OHDSI2025 Global Symposium Preview

OHDSI Community Call

Sept. 9, 2025 • 11 am ET

Upcoming Community Calls

Date	Topic
Sept. 9	Global Symposium Preview
Sept. 16	OHDSI/OMOP Research Spotlight
Sept. 23	Educating on OHDSI: Lessons Learned
Sept. 30	OHDSI 2025 Poster Preview Mad Minutes / Symposium Logistics
Oct. 7	No Call – OHDSI Symposium
Oct. 14	Welcome to OHDSI
Oct. 21	Meet the Titans

Sept 16: OHDSI/OMOP Research Spotlight

Jessie Tong

Assistant Professor, Johns Hopkins University

Unlocking efficiency in real-world collaborative studies: a multi-site international study with one-shot lossless GLMM algorithm • *NPJ Digital Medicine*

Kim López Güell

Dphil Candidate, University of Oxford

Clusters of post-acute COVID-19 symptoms: a latent class analysis across 9 databases and 7 countries • *Journal of Clinical Epidemiology*

Jen Wooyeon Park

PhD Student, Johns Hopkins University

Breaking data silos: incorporating the DICOM imaging standard into the OMOP CDM to enable multimodal research • *JAMIA*

Abigail Newbury

PhD Student, Columbia University

Multi-domain rule-based phenotyping algorithms enable improved GWAS signal • *NPJ Digital Medicine*

Benjamin Martin

Postdoctoral Fellow, Johns Hopkins University

Identification of Adult Dermatomyositis Patients Using Real-World Data Sources • *Arthritis Care and Research*

Three Stages of The Journey

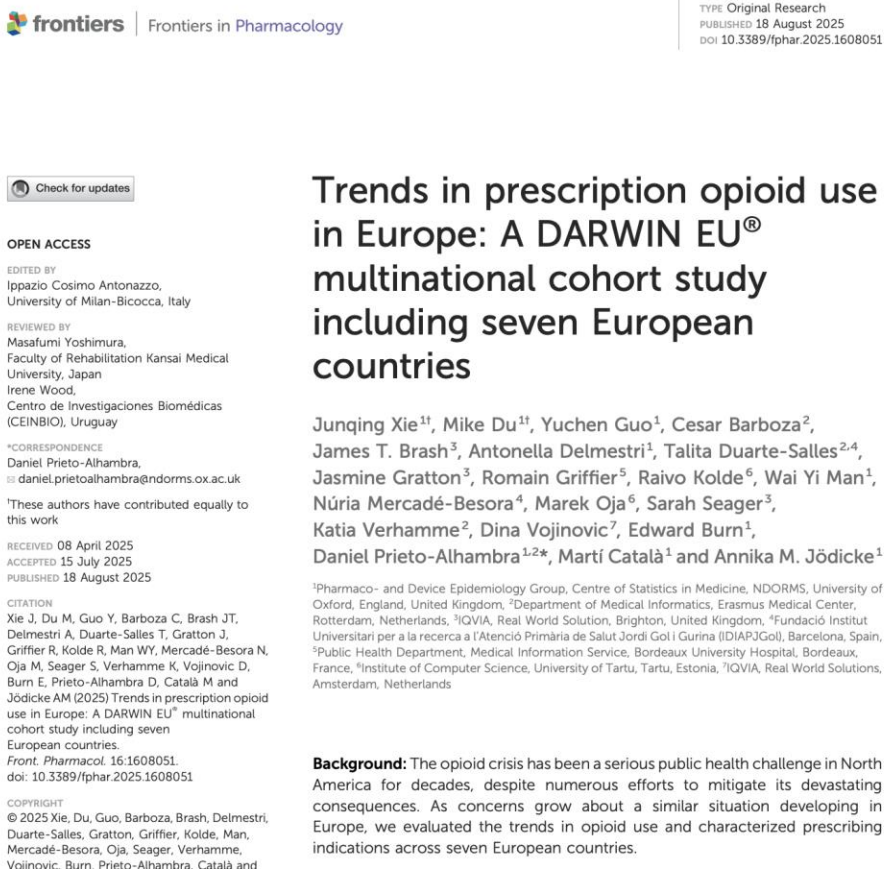
Where Have We Been?

Where Are We Now?

Where Are We Going?

OHDSI Shoutouts!

Congratulations to the team of **Junqing Xie, Mike Du, Yuchen Guo, Cesar Barboza, James T Brash, Antonella Delmestri, Talita Duarte-Salles, Jasmine Gratton, Romain Griffier, Raivo Kolde, Wai Yi Man, Núria Mercadé-Besora, Marek Oja, Sarah Seager, Katia Verhamme, Dina Vojinovic, Edward Burn, Daniel Prieto-Alhambra, Martí Català, Annika M Jödicke** on the publication of **Trends in prescription opioid use in Europe: A DARWIN EU® multinational cohort study including seven European countries** in *Frontiers in Pharmacology.*



frontiers | Frontiers in Pharmacology

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Check for updates

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Trends in prescription opioid use in Europe: A DARWIN EU® multinational cohort study including seven European countries

Junqing Xie[1†], Mike Du[1†], Yuchen Guo[1], Cesar Barboza[2], James T. Brash[3], Antonella Delmestri[1], Talita Duarte-Salles[2,4], Jasmine Gratton[3], Romain Griffier[5], Raivo Kolde[6], Wai Yi Man[1], Núria Mercadé-Besora[4], Marek Oja[6], Sarah Seager[3], Katia Verhamme[2], Dina Vojinovic[7], Edward Burn[1], Daniel Prieto-Alhambra[1,2*], Martí Català[1] and Annika M. Jödicke[1]

