



#OHDSI2023

Global Symposium Preview

OHDSI Community Call
Sept. 12, 2023 • 11 am ET



Upcoming Community Calls

Date	Topic
Sept. 19	Journal Club: 11th Revision of the ENCePP Guide on Methodological Standards in Pharmacoepidemiology
Sept. 26	Publications Presentation
Oct. 3	Workgroup Reports, pt 1
Oct. 10	Workgroup Reports, pt 2
Oct. 17	Symposium Week! Final Logistics
Oct. 24	Welcome to OHDSI



Three Stages of The Journey

Where Have We Been?

Where Are We Now?

Where Are We Going?





OHDSI Shoutouts!



Congratulations to the team of **Cindy Cai, William Halfpenny, Michael Boland, Harold Lehmann, Michelle Hribar, Kerry Goetz, and Sally Baxter** on the publication of **Advancing toward a common data model in ophthalmology: gap analysis of general eye examination concepts to standard OMOP concepts** in *Ophthalmology Science*.

Ophthalmology Science AMERICAN ACADEMY OF OPHTHALMOLOGY

Articles Publish Topics Multimedia About Contact

RESEARCH ARTICLE | ARTICLES IN PRESS, 100391 PDF [3 MB] Figures

Advancing toward a common data model in ophthalmology: gap analysis of general eye examination concepts to standard OMOP concepts

Cindy X. Cai, MD, MS • William Halfpenny, MB, BChir, MEng • Michael V. Boland, MD, PhD • Harold P. Lehmann, MD, PhD • Michelle Hribar, PhD • Kerry E. Goetz, MS • Sally L. Baxter, MD, MSc

Show less • Show footnotes

Open Access • Published: August 25, 2023 • DOI: <https://doi.org/10.1016/j.xops.2023.100391>

Abstract

Introduction

Methods

Results

Discussion

Uncited reference

Abstract

Objective or Purpose

Evaluate the degree of concept coverage of the general eye exam in one widely used electronic health record (EHR) system using the Observational Health Data Sciences and Informatics (OHDSI) Observational Outcomes Medical Partnership (OMOP) common data model (CDM).



OHDSI Shoutouts!



Congratulations to the team of **Mareike Przysucha, Jens Hüasers, Daniil Liberman, Oliver Kersten, Aphrodite Schlüter, Sebastian Fraas, Dorothee Busch, Maurice Moelleken, Cornelia Erfurt-Berge, Joachim Dissemond, and Ursula Hübner** on the publication of **Design and Implementation of an ETL-Process to Transfer Wound-Related Data into a Standardized Common Data Model in *Ophthalmology Science***.

258

German Medical Data Sciences 2023 — Science. Close to People.
R. Röhrig et al. (Eds.)

© 2023 The authors and IOS Press.

This article is published online with Open Access by IOS Press and distributed under the terms of the Creative Commons Attribution Non-Commercial License 4.0 (CC BY-NC 4.0).

doi:10.3233/SHTI230723

Design and Implementation of an ETL-Process to Transfer Wound-Related Data into a Standardized Common Data Model

Mareike PRZYSUCHA^{a1}, Jens HÜASERS^a, Daniil LIBERMAN^b, Oliver KERSTEN^b, Aphrodite SCHLÜTER^b, Sebastian FRAAS^b, Dorothee BUSCH^c, Maurice MOELLEKEN^d, Cornelia ERFURT-BERGE^c, Joachim DISSEMOND^d, and Ursula HÜBNER^a

^aHealth Informatics Research Group, Osnabrück University of AS, Germany
^bapenio GmbH & Co. KG, Germany

^cDepartment of Dermatology, Uniklinikum Erlangen, Friedrich-Alexander University Erlangen-Nürnberg (FAU), Erlangen, Germany

^dDepartment of Dermatology, Venerology and Allergology, University Hospital of Essen, Germany

Abstract. For observational studies, which are relevant especially for chronic conditions like chronic wounds, the Observational Medical Outcomes Partnership (OMOP) Common Data Model (CDM) offers a standardized database schema. In this study an ETL process for the transition of wound related data was developed. After understanding the data in general and mapping the relevant codes to concepts available in OMOP, the ETL process was implemented. In a first step, a generic algorithm to convert data to a csv format was implemented in Java. The resulting csv file was then processed within KNIME to be loaded into an OMOP CDM conformant database. During the whole ETL process, HL7 FHIR CodeSystem and ConceptMap resources were used for coding and mapping. First clinical test cases to retrieve data were successfully processed as an example to demonstrate the feasibility and usefulness. They concerned wound size at the first visit and the main issues of patients in the wound quality of life questionnaire (n = 24). In general, the ETL process worked well, yet some challenges arose, like post coordinated SNOMED codes or conditions, which might occur more than once.

Keywords. OMOP CDM, ETL Process, Wound Care

1. Introduction

To evaluate the outcome and impact of health related procedures for patients with chronic conditions, studies based on observational data are a promising approach next to randomized trials [1]. To enhance observational studies, the Observational Medical Outcomes Partnership (OMOP) was formed in 2008. They created a common data model (CDM) allowing researchers to perform observational studies with data from different sites and countries. After the end of the partnership in 2013, the Observational Health Data Science and Informatics (OHDSI) initiative was founded in 2014 and continues



#OHDSISocialShowcase



ohdsi.org/europe2023-showcase



#OHDSISocialShowcase

MONDAY

The EHDEN Portal – Simplifying the access to OMOP CDM databases

(**João Rafael Almeida**, Nigel
Hughes, Peter Rijnbeek, José Luís
Oliveira)

*The EHDEN Portal –
Simplifying the access to
OMOP CDM databases*

by José Oliveira

INTRO:

- EHDEN project aims to **improve health outcomes for patients** by providing an observational research ecosystem to explore real-world data.
- Goal: harmonizing **500 million anonymized** health records from European institutions.

METHODS

- EHDEN Portal is a web platform that centralizes the entry points for all available services within this project.
- The Database Catalogue is the primary entry point for **data discovery** in the databases in the EHDEN network.

RESULTS

- EHDEN portal currently holds information about more than **60 databases**.
- Allows data owners to specify at most **46 attributes** for each database.
- The tools integrated in this portal provide an ecosystem capable of supporting the different stages of a medical study.

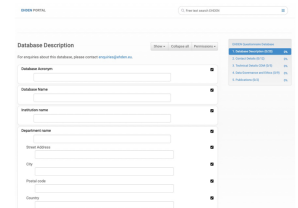
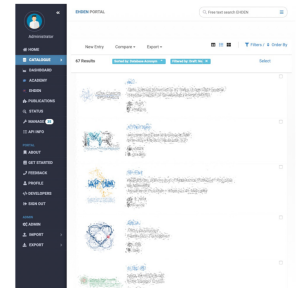
CONCLUSIONS

- The proposed portal strongly benefits from the OHDSI tools and principles.
- This portal provides services that enable a federated European data network to perform fast, scalable, and highly reproducible health research.

