Building Up The OHDSI Evidence Network
(Session 1)

OHDSI Community Call
July 9, 2024 • 11 am ET
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<td>July 9</td>
<td>Building The OHDSI Evidence Network Sprint</td>
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<td>July 16</td>
<td>HowOften Initiative &amp; Early Results</td>
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<td>July 30</td>
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<td>Aug. 27</td>
<td>canceled due to ISPE 2024</td>
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<tr>
<td>Sept. 3</td>
<td>New Standardized Vocabularies Release</td>
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July 16: HowOften Initiative & Early Results

Hsin Yi “Cindy” Chen
MD-PhD Student
Columbia University Department of Biomedical Informatics

Azza Shoaibi
Director, Observational Health Data Analytics
Janssen Research and Development

Elise Ruan
Clinical Informatics Fellow
NewYork-Presbyterian Hospital/Columbia University

George Hripcsak
Professor of Biomedical Informatics
Columbia University
Three Stages of The Journey

Where Have We Been?
Where Are We Now?
Where Are We Going?
OHDSI Shoutouts!

Congratulations to the team of Jason Patterson and Nicholas Tatonetti on the publication of KG-LIME: predicting individualized risk of adverse drug events for multiple sclerosis disease-modifying therapy in JAMIA.
Congratulations to the team of Yong Shang, Yu Tian, Kewei Lyu, Tianshu Zhou, Ping Zhang, Jianghua Chen, and Jingsong Li on the publication of Electronic Health Record–Oriented Knowledge Graph System for Collaborative Clinical Decision Support Using Multicenter Fragmented Medical Data: Design and Application Study in the Journal of Medical Internet Research.
Three Stages of The Journey

Where Have We Been?
Where Are We Now?
Where Are We Going?
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<tr>
<th>Date</th>
<th>Time (ET)</th>
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<tr>
<td>Tuesday</td>
<td>12 pm</td>
<td>Common Data Model Vocabulary Subgroup</td>
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<tr>
<td>Tuesday</td>
<td>12 pm</td>
<td>Generative AI and Analytics</td>
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<td>Wednesday</td>
<td>7 am</td>
<td>Medical Imaging</td>
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<td>Wednesday</td>
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<td>Patient-Level Prediction</td>
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<td>Wednesday</td>
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<td>Health Equity/OMOP + FHIR</td>
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<td>Wednesday</td>
<td>2 pm</td>
<td>Natural Language Processing</td>
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<td>4 pm</td>
<td>Vulcan/OHDSI</td>
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<td>Thursday</td>
<td>9:30 am</td>
<td>Network Data Quality</td>
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<td>Evidence Network</td>
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<td>Thursday</td>
<td>12 pm</td>
<td>Strategus Subgroup</td>
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<td>Thursday</td>
<td>6 pm</td>
<td>Eyecare and Vision Research</td>
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<td>Dentistry</td>
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<td>Friday</td>
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<td>Phenotype Development and Evaluation</td>
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<td>Friday</td>
<td>10 am</td>
<td>GIS-Geographic Information System</td>
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<td>Friday</td>
<td>11:30 am</td>
<td>Steering Group</td>
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<td>Friday</td>
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<td>China Chapter</td>
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<td>Monday</td>
<td>9 am</td>
<td>Vaccine Vocabulary</td>
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<td>Monday</td>
<td>10 am</td>
<td>Healthcare Systems Interest Group</td>
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<td>Monday</td>
<td>11 am</td>
<td>Data Bricks User Group</td>
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<td>Monday</td>
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<td>Electronic Animal Health Records</td>
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Health Equity / OMOP + FHIR Cross-Working Group Collaboration

Kelly Davison, RN, MN, MSc, CPHMN(C), CTSS
University of Victoria, British Columbia

HL7 Gender Harmony Project: Sex and Gender Representation

Wednesday, July 10 at 12pm ET (Meeting Link)
2024 OHDSI Europe Symposium

SESSION ONE

00:00 - Welcome to the European OHDSI Journey
Peter Rijnbeek, PhD, Chair, Department of Medical Informatics, Erasmus MC

14:00 - Journey of OHDSI: Where Have We Been and Where We Can Go Together?
Patrick Ryan, PhD, Janssen Research and Development, Department of Biomedical Informatics, Columbia University Medical Center

42:15 - Selection of European Initiatives Using the OMOP CDM
Moderator: Renkse Los, PhD, Assistant Professor of Medical Informatics, Department of Medical Informatics, Erasmus MC