[1]Pharmaco- and Device Epidemiology Group, Centre of Statistics in Medicine, NDORMS, University of Oxford, England, United Kingdom, [2]Department of Medical Informatics, Erasmus Medical Center, Rotterdam, Netherlands, [3]IQVIA, Real World Solution, Brighton, United Kingdom, [4]Fundació Institut Universitari per a la recerca a l'Atenció Primària de Salut Jordi Gol i Gurina (IDIAPJGol), Barcelona, Spain, [5]Public Health Department, Medical Information Service, Bordeaux University Hospital, Bordeaux, France, [6]Institute of Computer Science, University of Tartu, Tartu, Estonia, [7]IQVIA, Real World Solutions, Amsterdam, Netherlands

Background: The opioid crisis has been a serious public health challenge in North America for decades, despite numerous efforts to mitigate its devastating consequences. As concerns grow about a similar situation developing in Europe, we evaluated the trends in opioid use and characterized prescribing indications across seven European countries.

OHDSI Shoutouts!

Congratulations to the team of **Daniel Neumann, Richard Gebler, Jana Kiederle, Jördis Beck, Fabio Aubele, Alexander Struebing, Florian Schmidt, Matthias Reusche, Helene Koester, Markus Loeffler, Sebastian Staeubert** on the publication of **Development and Implementation of an Open, Modular, and Participatory Toolchain for Distributed IT Development in Healthcare Research – Lessons Learned** in *Volume 331 of Studies in Health Technology and Informatics: German Medical Data Sciences 2025: GMDS Illuminates Health.*

German Medical Data Sciences 2025: GMDS Illuminates Health
R. Röhrig et al. (Eds.)

doi:10.3233/SHTI251418

Development and Implementation of an Open, Modular, and Participatory Toolchain for Distributed IT Development in Healthcare Research - Lessons Learned

Daniel NEUMANN[a,1], Richard GEBLER[b], Jana KIEDERLE[c], Jördis BECK[d], Fabio AUBELE[e], Alexander STRUEBING[a], Florian SCHMIDT[a], Matthias REUSCHE[a], Helene KOESTER[f], Markus LOEFFLER[a], and Sebastian STAEUBERT[a]
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Abstract. **Introduction:** Distributed healthcare research infrastructures face significant challenges when translating routine clinical data into harmonized, research-ready formats using HL7 FHIR standards. **State of the Art**: Existing FHIR-based pipelines such as the SMART/HL7 FHIR Bulk Data Access API, FHIR-to-OMOP mappings, and analytical services like Pathling demonstrate technical feasibility. However, most assume semantically valid FHIR data, operate within single-institution settings, and lack practical guidance for deployment across heterogeneous, regulated environments. **Technical Framework and Deployment**: Within the German Medical Informatics Initiative (MII) and the INTERPOLAR project, we developed an open, modular, and participatory toolchain for decentralized FHIR-based data transformation and export across multiple Data Integration Centers (DICs). The toolchain supports FHIR extraction, profile-based transformation, REDCap integration, and OMOP-compatible export. Deployment required adapting to local infrastructures, regulatory boundaries (e.g., de-identified FHIR stores, restricted network access), and clinical domain needs. Configurable modules, proxy support, and site-specific adaptations were essential for integration into operational hospital workflows. **Lessons Learned**: Key lessons include the necessity of early access to real data, the limitations of synthetic test data, the value of joint workshops for profile interpretation, and the need for adaptable validation tooling. Organizational knowledge gaps, inconsistent FHIR implementations, and performance issues in resource flattening were addressed through co-design and

Three Stages of The Journey

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Upcoming Workgroup Calls

Date	Time (ET)	Meeting
Tuesday	12 pm	ATLAS/WebAPI
Tuesday	12 pm	Generative AI and Analytics
Tuesday	3 pm	Oncology Outreach/Research Subgroup
Wednesday	9 am	Patient-Level Prediction
Wednesday	2 pm	Natural Language Processing
Wednesday	7 pm	Eyecare and Vision Research
Thursday	7 am	Europe Community Call
Thursday	9:30 am	Network Data Quality
Thursday	10 am	Rare Diseases
Thursday	10:30 am	Evidence Network
Friday	9 am	Phenotype Development & Evaluation
Friday	10 am	GIS – Geographic Information System
Friday	11 am	Clinical Trials
Friday	11:30 am	Steering
Friday	11 pm	China Chapter
Monday	9 am	Vaccine Vocabulary
Monday	10 am	Africa Chapter
Monday	10 am	Getting Started Subgroup
Monday	11 am	Data Bricks User Group
Monday	2 pm	Electronic Animal Health Records
Tuesday	10 am	CDM Survey Subgroup

2025 Europe Community Calls

Date	Topic
Sept. 11	Europe Community Call Introduction / DARWIN EU Update
Oct. 9	TBA
Nov. 13	Patient-Reported Outcome Measures (PROMs)
Dec. 11	Vocabularies in Europe

Science for a Sustainable Future: Showcasing Science Collaboration

The role and contribution of **science in attaining the United Nations Sustainable Development Goals (SDGs)** will be the central theme of the Science Summit. The objective is to enable science collaborations to demonstrate how science supports the attainment of the UN SDGs and Agenda 2030.