The EHDEN Portal Simplifying the discovery and analysis of health databases!



Scan QR to
download the full paper



by João Rafael Almeida, Nigel Hughes,
Peter Rijnbeek, José Luís Oliveira





#OHDSISocialShowcase

TUESDAY

Construction of a central ontology platform for semantic mapping coordination and vocabulary augmentation across a multi-partner oncology consortium

(Jared Houghtaling, Peter Prinsen, Maaike van Swieten, Chiara Attanasio, Lars Halvorsen)

A central ontology platform enables OMOP consortia to pre-coordinate their semantic mapping approach and to **maintain necessary granularity** until it is possible to formally integrate those concepts into a new standard OMOP vocabulary version

Title: Construction of a central ontology platform for semantic mapping coordination and vocabulary augmentation across a multi-partner oncology consortium

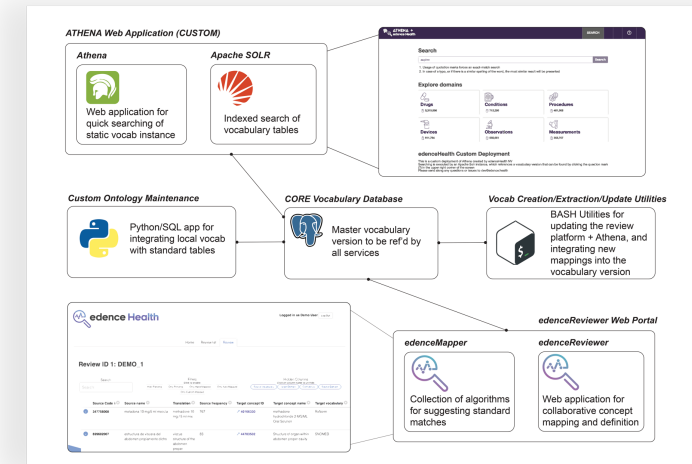
BACKGROUND: The *Integraal Kankercentrum Nederland*, or IKNL, collects and catalogues data from individuals diagnosed with cancer across the Netherlands [1]. In an effort to enrich this national dataset, as well as to validate and expand upon ongoing analyses, IKNL has joined efforts with the Blueberry consortium alongside other regional and national cancer registries. Much of the critical information the consortium aims to capture exists as part of the ICDO3 vocabulary, which is not comprehensively represented in the standard Observational Medical Outcomes Partnership (OMOP) vocabulary tables as of Spring 2023.

In order to capture sufficient granularity of source concepts across the network, we have constructed a central ontology platform that provides Blueberry users with the following functionalities:

- (1) Submission of unmapped source codes to a semantic mapping portal for automated standard suggestions (edenceMapper)
- (2) Creation of semantic mapping sets to be collaboratively reviewed, and subsequently approved or modified, in an online web portal (edenceReviewer)
- (3) Maintenance and update of the central consortium vocabulary tables using PROSA, an OMOP ontology application,
- (4) Search and reference of the latest central consortium vocabulary version using a centrally deployed Athena web application
- (5) Utilities and triggers that help integrate and synchronize each of the independent components

In this work, we describe each of these functionalities and the tools that support them, and we present the benefits and drawbacks of using such an approach to fill gaps (temporarily) in the OMOP-vocabularies to support semantic mapping coordination across a targeted federated network.

Figure 1: Overview of services available on the ontology platform, which include two web applications (Athena and edenceReviewer) as well as various tooling to support those applications and ensure that the core vocabulary tables are updated and maintained appropriately.



LIMITATIONS AND DISCUSSION: In comparison with site-specific vocabulary maintenance, the ontology management structure we have established above has several advantages: all partners can implement the same standard vocabulary version in their OMOP CDM instances, all partners can reference the consortium-specific vocabulary through a familiar Athena interface, and all partners can quickly request and update the vocabulary version to incorporate concepts that capture source-specific information, without concern of concept redundancy across the network.

One critical consideration with this type of approach is that data partners need to establish consistent ETL deployment schedules to reference a dynamic vocabulary version. We expect to keep track of source releases and referenced vocabulary versions across the network using the Ares network tool [3, 4], which has already been implemented at IKNL to track OMOP version releases internally.



Jared Houghtaling^a, Peter Prinsen^b, Maaike van Swieten^a, Chiara Attanasio^b and Lars Halvorsen^a

AFFILIATIONS
^a eonresearch bv, Leuven, Belgium
^b Integraal Kankercentrum Nederland, Groningen, The Netherlands

REFERENCES
[1] Houtman et al. (2022) Development of an OMOP Ontology Application - PROSA - for creation and maintenance of highly granular source concepts within the OMOP framework. *OMOP Consortium Meeting*, 2022.
[2] Dool, J. et al. (2023) Development of an OMOP Ontology Application - PROSA - for creation and maintenance of highly granular source concepts within the OMOP framework. *OMOP Consortium Meeting*, 2023.
[3] Dool, J. et al. (2023) Development of an OMOP Ontology Application - PROSA - for creation and maintenance of highly granular source concepts within the OMOP framework. *OMOP Consortium Meeting*, 2023.
[4] Dool, J. et al. (2023) Development of an OMOP Ontology Application - PROSA - for creation and maintenance of highly granular source concepts within the OMOP framework. *OMOP Consortium Meeting*, 2023.





#OHDSISocialShowcase

WEDNESDAY

The DigiONE FORGE Approach to Providing OMOP Oncology Data for Federated Analyses

(**Daniel Maier**, Fabienne A. U. Fox, Abishaa Vengadeswaran, Andrea Wolf, Christian Brandts, Daniel P. Brucker, Holger Storf, Jörg Janne Vehreschild, Timo Schneider, Dennis Kadioglu)

Introducing OMOP and high-velocity NLP solutions for international collaborations in RWD-oncology in Germany

The Frankfurt Oncological Hub for the Generation of RWE (FORGE)

The DigiONE-FORGE Approach to Providing OMOP Oncology Data for Federated Analyses

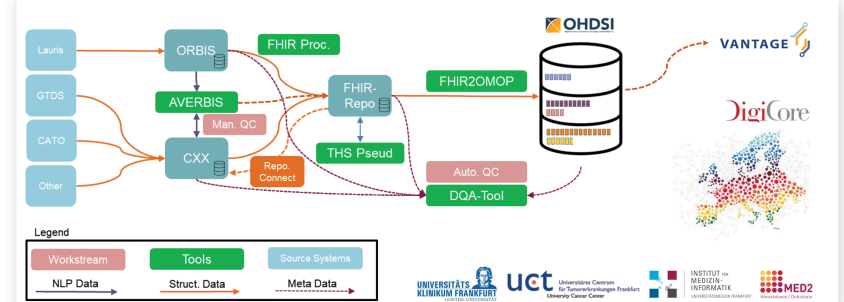
Background

FORGE is part of the Digital Oncology Network for Europe (DigiONE)-initiative connecting six European cancer centers, funded by the Digital Institute for Cancer Outcomes Research (DigiCore). It aims to establish an OMOP-based federated infrastructure, which promotes the exchange between institutions and research on oncological real-world data. The project co-pioneers innovative, near real-time, automated procedures to capture, process, clean and provide data across countries, thereby building bridges between established national standards.