1. 03:50 - OHDSI Europe National Nodes building opportunities through collaboration - Renkse Los, Erasmus MC, The Netherlands
2. 10:00 - ONEVALUE: Can Real-World Data Shape the Future of Health Technology Assessment in Oncology? - Andreas Henriksson, Copenhagen University Hospital, Denmark
3. 12:17 - DigONE: technical challenges and solutions to the European cancer OMOP conversions from hospital EHR - Piero Mahon, DIGICORE, UK
5. 12:00 - Ecord: European Clinical Research Alliance on Infectious Diseases - Ankur Krishnan, Heidelberg University Hospital, Germany
6. 12:10 - Pederation - the Federated Network of Pulmonary Hypertension Registries - Eva-Maria Diddens, Astelion, a Johnson & Johnson Company, Belgium
7. 13:25 - Q&A

SESSION TWO

00:00 - Collaborator Showcase: Rapid Fire Presentation
Moderator: Katia Verhamme, MD, Associate Professor of Use and Analysis of Observational Data, Department of Medical Informatics, Erasmus MC, Rotterdam

1. 00:45 - Adoption of the OMOP Common Data Model in the UK - Alex Knight, Health Data Research UK
2. 01:05 - Piloting the Transformation of Multiple Sciences Real-World Data to the OMOP CDM: Lessons Learned - Tina Porstak, UHasselt
3. 01:25 - Annotation-preserving machine translation of English corpora to validate Dutch clinical concept extraction tools - Tom Seinen, Erasmus MC
4. 01:45 - Beyond Diagnostic Codes: A Weakly Supervised Learning Framework for Accurate Multimorbidity Identification in Electronic Health Records - Luz Saide, Portugal
5. 02:05 - OHDSI meets Fabelle to Streamline Biomedical Data Discovery and Analysis - João Almeida
6. 02:15 - ReportGenerator: Automating study reports and visualization apps for DARWIN EU! research - Cesar Barboza Gullerán, Erasmus MC
7. 02:35 - Analysis of Lung Cancer Patient Treatment with Immune Checkpoint Inhibitors Using Natural Language Processing for Data Extraction from Electronic Health Records - Clara L. Deste and Annales Descloitres, Lyracare
8. 02:55 - An Exploration of Ovarian Cancer Therapy Sequence Utilization in Treatment-naïve Women from 2008-2020 - Whitney Burton, Taelp Medical University
9. 03:15 - Baseline Characterization and Treatment Pathways of Patients With Aplastic Syndrome Across Geographies: Exploring a Rare Disease in Multi-Database Retrospective Cohort Study - Karim Metivit, Bayer AG

SESSION THREE

06:55 - Large Scale Evidence Generation in EHDEN and DARWIN EU!
Moderators: Daniel Prieto-Alhambra and Katia Verhamme, Department of Medical Informatics, Erasmus MC

1. 06:55 - Introduction to EHDEN - Daniel Prieto Alhambra
2. 10:15 - Predicting long term cancer survival for Health Technology Assessment: A Multinational Cohort Study Across Europe - Jeremy Dietz, National Institute for Health and Care Excellence
3. 03:00 - Trends over time in medicines with suggested shortages in Europe - Marta Pineda-Moncusi, Oxford University
4. 03:25 - Q&A
5. 04:10 - Introduction to DARWIN EU! - Katia Verhamme
6. 04:20 - DARWIN EU!- Trend of prescription opioid use in Europe - Annika Jödicke, Oxford University
7. 05:00 - DARWIN EU! - Treatments of multiple myeloma in Europe from 2012-2022: a population-based network cohort study - Talita Duarte Salles, Erasmus MC
8. 05:45 - Q&A

1:00:00 - What evidence are we going to showcase at OHDSI Europe in 2025?
Patrick Ryan, Johnson & Johnson, Columbia University

1:32:00 - Closure
Peter Rijnbeek, PhD, Chair, Department of Medical Informatics, Erasmus MC
2024 OHDSI Europe Symposium
Welcome to OHDSI!

The Observational Health Data Sciences and Informatics (or OHDSI, pronounced "Odyssey") program is a multi-stakeholder, interdisciplinary collaborative to bring out the value of health data through large-scale analytics. All our solutions are open-source.

OHDSI has established an international network of researchers and observational health databases with a central coordinating center housed at Columbia University.

Join Us At The 2024 Global Symposium

Registration is now open for the 2024 Global Symposium, which will be held October 22-24 at the Hyatt Regency Hotel in New Brunswick, N.J., USA. Check out the event page for details on the collaborator showcase, tutorial offerings, workshop activities, and more!