The Summit will examine what **enabling policy, regulatory and financial environments** are needed to implement and sustain the science mechanisms required to support genuinely global scientific collaborations across continents, nations and themes.

Scientific discovery through the analysis of massive data sets is at hand. This data-enabled approach to science, research and development will be necessary if the SDGs are to be achieved.

SCIENCE FOR GLOBAL CHALLENGES →

Full programme is here

https://sciencesummitnyc.org/

Sep, Thu 18 | 08:30 AM - 10:30 AM | Virtual | Public

Standardizing Health Data and Analytics to Accelerate Clinical Impact and Global Reach: Part 1

Theme: Digital / AI

Observational Health Data Science and Informatics (OHDSI) is a global community that uses data harmonized to the OMOP Common Data Model, standardized vocabulary, data quality checks and validated analytics to produce rigorous evaluation of big data from existing health databases. Through sharing of computer codes and summary statistics instead of patient-level data, OHDSI preserves privacy while enabling collaboration across institutions, countries, and continents. Large-scale, real-world studies through OHDSI network collaborations have revealed valuable insights into clinical care and public health.

Speakers:

Agnes Kiragga
Global Health Leader,...

Organization: African Population Health and Research Centre

Chan Seng You
Assistant Professor

Organization: Yonsei University College of Medicine

NicolePratt
Professor, Biostatistic...

Organization: University of South Australia

George Hripcsak
Professor, Biomedical...

Organization: Columbia University

Register | Session details

Sep, Thu 18 | 11:00 AM - 12:45 PM | Virtual | Public

Standardizing Health Data and Analytics to Accelerate Clinical Impact and Global Reach: Part 2

Theme: Digital / AI

Observational Health Data Science and Informatics (OHDSI) is a global community that uses data harmonized to the OMOP Common Data Model, standardized vocabulary, data quality checks and validated analytics to produce large-scale evaluation of real world data. Through sharing of computer codes and summary statistics instead of patient-level data, OHDSI preserves privacy while enabling collaboration across institutions, countries, and continents. Large-scale, real-world studies by OHDSI members have revealed valuable insights into clinical care and public health.

Speakers:

Cynthia Sung
Adjunct Associate...

Organization: Duke-NUS Medical School Centre of Regulatory Excellence

Patrick Ryan
VP Janssen...

Organization: OHDSI Observational Health Data Science and Informatics

Katia Verhamme
Associate Professor of...

Organization: Erasmus University Medical Center

Peter Rijnbeek
Professor, Medical...

Organization: Erasmus University Medical Center

Julio Oliveira
CEO

Organization: Precision Data

Registration links

Part 1 Sep 18, 8:30-10:30 EDT: https://event.sciencesummitnyc.org/list-of-sessions/detail/131

Part 2: Sep 18, 11:00-13:00 EDT https://event.sciencesummitnyc.org/list-of-sessions/detail/130

Full programme here: https://event.sciencesummitnyc.org/list-of-sessions

Part 1 (8:30 am ET)

1. *Observational Health Data Science and Informatics (OHDSI): Inclusive and Collaborative Science.* George Hripcsak
2. *Promoting Data Harmonization and Data Science in Africa*. Agnes Kiragga
3. *Rapid Response to the Covid-19 Pandemic Using a National Scale Database.* Chan Seng You
4. *OHDSI in Asia and the Pacific Rim.* Nicole Pratt
5. *Q&A Session*

Part 2 (11 am ET)

1. *Enabling Reliable Evidence Generation from Real-word Data in Europe.* Peter Rijnbeek
2. *DARWIN-EU® – Delivering Real World Evidence to Support Regulatory Decision-making by the European Medicines Agency.* Katia Verhamme
3. *OHDSI Adoption and Current Implementation Landscape in Latin America.* Julio Cesar Barbour Oliveira
4. *Learning Opportunities for OHDSI Skills Development.* Cynthia Sung
5. *Clinical and Public Health Impact of OHDSI.* Patrick Ryan
6. *Q&A Session*

Titan Award Nominations Are Due TONIGHT!

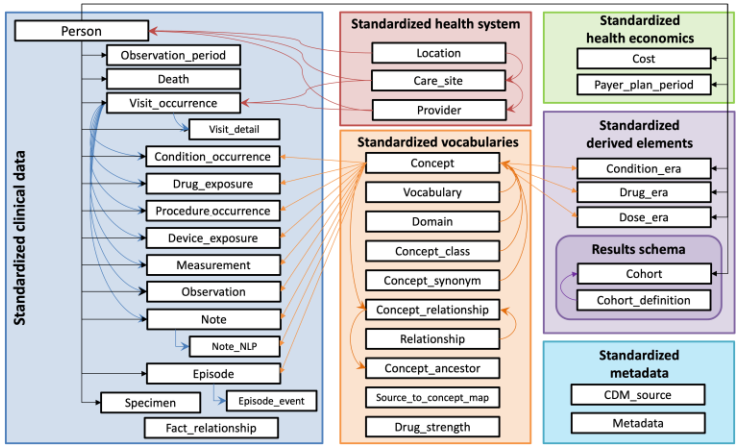
The Titan Awards have been handed out annually since 2018 to recognize OHDSI collaborators (or collaborating institutions) for their contributions towards OHDSI's mission.