Results

- MEDOC dataset: 36 items were selected by clinical importance and availability
- ORBIS (hospital information system) and CentraXX (bio-bank and cancer registry DB) serve as main data sources
- Fast Healthcare Interoperability Resource (FHIR) repository as sustainable intermediary source for providing data to the OMOP data base
- FHIR2OMOP-interface by the German MI-I will be leveraged to provide data in the OMOP CDM
- Averbis Health Discovery will be used for detection, extraction and transformation of free-text data
- Expert manual validation of NLP-processed data as quality control
- Vantage6 will be connected for enabling federated analyses across the DigiONE consortium
- Other customized tools secure institutional and national standards with regards to data privacy, sparsity and sustainability

Methodological Approach



Conclusion

Our approach aims to contribute to the cross-national infrastructure for federated RWD research that may serve as a blueprint for future oncological research in Europe.



Daniel Maier^{1,2}, Fabienne A. U. Fox¹, Abishaa Vengadeswaran³, Andrea Wolf⁴, Christian Brandts⁴, Daniel P. Brucker⁴, Holger Storf⁵, Janne Vehreschild^{1,5,6}, Timo Schneider⁴, Dennis Kadioglu³

¹Department of Internal Medicine 2, Frankfurt University Hospital, Frankfurt, Germany
²German Cancer Consortium (DKTK), Partner site Frankfurt and German Cancer Research Center, Heidelberg, Germany
³Institute for Medical Informatics, Frankfurt University Hospital, Frankfurt, Germany
⁴University Cancer Center (UCC) Frankfurt, Frankfurt University Hospital, Frankfurt, Germany
⁵Department of Internal Medicine 1, University Hospital of Cologne, Cologne, Germany
⁶German Centre for Infection Research (GCI), Partner Site Bonn-Cologne, Cologne, Germany



#OHDSISocialShowcase

THURSDAY

Vaccine effectiveness to prevent long COVID: A staggered cohort study using primary care electronic health records from the United Kingdom

(Martí Català, Núria Mercadé-Besora, Edward Burn, Trishna Rathod-Mistry, Kristin Kostka, Wai Man, Antonella Delmestri, Talita Duarte-Salles, Daniel Prieto-Alhambra, Annika M. Jödicke)

COVID-19 vaccines reduce risk for Long COVID symptoms

The Effectiveness of COVID-19 Vaccines to Prevent Long COVID Symptoms: Staggered Cohort Analyses of Data from the UK, Spain, and Estonia

Background While few studies previously assessed vaccine effectiveness to prevent long-term complications in people with COVID-19, effect estimates varied greatly between studies, largely depending on the long covid definition used, study setting and study size. Moreover, the effect of vaccines to prevent COVID-19 infections in the first place was not captured. The objective of this study was therefore to assess the impact of vaccination to prevent long COVID on the population level.

Results

A total 1,618,395; 5,729,915; 2,744,821 and 77,603 vaccinated people and 1,640,371; 5,860,564; 2,588,518 and 302,267 unvaccinated people were included from CPRD GOLD (UK), CPRD AURUM (UK), SIDIAP (Spain) and CORIVA (Estonia), respectively. Among those, 6–21%, 9–33%, 26–34% and 31–39% were included in staggered cohorts 1–4.

Among the vaccinated people, 59%, 56%, 15% and 6% were vaccinated with ChAdOx1 and 38%, 40%, 66% and 74% were vaccinated with BNT162b2, respectively.

Protective effects against development of long COVID was found associated with vaccination across all studies (Figure 1). Overall sHR were 0.55 [95%CI 0.46–0.65], 0.64 [0.55–0.74], 0.84 [0.75–0.93] and 0.62 [0.49–0.78] respectively.

Data sources

- Primary care electronic health records from the UK (CPRD GOLD and CPRD AURUM)
 - Primary care records linked to hospital admissions data from Catalonia, Spain (SIDIAP).
 - National health claims from Estonia (CORIVA)
- All data was mapped to the OMOP CDM.

Methods

Study design, participants, and vaccination

As people became eligible for receiving their first vaccine dose at different times, this study was designed as a staggered cohort study. Four study cohorts were created, each of them representing a specific stage of the vaccination campaign. All adults registered for at least 180 days as of 01/2021 (UK), 02/2021 (Spain) and 01/2021 (Estonia) comprised the source population. Vaccination status was used as a time-varying exposure, staggered by vaccine rollout period. Vaccinated people were further classified by vaccine brand according to their first dose received. Vaccinated people were further classified by the vaccine brand (ChAdOx1 vs. BNT162b2) they received for their first vaccine dose.

Main outcome measures

Long COVID was primarily defined as a recording of at least one WHO-listed symptoms ≥ 90 days following SARS-CoV-2 infection, with no history of that symptom in the previous 180 days. Concept sets for long COVID symptoms developed for OMOP mapped data were used from previous work.

Statistical analyses

Analyses were conducted separately for each database using the same analytic code developed for data mapped to the OMOP CDM. Informed by previous methodological work, we used propensity score overlap weighting applied separately for each study to balance covariates between exposure groups. Subdistribution Hazard Ratios (sHR) were calculated using Fine-and-Gray model to account for death as competing risk to developing post-COVID-19 complications. Subsequently, effect estimates were calibrated using Negative Control Outcomes to account for residual confounding. Random effects meta-analyses across staggered cohorts were conducted to pool overall effect estimates.

