, we will review and redefine the oncology use cases, creating a solid foundation for subsequent vocabulary enhancements and model modifications.</p> <p><u>Target audience:</u> Researchers and data partners interested in oncology.</p>	<p><b>HADES tutorial part 2</b> Martijn Schuemie, Egill Fridgeirsson</p>
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# Workshop and Workgroup Meeting Agenda

## Sunday June 2nd, 2024

### Educational Center, Erasmus MC

Sessions with a focus on learning (Yellow)

Session with a focus on contribution (Blue)

Time	Workshops	Workgroup Meetings
09.30	Coffee and registration	
10:00	<p><b>National node meetings</b></p> <p><u>Description:</u> The OHDSI Europe Chapter in collaboration with the EHDEN project has initiated the creation of National Nodes to facilitate national and international collaborations. Currently there are National Nodes in <b>Belgium, Denmark, Estonia, Germany, Greece, Israel, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, United Kingdom.</b></p> <p>An OHDSI Europe National Node is a collection of research institutes within a member country. The Node builds on the strengths of the stakeholders and scientific communities of that country.</p> <p>Each Node has a lead institute that oversees the work of that Node and assigns a lead and co-lead. For more information see: <a href="https://www.ohdsi-europe.org/">https://www.ohdsi-europe.org/</a></p> <p>In this timeslot the National Nodes are organizing meetings with their members.</p>	<p><b>Vocabulary part 1 (tutorial)</b> Vlad Korsik, Anna Ostropelets, Christian Reich, Patrick Ryan, Tatiana Skugarvskaya, Oleg Zhuk</p> <p><b><i>What you need to know about OHDSI Vocabularies to do phenotyping?</i></b></p> <p><u>Description:</u> The OHDSI Standardized Vocabularies is a mandatory reference standard in the OMOP CDM and enables standardized and robust research in the OHDSI Network. They are instrumental in identifying patients of interest, constructing features and navigating the results of studies. To use them to their full capacity, researchers need to know how to operate them and how to mitigate their shortcomings. This tutorial aims to describe the use of Vocabularies for phenotyping, specifically:</p> <ul style="list-style-type: none"><li>• Develop concept sets from code lists in the literature</li><li>• Make concept sets comprehensive</li><li>• Simplify the concept set construction through the hierarchy (SNOMED, RxNorm, ATC and other hierarchies)</li><li>• Use tools for all this and more.</li></ul>

	<p><u>Target audience:</u> Members of the national nodes and others interested to join.</p>	<p><u>Target audience:</u></p> <ul style="list-style-type: none"> <li>• Anyone interested in using the vocabularies</li> </ul>
<b>12:30</b>	<b>Lunch &amp; registration</b>	<b>EHDEN SME and Data Partner lunch</b>
<b>13:30</b>	<p><b>Academy Hackathon</b> Henrik John, Renske Los</p> <p><u>Description:</u> Help us develop a new curriculum, establish certification and accreditation processes, and formulate strategies for sustainability.</p> <p><u>Target audience:</u> Individuals and leaders aiming to utilize or incorporate the EHDEN Academy into their personal or organizational training initiatives.</p>	<p><b>Vocabulary part 2 (tutorial)</b></p> <p><b><i>What you need to know about OHDSI Vocabularies to do phenotyping?</i></b></p> <p>Vlad Korsik, Anna Ostropolets, Christian Reich, Patrick Ryan, Tatiana Skugarvskaya, Oleg Zhuk</p>
<b>15:00</b>	<b>Coffee &amp; tea break</b>	
<b>15:30</b>	<p><b>Extract Transform Load</b> Maxim Moinat, Anne van Winzum, Melanie Philofsky</p> <p><u>Description:</u> The start of the OHDSI journey is transforming your data to the OMOP CDM. In this session we will go over the different steps in transforming your data, main challenges and show where to find the OMOP mapping conventions.</p> <p><u>Target audience:</u> Data holders looking to map or in progress of mapping data. Data engineers of SMEs supporting transformation to OMOP.</p>	<p><b>Patient-Level Prediction</b> Ross Williams, Egill Fridgeirsson</p> <p><u>Description:</u> The Patient-Level Prediction WG are going to discuss the next major release of the PLP Package. The aim of this will be to create a CRAN release, to possibly move to an R6 structure, and to discuss other major consequences of this change.</p> <p><u>Target audience:</u> Experienced PLP users and developers.</p>
<b>17:00</b>	<b>Drinks</b>	
<b>18:00</b>		

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# Health Data Science



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