Nominations for the 2025 Titan Awards are now open. **Please complete your nominations by our Sept. 9 (8 pm ET) deadline!**

ohdsi.org/titan-awards

Upcoming Presentation (Sept. 29, 1-2 pm ET)

Delivery, Not Hype: How to Harmonise FHIR × openEHR × OMOP in practice



A Health Futures Collective Series - powered by Evidentli, Fuzzy, openEHR, Professional Development and Summer Programmes, Institute of Extended Learning at Imperial College

Confirmed panellists

Grahame Grieve — Inventor of FHIR
Rachel Dunscombe — CEO, openEHR Foundation
Davera Gabriel — Lead Author, FHIR to OMOP IG
Guy Tsafnat — Expert in real-world data & AI

Moderator

Ram Rajaraman — Healthcare & Life Sciences Lead, Quantexa

FHIR

Jamie Weaver Scholarship at University of Oxford

< PhDs

Improving the quality of real world evidence by measuring and minimising outcome misclassification using the OMOP common data model and large multinational health data (Botnar-2025-8)

University of Oxford > Botnar Research Centre

Prof Dani Prieto-Alhambra Tuesday, December 02, 2025

Funded PhD Project (Students Worldwide)

About the Project

This scholarship and work has been proposed to continue and expand work started by the late James (Jamie) Weaver. Jamie was a talented and bright data scientist and DPhil student working with us on the use of methods to minimise the impact of outcome misclassification in real world evidence (RWE). Funding has been secured, from the Medical Sciences Division, Brasenose College, and NDORMS, for this project to continue his important work on this extremely relevant topic; the successful candidate will be assigned to Brasenose College.

Real world evidence (RWE) is generated by leveraging and processing large routinely collected health data. Despite difficulties in the analysis of such information for causal inference purposes, RWE has recently been shown as a reliable source of data when used using adequate methods for trial emulation [1, 2]. We participate in multiple European and international networks to generate reliable information to inform, amongst others, regulatory decision making and health technology assessments.

Through ongoing collaborations, we leverage multiple international datasets mapped to the Observational Medical Outcomes Partnership (OMOP) Common Data Model in a federated manner. Previous work led by our student Jamie Weaver uncovered the impact of outcome misclassification on the estimation of background rates of adverse events, and proposed new methods to account for this in future studies [3].

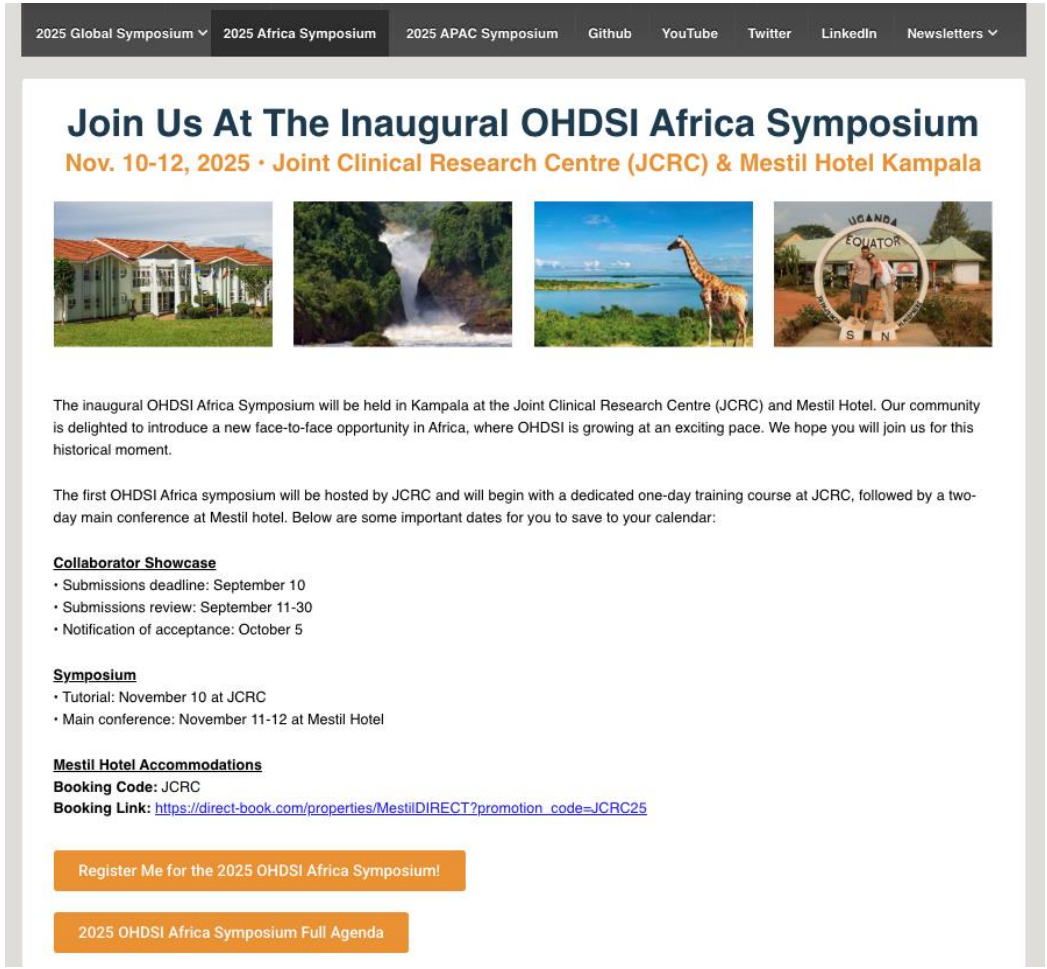
Through this 3-year PhD funded studentship, we aim to investigate how novel methods can be applied to measure and account for outcome misclassification in RWE studies, by researching:

1. The use and application of artificial intelligence (and specifically large language models) for the generation and validation of computable phenotypes
2. The impact of outcome misclassification in different data assets
3. The performance of existing and novel methods to account for outcome misclassification in international RWE studies

Global Symposium: Oct. 7-9

ohdsi.org/ohdsi2025

Africa Symposium: Nov. 10-12



ohdsi.org/africa2025

APAC Symposium: Dec. 6-7

The 2025 OHDSI APAC Symposium will be held Dec. 6-7 in Shanghai, China at the Shanghai Jiao Tong University. It will feature a 1-day tutorial and a 1-day main conference. Here are some important dates for you to save to your calendar:

Collaborator Showcase

- Submissions deadline: September 7
- Submissions review: September 8 – October 9
- Notification of acceptance: October 17

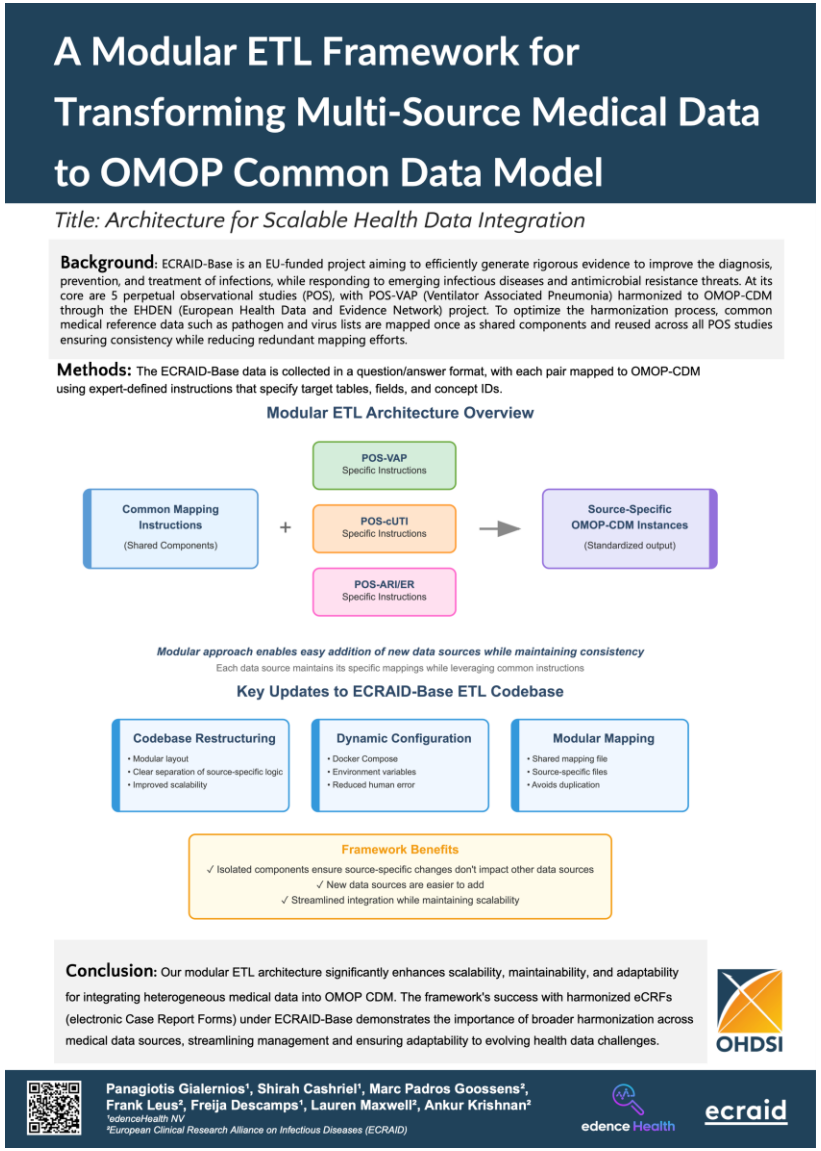
ohdsi.org/apac2025

#OHDSISocialShowcase This Week

Monday

ECRAID-Base OMOP-CDM ETL Architecture for Scalable Health Data Integration

(Panagiotis Gialernios, Shirah Cashriel, Marc Padros Goossens, Frank Leus, Freija Descamps, Lauren Maxwell, Ankur Krishnan)