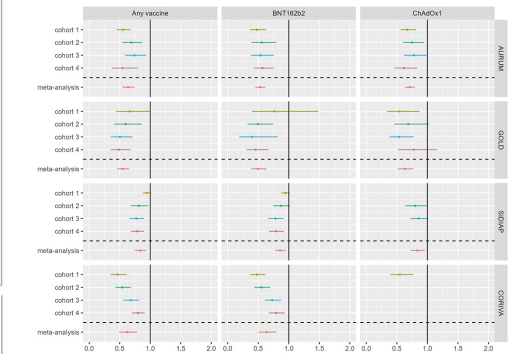


Figure 1: Forest plots for vaccine effectiveness against long COVID depicting calibrated subdistribution Hazard Ratios (sHR) from CPRD GOLD, CPRD AURUM, SIDIAP and CORIVA for cohorts 1-4 and meta-analyses. Panel (a): unvaccinated (orange) vs. unvaccinated; (b) BNT162b2 vs. unvaccinated; (c) ChAdOx1 vs. unvaccinated. Figure from: Català et al. The Effectiveness of COVID-19 Vaccines to Prevent Long COVID Symptoms: Staggered Cohort Analyses of Data from the UK, Spain, and Estonia. Available at SSRN: <https://ssrn.com/abstract=3918411>



Read our preprint



Martí Català, Núria Mercadé-Besora, Raivo Kolde, Nhung TH Trinh, Elena Roel, Edward Burn, Trishna Rathod-Mistry, Kristin Kostka, Wai Yi Man, Antonella Delmestri, Hedvig ME Nordeng, Anneli Uusküla, Talita Duarte-Salles, Daniel Prieto-Alhambra, Annika M Jödicke
marti.catalasabate@ndorms.ox.ac.uk



#OHDSISocialShowcase

FRIDAY

Comparing concepts extracted from clinical Dutch text to conditions in the structured data

(Tom M. Seinen, Jan A. Kors, Erik M. van Mulligen, Peter R. Rijnbeek)

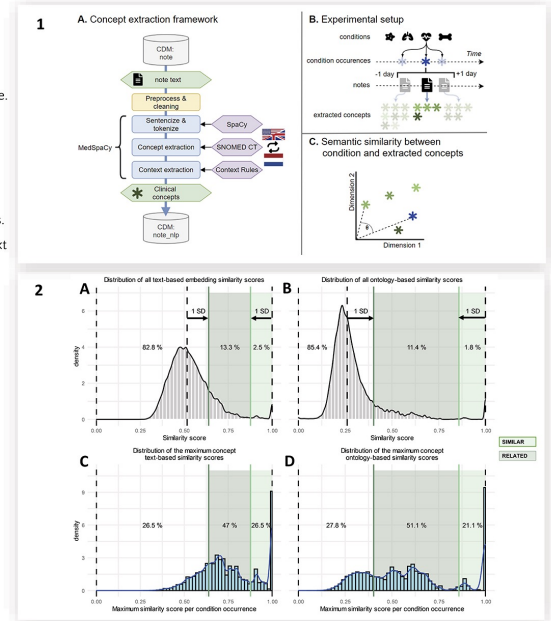
Assessing the information difference between coded conditions and their related clinical notes

Comparing concepts extracted from clinical Dutch text to conditions in the structured data

Background: Unlocking valuable hidden information in clinical narratives is crucial for clinical research and practice. This study focuses on evaluating an open-source framework for extracting clinical concepts from Dutch clinical free-text and assessing the semantic similarity between coded conditions and extracted concepts, contributing to bridging the gap for non-English language processing in healthcare.

Methods

Data: Integrated Primary Care Information (IPCI) Dutch general practitioner EHR database.
Concept extraction: MedSpacy with Dutch resources.
Setup: We applied the concept extraction framework to clinical notes related to commonly occurring ICPC-1 coded conditions.
Semantic similarity: SNOMED CT concept (text and ontology-based) embeddings were used to calculate the similarity between coded conditions and extracted concepts.



Results

Figure 2A and B illustrate the similarity scores between extracted concepts and the coded condition using text-based and ontology-based embeddings. In 73.5% of condition occurrences, a concept either semantically similar or related to the coded condition was found in the surrounding text, as shown in Figure 2C and D.

Conclusion: Our study successfully adapted an open-source English concept extraction framework to Dutch clinical text, accurately matching structured data in most condition occurrences, yet many conditions are not described in the surrounding text.



Tom Seinen, Erik van Mulligen, Jan Kors, Peter Rijnbeek
Department of Medical Informatics, Erasmus MC, The Netherlands
t.seinen@erasmusmc.nl





OHDSI Shoutouts!



Any shoutouts from the community? Please share and help promote and celebrate OHDSI work!

Do you have anything you want to share? Please send to sachson@ohdsi.org so we can highlight during this call and on our social channels.

Let's work together to promote the collaborative work happening in OHDSI!





Three Stages of The Journey

Where Have We Been?

Where Are We Now?

Where Are We Going?





Upcoming Workgroup Calls



Date	Time (ET)	Meeting
Tuesday	6 pm	Eyecare & Vision Research
Wednesday	9 am	Patient-Level Prediction
Wednesday	2 pm	Natural Language Processing
Thursday	8 am	India Chapter
Thursday	9:30 am	Data Network Quality
Friday	9 am	GIS – Geographic Information System Development
Friday	10:30 am	Open-Source Community
Friday	11:30 am	Steering Group
Friday	1 pm	Clinical Trials
Monday	9 am	Vaccine Vocabulary
Monday	10 am	Africa Chapter
Monday	11 am	Data Bricks User Group
Monday	6 pm	OMOP & FHIR



Global Symposium



Oct. 20-22 • East Brunswick, NJ, USA
Hilton East Brunswick Hotel & Executive Meeting Center

bit.ly/OHDSI2023Registration



Sept. 15: HowOften Phenotype Library Contribution Deadline



HowOften: Community contributions wanted

General



Patrick_Ryan

2h

Friends:

As we discussed on the [20June2023](#) and [15August2023](#) community calls, [@hripcsa](#) and I would like to encourage our community to think big and collaborate together in a effort toward large-scale incidence characterization. HowOften is be a community-wide study to define a broad set of target cohorts T that'll serve as denominators, and another broad set of outcome cohorts O that'll serve as numerators. And for a defined list of time-at-risk windows (e.g. 30d, 1yr, all-time), stratified by age/sex/index year, we will compute the incidence of O in T for all T-O combinations within each database in our participating network, and then meta-analyze the results to produce composite summaries.

As with all OHDSI network studies, we will use [GitHub](#) to share study materials, including protocol and source code, which should be based where possible off of existing HADES packages. And we intend to make the full resultset publicly available through an interactive website, likely initially taking advantage of the RShiny modules built by the HADES team as part of the Strategus workflow. As we've seen with prior OHDSI work, background incidence rates can be used for a wide range of clinical applications, including providing [disease natural history](#), providing context for [pharmacovigilance](#) by quantifying the magnitude of risk for known effects, and reporting digital quality measures (see [@bnhamlin](#)'s talk [here](#)).



Titan Award Nominations Are Open!