2024 Global Symposium Homepage

OHDSI Symposium 'Scaling up Reliable Evidence across Europe' June 3+, 2024

The 9th European OHDSI Symposium called "Scaling up Reliable Evidence Across Europe" aimed to bring data partners, regulators, and researchers to collaborate and share results and ideas about the use of the OMOP-CDM in Europe.

The symposium took place on Monday, June 3rd 2024 at the ship SS Rotterdam, Saturday, June 1st, and Sunday, June 2nd were dedicated to workshop and subgroup meetings, held in the Education Centre of the Erasmus University Medical Center, Rotterdam.

The symposium had 360 participants, 25 plenary presentations, 130 posters, and 13 software demos.

Video Recordings can be found on the OHDSI YouTube Channel.

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<td>10:00:00 - Welcome to the European OHDSI Journey</td>
<td>Peter Riphagen, PhD, Chair, Department of Medical Informatics, Erasmus MC</td>
<td>10:00:00 - Journey of OHDSI: Where We Have Been and Where We Can Go Together?</td>
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Collaborator Spotlight: Sarah Seager

Sarah Seager is the Senior Director, Analytics & AI at IQVIA. She is an experienced technical senior leader who develops and leads analytical teams in the world of data science and advanced analytics.

In the latest edition of the Collaborator Spotlight, Sarah shares her thoughts on the current path of data management and analytics, why OMOP is an ideal common data model, recent advances around the European community, and how data is similar to another one of Sarah’s passions, art.

ohdsi.org/spotlight-sarah-seager
Next CBER Best Seminar: July 17

**Speaker:** Yonas Ghebremichael-Weldeselassie, Lecturer of Statistics at School of Mathematics and Statistics, The Open University, UK

**Topic:** A modified self-controlled case series method for event-dependent exposures and high event-related mortality, with application to COVID-19 vaccine safety

**Date/Time:** Wednesday, July 17, 11 am ET

**Upcoming Seminars**

- July 17, 2024 (11 am) - Yonas Ghebremichael-Weldeselassie, Warwick Medical School

  **Topic:** A modified self-controlled case series method for event-dependent exposures and high event-related mortality, with application to COVID-19 vaccine safety

  **Presenter:** Yonas Ghebremichael-Weldeselassie, Lecturer of Statistics at School of Mathematics and Statistics, The Open University, UK

  **Abstract:**

  We propose a modified self-controlled case series (SCCS) method to handle both event-dependent exposures and high event-related mortality. This development is motivated by an epidemiological study undertaken in France to quantify potential risks of cardiovascular events associated with COVID-19 vaccines. Event-dependence of vaccinations, and high event-related mortality, are likely to arise in other SCCS studies of COVID-19 vaccine safety. Using this case study and simulations to broaden its scope, we explore these features and the biases they may generate, implement the modified SCCS model, illustrate some of the properties of this model, and develop a new test for presence of a dose effect. The model we propose has wider application, notably when the event of interest is death.

  **Bio:** Yonas Weldeselassie is a Lecturer of Statistics at School of Mathematics and Statistics, The Open University, UK. He graduated in statistics and demography from University of Asmara, Ethiopia and went on to become an assistant lecturer in Mekelle University, Ethiopia, and then a Senior Research Fellow in Medical Statistics at Warwick Medical School, division of Population Evidence and Technologies. He earned an MSc in Biostatistics from Hasselt University, Belgium and PhD in Statistics from the Open University, UK. After working as a research associate, on MRC project 'Software tools and online resources for the self-controlled case series method and its extensions', at the department of mathematics and statistics, the Open University since 2014, he joined Warwick Medical School in June 2017. His main research interest is in medical statistics especially in the methodological development and application of the self-controlled case series (SCCS) method. He published a book on SCCS with Paddy Farrington and Heather Whitaker, and he is currently working on early prediction of gestational diabetes mellitus.
#OHDSI2024 Registration Is Open!

Registration is OPEN for the 2024 OHDSI Global Symposium, which will be held Oct. 22-24 at the Hyatt Regency Hotel in New Brunswick, N.J., USA.