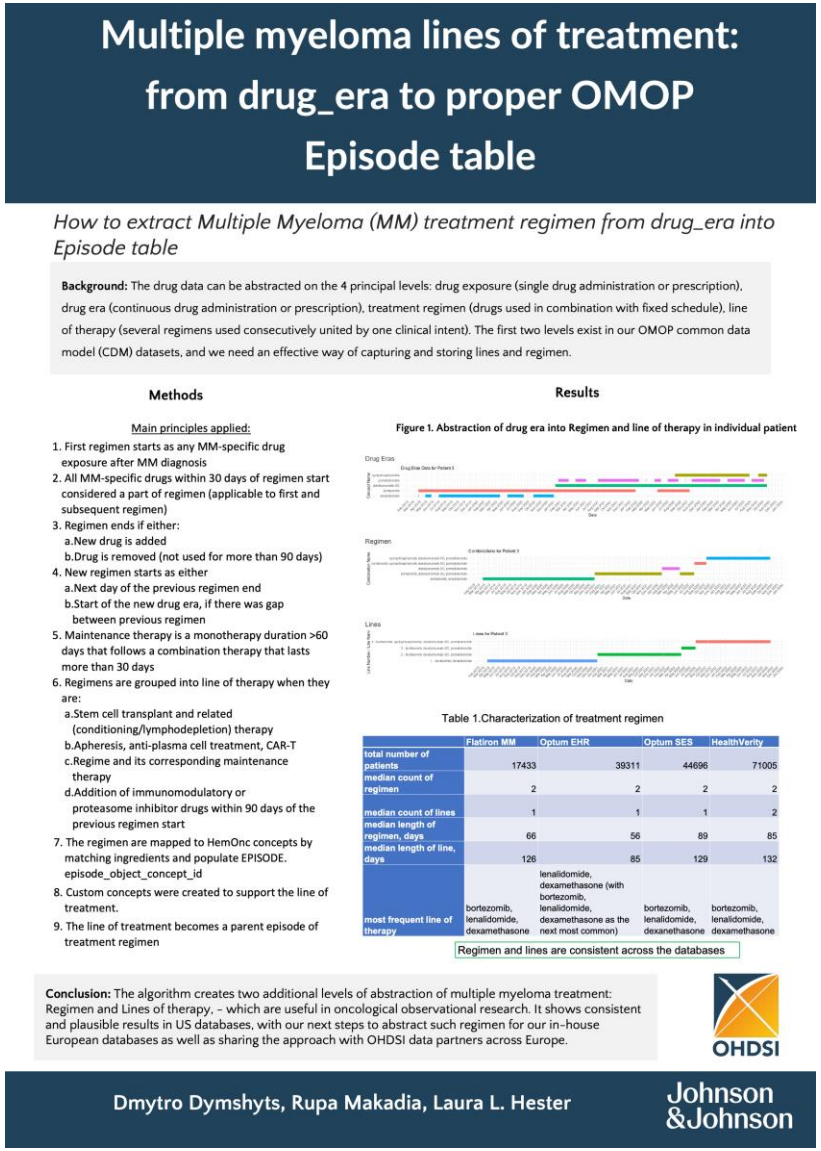


#OHDSISocialShowcase This Week

Tuesday

Multiple myeloma lines of treatment: from drug_exposure to proper Episode table

(Dmytro Dymshyts, Rupa Makadia, Laura L. Hester)

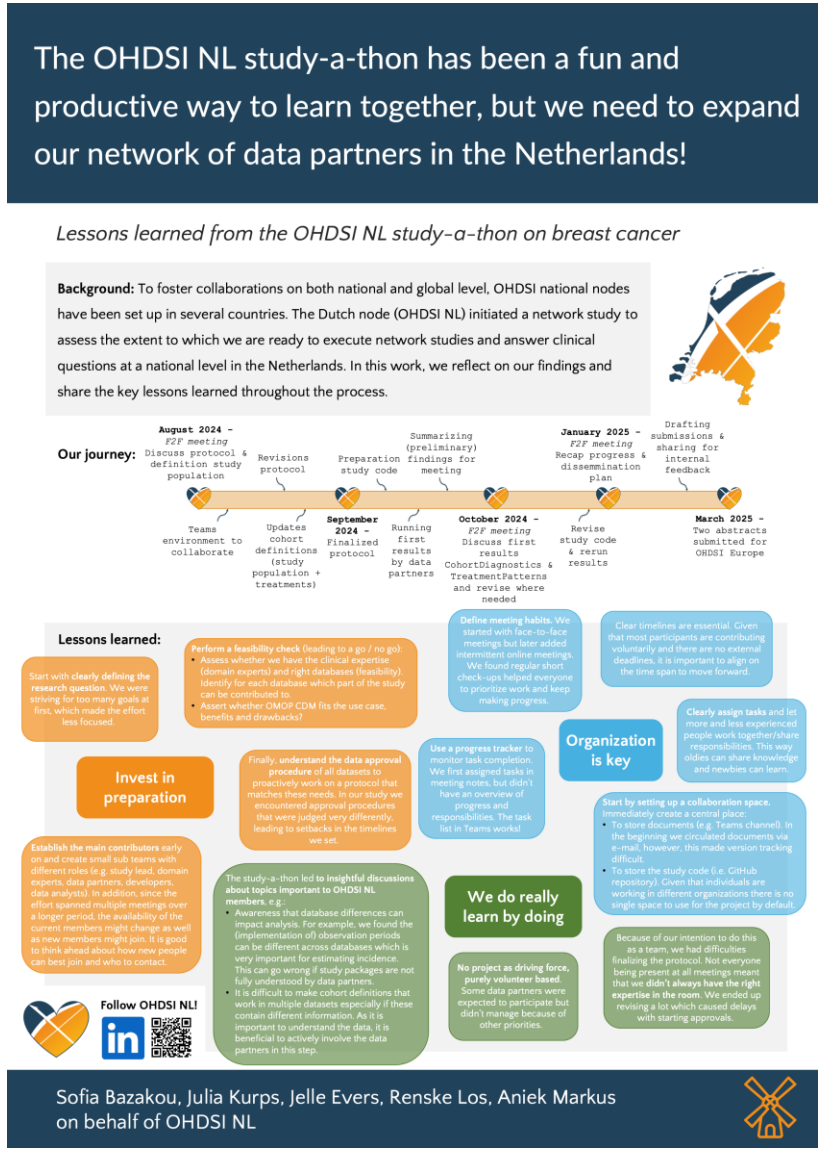


#OHDSISocialShowcase This Week

Wednesday

Lessons learned from the OHDSI-NL study-a-thon on breast cancer

(Aniek F. Markus, Sofia Bazakou, Renske Los, Julia Kurps, Jelle Evers on behalf of OHDSI NL)