To recognize OHDSI collaborators (or collaborating institutions) for their contributions towards OHDSI's mission, the OHDSI Titan Awards were introduced at the 2018 Symposium and have been handed out at the Global Symposium each year since.



bit.ly/2023TitanNominations



OHDSI HADES releases: DatabaseConnector 6.2.4

DatabaseConnector

DatabaseConnector is part of [HADES](#).

Introduction

This R package provides function for connecting to various DBMSs. Together with the `SqlRender` package, the main goal of `DatabaseConnector` is to provide a uniform interface across database platforms: the same code should run and produce equivalent results, regardless of the database back end.

Features

- Create connections to the various database platforms:
 - MicrosoftSQL Server
 - Oracle
 - PostgresSql
 - Microsoft Parallel Data Warehouse (a.k.a. Analytics Platform System)
 - Amazon Redshift
 - Apache Impala

Links

- [View on CRAN](#)
- [Browse source code](#)
- [Report a bug](#)
- [Ask a question](#)

License

Apache License

Citation

[Citing DatabaseConnector](#)

Developers

- Martijn Schuemie
Author, maintainer
- Marc Suchard
Author

[More about authors...](#)





OHDSI HADES releases: CAPR 2.0.7

Capr 2.0.6

Reference

Articles ▾

Changelog



Capr

Capr is part of [HADES](#)

Introduction

The goal of Capr, pronounced 'kay-pr' like the edible flower, is to provide a language for expressing OHDSI Cohort definitions in R code. OHDSI defines a cohort as "a set of persons who satisfy one or more inclusion criteria for a duration of time" and provides a standardized approach for defining them (Circe-be). Capr exposes the standardized approach to cohort building through a programmatic interface in R which is particularly helpful when creating a large number of similar cohorts. Capr version 2 introduces a new user interface designed for readability with the goal that Capr code being a human readable description of a cohort while also being executable on an OMOP Common Data Model.

Learn more about the OHDSI approach to cohort building in the [cohorts chapter of the Book of OHDSI](#).

Installation

Users can install the current development version of Capr from [CRAN](#) with:



Links

[Browse source code](#)

[Report a bug](#)

[Ask a question](#)

License

[Full license](#)

Apache License (>= 2)

Citation

[Citing Capr](#)

Developers

Martin Lav
Author

Adam Black
Author, maintainer

Dev sta





OHDSI HADES releases: DeepPatientLevelPrediction 2.0.0


DeepPatientLevelPrediction 2.0.0

- New backend which uses pytorch through reticulate instead of torch in R
- All models ported over to python
- Dataset class now in python
- Estimator class in python
- Learning rate finder in python
- Added input checks and tests for wrong inputs
- Training-cache for single hyperparameter combination added
- Fixed empty test for training-cache






Openings at Boehringer Ingelheim


 **Boehringer Ingelheim**

[Explore our company](#) [Discover our careers](#) [See our Locations](#) [How to apply](#) [Get in touch](#) [FAQ](#)

Director, Real World Data & Analytics - Data Domain Owner

[Apply Now](#)




 **Boehringer Ingelheim**

[Explore our company](#) [Discover our careers](#) [See our Locations](#) [How to apply](#) [Get in touch](#) [FAQ](#)

Real World Evidence Data Engineer

[Apply Now](#)





Opening: Postdoctoral Associate/Data Analyst

Job Announcement: Postdoctoral Associate/Data Analyst - LEGEND Hypertension Project

Position: Postdoctoral Associate/Data Analyst

Organization: Yale University, School of Medicine

Location: 195 Church Street, 5th floor, New Haven, CT, 06510

Application Deadline: Rolling basis

Job Description:

We are seeking a talented and dedicated Postdoctoral Associate/Data Analyst to join our dynamic team. In this role, you will play a pivotal part in advancing our mission of improving health outcomes through data-driven research. You will have the opportunity to work with diverse healthcare datasets, develop innovative analytical methods, and collaborate with experts in the field.

The Postdoctoral Associate/Data Analyst should possess significant experience in R and Rstudio, with specific expertise in database management using PostgreSQL—critical requirements within the OHDSI network. Your responsibilities will include assisting the Principal Investigator (Dr. Yuan Lu from Yale University) and Co-Investigator (Drs. Marc Suchard from UCLA) in creating the analytic tool stack and performing related analyses.

Key Responsibilities:

- Collaborate with multidisciplinary teams to design and execute data analysis projects.
- Develop and implement statistical and machine learning models for healthcare data.
- Perform data extraction and preprocessing tasks to prepare datasets for analysis.
- Conduct exploratory data analysis and visualization to extract insights from healthcare data.
- Assist in the development and maintenance of OHDSI's open-source tools and resources.
- Communicate findings and insights through reports, presentations, and publications.
- Stay up-to-date with the latest advancements in data science and healthcare informatics.

Email: y.lu@yale.edu



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?





Global Symposium



Oct. 20-22 • East Brunswick, NJ, USA
Hilton East Brunswick Hotel & Executive Meeting Center

ohdsi.org/OHDSI2023

Global Symposium Conference Agenda

Time	Topic
7:30 - 8:30 am East Brunswick Room + Grand Ballroom Foyer	Symposium Registration, Lite Breakfast Buffet, All-Day Exhibits
8:30 - 9:30 am Grand Ballroom	<p>State of the Community OHDSI: Where have we been? Where are we going? George Hripcsak, Columbia Univ.</p> <p>Community Highlights:</p> <ul style="list-style-type: none"> OMOP CDM users and the OHDSI data network Clair Blacketer, Johnson & Johnson OHDSI standardized vocabularies Alexander Davydov, Odysseus Data Services OHDSI's open-source community Katy Sadowski, Boehringer Ingelheim OHDSI Europe 2024 Peter Rijnbeek, Erasmus MC OHDSI Asia-Pacific 2024 Mengling Feng, National Univ. of Singapore
9:30 - 10:30 am Grand Ballroom	<p>OHDSI Community Networking</p> <p>Moderators:</p> <ul style="list-style-type: none"> Faalzah Arshad, Univ. of California-Los Angeles Cynthia Sung, Duke-NUS Medical School
10:30 am - 12:00 pm Grand Ballroom	<p>Plenary: Improving the reliability and scale of case validation</p> <p>Presenters:</p> <ul style="list-style-type: none"> Patrick Ryan, Johnson & Johnson, Columbia Univ. Anna Ostropolets, Odysseus Data Services Martijn Schuemie, Johnson & Johnson, Univ. of California-Los Angeles
12:00 pm - 1:00 pm Grand Ballroom Foyer	Buffet Lunch

All events take place at the Grand Ballroom Level • Exhibits will be available throughout the day