Tuesday: Tutorials
Wednesday: Plenary/Showcase
Thursday: Workgroup Activities

ohdsi.org/OHDSI2024
The Center for Advanced Healthcare Research Informatics (CAHRI) at Tufts Medicine welcomes:

Melissa Haendel, PhD
Director of Precision Health & Translational Informatics and the Sarah Graham Kenan Distinguished Professor in the Department of Genetics at The University of North Carolina at Chapel Hill and co-founder of the Monarch Initiative and the National Covid Cohort Collaborative

‘Journeys across the translational divide: making healthcare and basic research data interoperable’

July 25, 2024, 11am-12pm EST
Virtually via Zoom

Please contact Marty Alvarez at malvarez2@tuftsmedicalcenter.org for calendar invite or questions.
MONDAY

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)
TUESDAY

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)

Methods
- Study design: Retrospective analysis including all individuals in CPRD GOLD (UK) mapped to OMOI-COM
- Exposure: monthly use of 6 antibiotics
- Outcome: incidence rates of antibiotic use
- Study period: Jan 2013 to May 2023

Statistical methods: ARIMA and ARIMA with Exogenous Variables (ARIMAX) models (Figure 1)

The study was run under the scenario that the available data ended in Nov 2022, and we forecasted the usage of antibiotics for the next 6-months. We have used the remaining data up to May 2023 to test the accuracy of the models predicting we received these subsequent data later.

After fitting the ARIMA models, the average ratio between the 6- and 12-month showed that using a tune period of 6-month were more accurate than using 12-month (average ratio: 0.56 for MAE and 0.54 for MAPE). The test period metrics also favoured the 6-month models (average ratio: 0.56 for MAE and 0.53 for MAPE).
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)
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 Herraz, 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 Enery, 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)
FRIDAY

CDM Onboarding R package for data quality assessment

(Anne van Winzum, Maxim Moinat, Sofia Bazakou)
Opening: Health Data Scientist, Erasmus MC

**Health Data Scientist**

Would you like to be responsible for the creation and execution of study software to support our researchers? Join our team!

- **36 hours**
- University of Applied Sciences
- IT

**Job description**

The Health Data Science group at the department of Medical Informatics is looking for an experienced R programmer to develop open-source analytics.

You will be responsible for the creation and execution of study software to support the work of epidemiologists. This will include designing, developing, documenting, and maintaining R code that will be executed against health data that is standardized to the OMOP Common Data Model (OMOP-CDM). This data model is maintained by the Observational Health Data Sciences and Informatics (OHDSI, www.ohdsi.org) initiative. The Department is leading the Data Analysis and Real World Interrogation Network coordination centre (DARWIN EU®) in which a large data network is created with data sources that are mapped to the OMOP-CDM. The aim of this network is to provide fast and reliable evidence to the European Medicines Agency. Your work will enable the use of health data at an unprecedented scale in Europe and will facilitate the execution of impactful studies to improve patient care. We recommend applicants to review the DARWIN EU® software packages to get an understanding of the growing set of R packages.

Closing date: 18-07-2024

#JoinTheJourney
Opening: Sr AD, Real World Evidence & Analytics
Boehringer Ingelheim

SR AD, Real World Evidence & Analytics

Apply Now

< Back
JOB ID - 13278

Description

The purpose of this job is to:

- Generate real world evidence (RWE) to support in-line and pipeline products.
- Provide statistical advice on the analysis of real world data (RWD) to various internal and external stakeholders.
- Contribute to the RWD acquisition strategy and tool evaluation.
Opening: Lead Director, RWE Distributed Research
CVS Health

Lead Director, RWE Distributed Research

Apply

Hybrid
PA - Blue Bell
IL - Northbrook
CT - Hartford
RI - Woonsocket
AZ - Scottsdale

View All 7 Locations

Full time
Posted 6 Days Ago
R0288183

Bring your heart to CVS Health. Every one of us at CVS Health shares a single, clear purpose: Bringing our heart to every moment of your health. This purpose guides our commitment to deliver enhanced human-centric health care for a rapidly changing world. Anchored in our brand — with heart at its center — our purpose sends a personal message that how we deliver our services is just as important as what we deliver.

Our Heart At Work Behaviors™ support this purpose. We want everyone who works at CVS Health to feel empowered by the role they play in transforming our culture and accelerating our ability to innovate and deliver solutions to make health care more personal, convenient and affordable.
PHARMACOEPIDEMIOLOGY POST-DOCTORAL TRAINING PROGRAM

Co-Directors: Caleb Alexander, MD, MS and Jodi Segal, MD, MPH

The Pharmacoepidemiology Training Program at the Johns Hopkins Bloomberg School of Public Health (BSPH) is currently seeking to support postdoctoral fellows. All supported trainees work with core faculty on existing or newly developed research projects on pharmacoepidemiology, so as to optimize the safe and effective use of medicines to treat heart, lung and blood diseases in the United States.

Deadline for applications: rolling
Where Are We Going?

Any other announcements of upcoming work, events, deadlines, etc?
Three Stages of The Journey

Where Have We Been?

Where Are We Now?

Where Are We Going?
The weekly OHDSI community call is held every Tuesday at 11 am ET.

Everybody is invited!

Links are sent out weekly and available at: ohdssi.org/community-calls