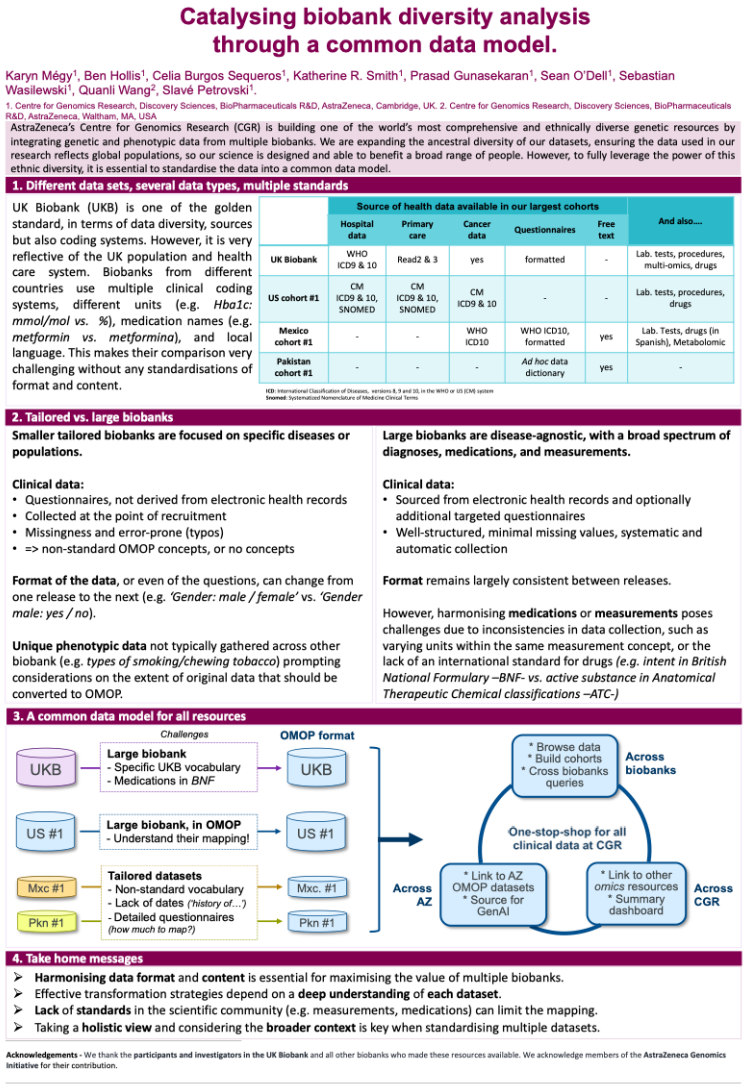


#OHDSISocialShowcase This Week

Thursday

Catalysing biobank diversity analysis through a common data model

(Karyn Mégy, Ben Hollis, Celia Burgos, Katherine R Smith, Prasad Gunasekaran, Sean O'Dell, Sebastian Wasilewski, Quanli Wang, Slavé Petrovski)



Catalysing biobank diversity analysis through a common data model.

Karyn Mégy[1], Ben Hollis[1], Celia Burgos Sequeros[1], Katherine R. Smith[1], Prasad Gunasekaran[1], Sean O'Dell[1], Sebastian Wasilewski[1], Quanli Wang[2], Slavé Petrovski[1].

1. Centre for Genomics Research, Discovery Sciences, BioPharmaceuticals R&D, AstraZeneca, Cambridge, UK. 2. Centre for Genomics Research, Discovery Sciences, BioPharmaceuticals R&D, AstraZeneca, Waltham, MA, USA

AstraZeneca's Centre for Genomics Research (CGR) is building one of the world's most comprehensive and ethnically diverse genetic resources by integrating genetic and phenotypic data from multiple biobanks. We are expanding the ancestral diversity of our datasets, ensuring the data used in our research reflects global populations, so our science is designed and able to benefit a broad range of people. However, to fully leverage the power of this ethnic diversity, it is essential to standardise the data into a common data model.

1. Different data sets, several data types, multiple standards

UK Biobank (UKB) is one of the golden standard, in terms of data diversity, sources but also coding systems. However, it is very reflective of the UK population and health care system. Biobanks from different countries use multiple clinical coding systems, different units (e.g. *Hba1c: mmol/mol vs. %*), medication names (e.g. *metformin vs. metformina*), and local language. This makes their comparison very challenging without any standardisations of format and content.

	Source of health data available in our largest cohorts					And also....
	Hospital data	Primary care	Cancer data	Questionnaires	Free text	
UK Biobank	WHO ICD9 & 10	Read2 & 3	yes	formatted	-	Lab. tests, procedures, multi-omics, drugs
US cohort #1	CM ICD9 & 10, SNOMED	CM ICD9 & 10, SNOMED	CM ICD9 & 10	-	-	Lab. tests, procedures, drugs
Mexico cohort #1	-	-	WHO ICD10	WHO ICD10, formatted	yes	Lab. Tests, drugs (in Spanish), Metabolomic
Pakistan cohort #1	-	-	-	*Ad hoc* data dictionary	yes	-

ICD: International Classification of Diseases, versions 8, 9 and 10, in the WHO or US (CM) system
Snomed: Systematized Nomenclature of Medicine Clinical Terms

2. Tailored vs. large biobanks

Smaller tailored biobanks are focused on specific diseases or populations.