Time	Topic
1:00 pm - 2:00 pm Grand Ballroom	<p>Panel: Lessons learned from OHDSI network studies</p> <p>Presenters:</p> <ul style="list-style-type: none"> Insights from LEGEND-T2DM Marc Suchard, Univ. of California-Los Angeles Intravitreal anti-VEGF and risk of kidney failure: A Sisyphus Challenge Study Cindy X Cai, Johns Hopkins Univ. Fluoroquinolones and the risk of aortic aneurysm: A Sisyphus Challenge study Seng Chan You, Yonsei Univ. Lessons learned applying the Strategus framework across the OHDSI network Anthony Sena, Johnson & Johnson <p>Moderator: Sarah Seager, IQVIA</p>
2:00 pm - 2:45 pm Grand Ballroom	<p>Collaborator Showcase, Lightning Talk Session #1: Data Standards and Methods Research</p> <ul style="list-style-type: none"> Mapping of Critical Care EHR Flowsheet data to the OMOP CDM via SSSOM Polina Talapova, SciForce Paving the way to estimate daily dose in OMOP CDM for Drug Utilisation Studies in DARWIN EU® Theresa Burkard, Univ. of Oxford Generating Synthetic Electronic Health Records in OMOP using GPT Chao Pang, Columbia Univ. Comparing concepts extracted from clinical Dutch text to conditions in the structured data Tom Seinen, Erasmus MC Finding a constrained number of predictor phenotypes for multiple outcome prediction Jenna Reys, Johnson & Johnson <p>Moderator: Davera Gabriel, Johns Hopkins University</p>
2:45 - 3:30 pm Grand Ballroom	<p>Collaborator Showcase, Poster / Demo Session #1</p> <p>Poster walk leads:</p> <ul style="list-style-type: none"> Data standards: Mui Van Zandt, IQVIA Methods research: Christophe Lambert, Univ. of New Mexico Open-source development: Paul Nagy, Johns Hopkins Univ. Clinical applications: Kristin Kostka, Northeastern University

All events take place at the Grand Ballroom Level • Exhibits will be available throughout the day

Time	Topic
3:30 pm - 4:15 pm Grand Ballroom	<p>Collaborator Showcase, Lightning Talk Session #2: Methods Research and Clinical Applications</p> <ul style="list-style-type: none"> Synthesizing Evidence for Rare Events: a Novel Zero-Inflated Bivariate Model to Integrate Studies with Double-Zero Outcomes Lu Li, Univ. of Pennsylvania Active Safety Surveillance Using Real-world Evidence (ASSURE): An application of the Strategus package Kevin Haynes, Johnson & Johnson Patient's outcomes after endoscopic retrograde cholangiopan creatography (ERCP) using reprocessed duodenoscope: a descriptive study using real-world data Jessica Maruyama, Precision Data Quantification of Racial Differences in Post-acute Sequelae of SARS-CoV-2 Infection (PASC) in Children: an EHR-Based Cohort from the RECOVER Program Bingyu Zhang, Univ. of Pennsylvania Eye Care and Vision Research Workgroup: First Year Update Michelle Hribar, National Institutes of Health – National Eye Institute <p>Moderator: Atif Adam, IQVIA</p>
4:15 - 5:00 pm Grand Ballroom	<p>Collaborator Showcase, Poster / Demo Session #2</p> <p>Poster walk leads:</p> <ul style="list-style-type: none"> Data standards: Melanie Philofsky, Odysseus Data Services Methods research: Andrew Williams, Tufts Univ. Open-source development: Nsikak Akpakpan, Accenture Clinical applications: Hanieh Razzaghi, Childrens Hospital of Pennsylvania
5:00 pm - 6:00 pm Grand Ballroom	<p>Closing session: Scaling community, scaling collaboration</p> <ul style="list-style-type: none"> Titan Awards Group Photo <p>Presenter Patrick Ryan, Johnson & Johnson, Columbia Univ.</p>
6:00 pm - 7:00 pm East Brunswick Room Grand Ballroom Foyer	Networking Reception and Exhibits
7:00 pm - 8:00 pm Grand Ballroom	OHDSI Got Talent!

bit.ly/OHDSI2023-Agenda

Register →





Global Symposium Weekend Agenda

	Friday, Oct. 20	Saturday, Oct. 21	Sunday, Oct. 22
7:30 am	Registration/Lite Breakfast	Lite Breakfast	Lite Breakfast
8:30 am	Welcome to OHDSI2023: State of the Community	Intro to OHDSI Tutorial & OHDSI Workgroup Activities	OHDSI collaborative workshop: HowOften (part 2)
9:30 am	Community Networking		
10:30 am	Plenary Session		
12:00 pm	Buffet Lunch		
12:00 pm		Buffet Lunch + Collaborator Showcase: Posters & Demos	Buffet Lunch + Collaborator Showcase: Posters & Demos
1:00 pm	Panel: Network Studies	OHDSI collaborative workshop: HowOften (part 1)	OHDSI workgroup activities
2:00 pm	Collaborator Showcase: Lightning Talks		
2:45 pm	Collaborator Showcase: Posters & Demos		
3:30 pm	Collaborator Showcase: Lightning Talks		
4:15 pm	Collaborator Showcase: Posters & Demos		
5:00 pm	Closing Talk & Titan Awards	Free time	We'll see you again in 2024!
6:00 pm	Networking Reception		
7:00 pm	OHDSI Got Talent!		

* this agenda is tentative and subject to change



Global Symposium

		2023 OHDSI Global Symposium										
		Friday, October 20- Sunday, October 22 Hilton East Brunswick Hotel and Meeting Center										
Friday, October 20												
Start	End Time	Grand Ballroom										
7:00	8:00	Registration/ Light Breakfast										
8:00	9:00	Welcome to OHDSI2023										
9:00	10:00	State of the Community										
10:00	11:00	Community Networking/ Meet the Mentors										
11:00	12:00	Plenary Session										
12:00	13:00	Buffet Lunch										
13:00	14:00	Panel: Network Studies										
14:00	15:00	Collaborator Showcase - Posters and Software Demonstrations	Exhibits									
15:00	16:00	Collaborator Showcase - Lightning Talks										
16:00	17:00	Collaborator Showcase - Posters and Software Demonstrations										
17:00	18:00	Closing Talk										
18:00	19:00	Networking Reception										
19:00	20:00	OHDSI Got Talent!										
Saturday, October 21		Grand Ballroom										
8:00	9:00											
9:00	10:00	Introduction to OHDSI Tutorial	Exhibits	Industry Special Interest	Perinatal & Reproductive	Oncology	HADES	CDM/Network Data Quality	Health Equity	Phenotype Evaluation	Medical Imaging	Natural Lang. Processing
10:00	11:00	Collaborator Showcase (and buffet lunch)										
11:00	12:00											
12:00	13:00											
13:00	14:00											
14:00	15:00	HowOften Large-scale Characterization Workshop										
15:00	16:00											
16:00	17:00											
Sunday, October 22		Grand Ballroom										
8:00	9:00											
9:00	10:00	HowOften Large-scale Characterization Workshop										
10:00	11:00											
11:00	12:00											
12:00	13:00	Collaborator Showcase (and buffet lunch)										
13:00	14:00		Exhibits	Psychiatry	Healthcare Systems	Vocabularies	HADES	HL7 FHIR-OMOP Connectathon	Education	Medical Devices	Eye care & Vision Research	ISPE-RWE For Pharmacovigilance
14:00	15:00											
15:00	16:00											
16:00	17:00											