Clinical data:
- Questionnaires, not derived from electronic health records
- Collected at the point of recruitment
- Missingness and error-prone (typos)
- => non-standard OMOP concepts, or no concepts

Format of the data, or even of the questions, can change from one release to the next (e.g. *'Gender: male / female'* vs. *'Gender male: yes / no*).

Unique phenotypic data not typically gathered across other biobank (e.g. *types of smoking/chewing tobacco*) prompting considerations on the extent of original data that should be converted to OMOP.

Large biobanks are disease-agnostic, with a broad spectrum of diagnoses, medications, and measurements.

Clinical data:
- Sourced from electronic health records and optionally additional targeted questionnaires
- Well-structured, minimal missing values, systematic and automatic collection

Format remains largely consistent between releases.

However, harmonising **medications** or **measurements** poses challenges due to inconsistencies in data collection, such as varying units within the same measurement concept, or the lack of an international standard for drugs *(e.g. intent in British National Formulary –BNF- vs. active substance in Anatomical Therapeutic Chemical classifications –ATC-)*

3. A common data model for all resources

4. Take home messages

- **Harmonising data format** and **content** is essential for maximising the value of multiple biobanks.
- Effective transformation strategies depend on a **deep understanding** of **each dataset**.
- **Lack** of **standards** in the scientific community (e.g. measurements, medications) can limit the mapping.
- Taking a **holistic view** and considering the **broader context** is key when standardising multiple datasets.

Acknowledgements - We thank the **participants and investigators in the UK Biobank** and all other biobanks who made these resources available. We acknowledge members of the **AstraZeneca Genomics Initiative** for their contribution.

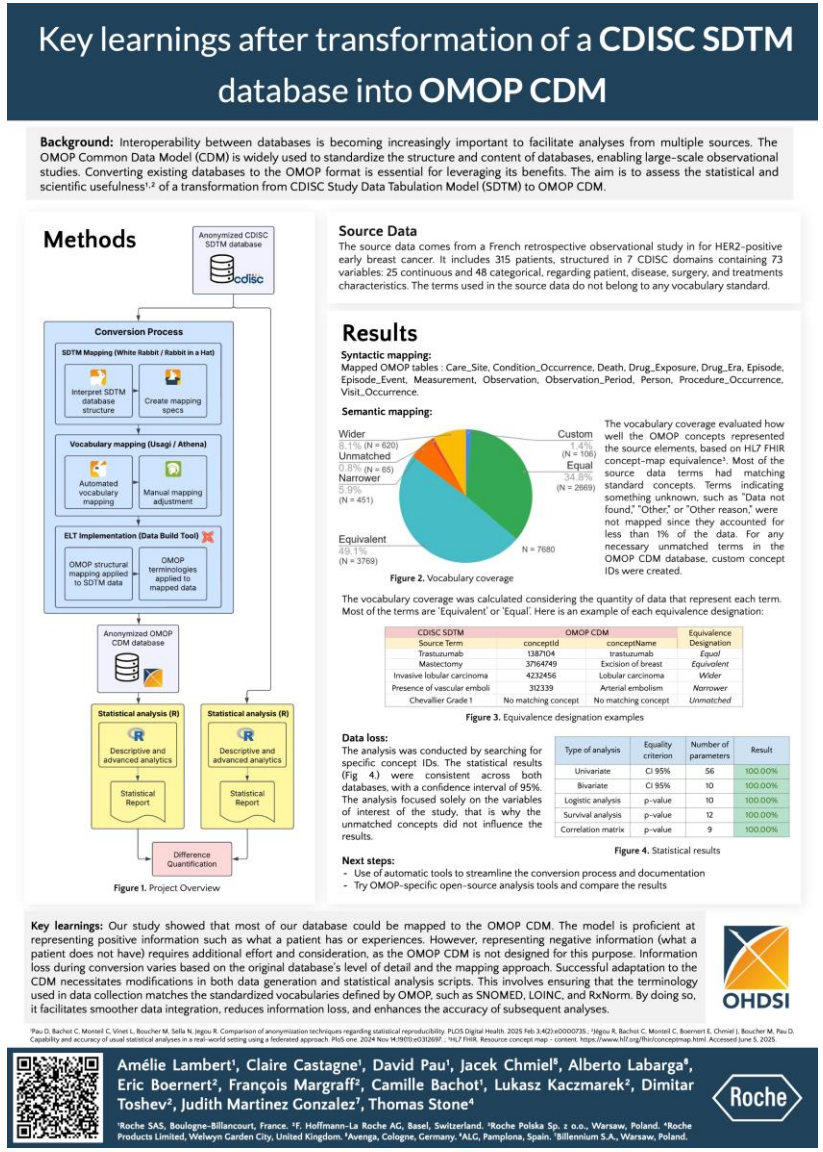
AstraZeneca

#OHDSISocialShowcase This Week

Friday

Key learnings after transformation of a CDISC SDTM database into OMOP CDM

(Amélie Lambert, Claire Castagne, Jacek Chmiel, Eric Boernert, François Margraff, David Pau, Camille Bachot, Lukasz Kaczmarek, Dimitar Toshev, Thomas Stone)



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:

ohdsi.org/community-calls-2025