Global Symposium Conference Agenda

<p>8:30 - 9:30 am Grand Ballroom</p>	<p>State of the Community OHDSI: Where have we been? Where are we going? George Hripcsak, Columbia Univ.</p> <p>Community Highlights:</p> <ul style="list-style-type: none">• OMOP CDM users and the OHDSI data network Clair Blacketer, Johnson & Johnson• OHDSI standardized vocabularies Alexander Davydov, Odysseus Data Services• OHDSI's open-source community Katy Sadowski, Boehringer Ingelheim• OHDSI Europe 2024 Peter Rijnbeek, Erasmus MC• OHDSI Asia-Pacific 2024 Mengling Feng, National Univ. of Singapore
<p>9:30 - 10:30 am Grand Ballroom</p>	<p>OHDSI Community Networking</p> <p>Moderators:</p> <ul style="list-style-type: none">• Faaizah Arshad, Univ. of California-Los Angeles• Cynthia Sung, Duke-NUS Medical School

bit.ly/OHDSI2023-Agenda

Register →





Global Symposium Conference Agenda

<p>10:30 am - 12:00 pm Grand Ballroom</p>	<p>Plenary: Improving the reliability and scale of case validation</p> <p>Moderators:</p> <ul style="list-style-type: none">• Patrick Ryan, Johnson & Johnson, Columbia Univ.• Anna Ostropolets, Odysseus Data Services• Martijn Schuemie, Johnson & Johnson, Univ. of California-Los Angeles
<p>1:00 pm - 2:00 pm Grand Ballroom</p>	<p>Panel: Lessons learned from OHDSI network studies</p> <p>Presenters:</p> <ul style="list-style-type: none">• Insights from LEGEND-T2DM Marc Suchard, Univ. of California-Los Angeles• Intravitreal anti-VEGF and risk of kidney failure: A Sisyphus Challenge Study Cindy X Cai, Johns Hopkins Univ.• Fluoroquinolones and the risk of aortic aneurysm: A Sisyphus Challenge study Seng Chan You, Yonsei Univ.• Lessons learned applying the Strategus framework across the OHDSI network Anthony Sena, Johnson & Johnson <p>Moderator: Sarah Seager, IQVIA</p>

bit.ly/OHDSI2023-Agenda

Register





Global Symposium Conference Agenda

<p>2:00 pm - 2:45 pm Grand Ballroom</p>	<p>Collaborator Showcase, Lightning Talk Session #1: Data Standards and Methods Research</p> <ul style="list-style-type: none">• Mapping of Critical Care EHR Flowsheet data to the OMOP CDM via SSSOM Polina Talapova, SciForce• Paving the way to estimate daily dose in OMOP CDM for Drug Utilisation Studies in DARWIN EU® Theresa Burkard, Univ. of Oxford• Generating Synthetic Electronic Health Records in OMOP using GPT Chao Pang, Columbia Univ.• Comparing concepts extracted from clinical Dutch text to conditions in the structured data Tom Seinen, Erasmus MC• Finding a constrained number of predictor phenotypes for multiple outcome prediction Jenna Reps, Johnson & Johnson <p>Moderator: Davera Gabriel, Johns Hopkins University</p>
<p>2:45 - 3:30 pm Grand Ballroom</p>	<p>Collaborator Showcase, Poster / Demo Session #1</p> <p>Poster walk leads:</p> <ul style="list-style-type: none">• Data standards: Mui Van Zandt, IQVIA• Methods research: Christophe Lambert, Univ. of New Mexico• Open-source development: Paul Nagy, Johns Hopkins Univ.• Clinical applications: Kristin Kostka, Northeastern University

Register





Global Symposium Conference Agenda

<p>3:30 pm - 4:15 pm Grand Ballroom</p>	<p>Collaborator Showcase, Lightning Talk Session #2: Methods Research and Clinical Applications</p> <ul style="list-style-type: none">• Synthesizing Evidence for Rare Events: a Novel Zero-Inflated Bivariate Model to Integrate Studies with Double-Zero Outcomes Lu Li, Univ. of Pennsylvania• Active Safety Surveillance Using Real-world Evidence (ASSURE): An application of the Strategus package Kevin Haynes, Johnson & Johnson• Patient's outcomes after endoscopic retrograde cholangiopan creatography (ERCP) using reprocessed duodenoscope: a descriptive study using real-world data Jessica Maruyama, Precision Data• Quantification of Racial Differences in Post-acute Sequelae of SARS-CoV-2 Infection (PASC) in Children: an EHR-Based Cohort from the RECOVER Program Bingyu Zhang, Univ. of Pennsylvania• Eye Care and Vision Research Workgroup: First Year Update Michelle Hribar, National Institutes of Health – National Eye Institute <p>Moderator: Atif Adam, IQVIA</p>
<p>4:15 - 5:00 pm Grand Ballroom</p>	<p>Collaborator Showcase, Poster / Demo Session #2</p> <p>Poster walk leads:</p> <ul style="list-style-type: none">• Data standards: Melanie Philofsky, Odysseus Data Services• Methods research: Andrew Williams, Tufts Univ.• Open-source development: Nsikak Akpakpan, Accenture• Clinical applications: Hanieh Razzaghi, Childrens Hospital of Pennsylvania

Register





Global Symposium Conference Agenda

5:00 pm - 6:00 pm Grand Ballroom	Closing session: Scaling community, scaling collaboration <ul style="list-style-type: none">• Titan Awards• Group Photo Presenter Patrick Ryan, Johnson & Johnson, Columbia Univ.
6:00 pm - 7:00 pm East Brunswick Room Grand Ballroom Foyer	Networking Reception and Exhibits
7:00 pm - 8:00 pm Grand Ballroom	OHDSI Got Talent!

bit.ly/OHDSI2023-Agenda

Register →





2023 Global Symposium OMOP + FHIR Connectathon



Goals

OMOP + FHIR WG OKR:

- ◆ Hands-on event: draft specification support

Generate community crowdsourced maps for common, core EHR data

Persistent Reference implementations

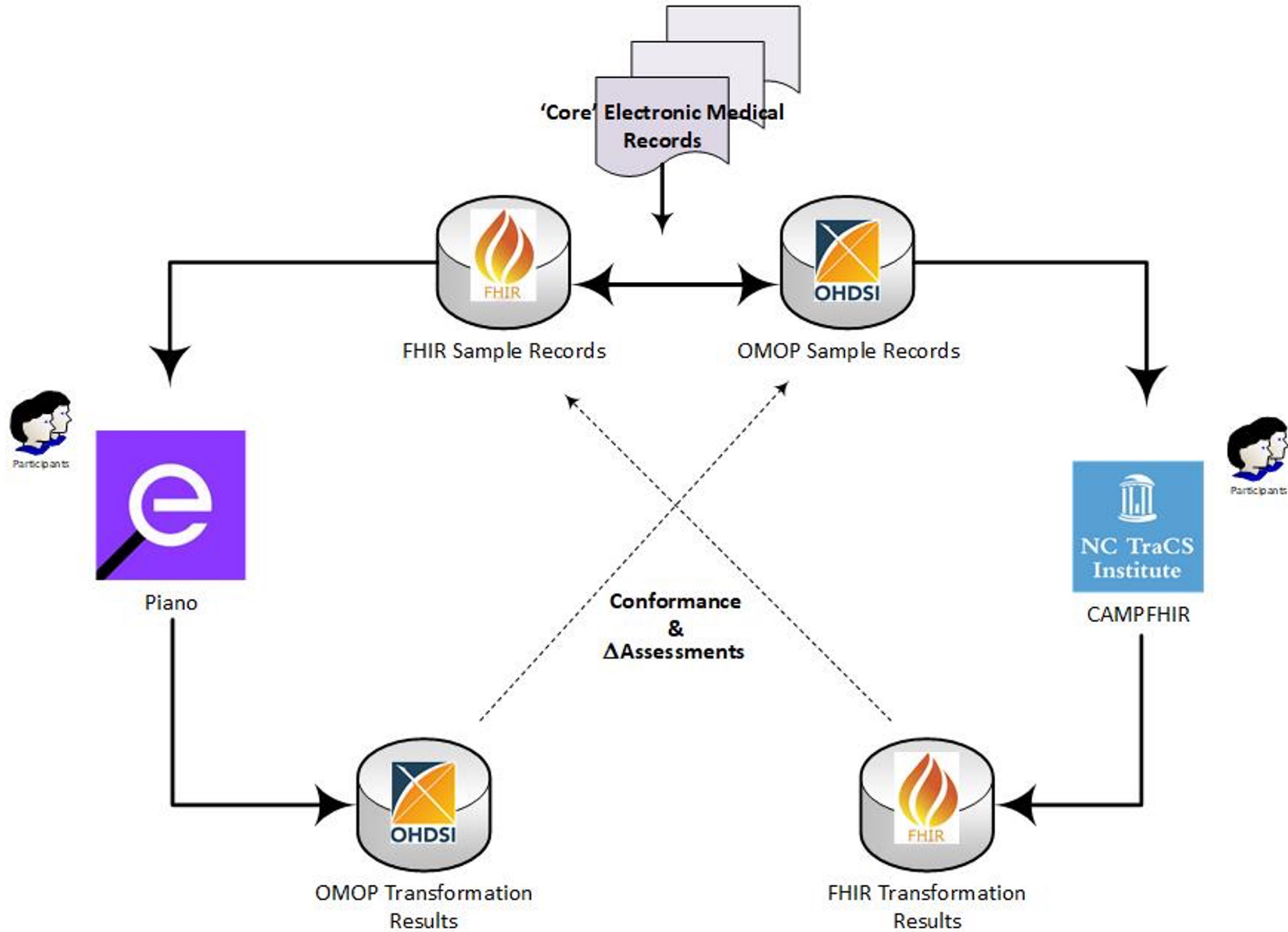
- ◆ To identify transformation
 - Best practices
 - Gaps to be addressed
- ◆ Support iterative subsequent events

Participant Perks

- ◆ Low-risk data transformation experience - suitable for all
- ◆ Hands-on 2 transformation tools
- ◆ Learn about FHIR



OHDSI 2023 Global Symposium OMOP + FHIR Connectathon Workflow





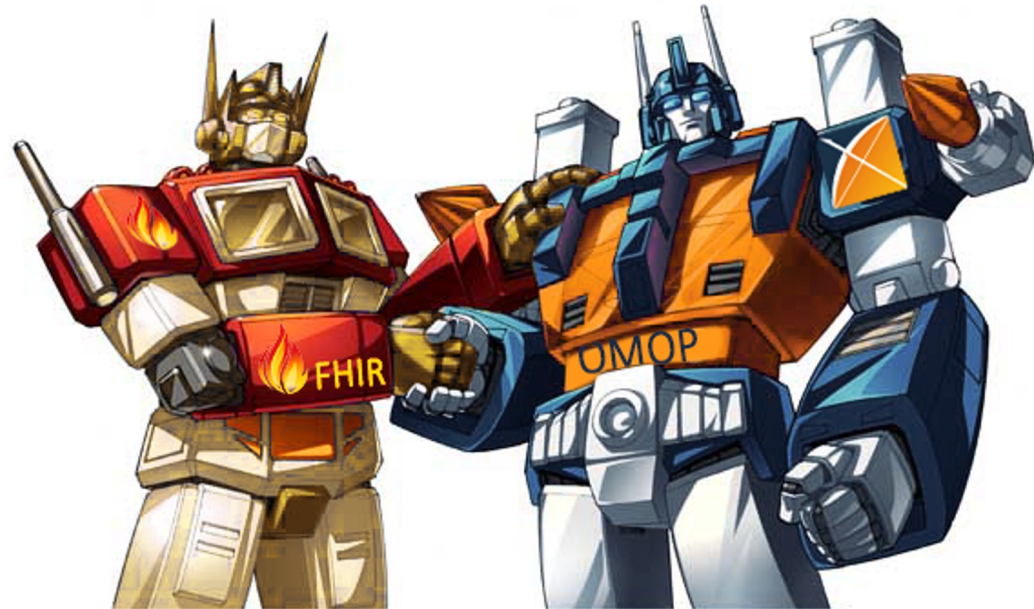
2023 Global Symposium OMOP + FHIR Connectathon Agenda: Sunday, October 22



9:00- 10:00a	Welcome / Agenda review <ul style="list-style-type: none">• Piano Workflow demo• CAMPFHIR workflow demo
10:00 - Noon	Hands-on transformations
Noon - 1:00p	LUNCH BREAK
1:00 - 2:00p	Preliminary OMOP -> FHIR Results <ul style="list-style-type: none">• FHIR RESTful query demonstration
2:00 - 4:00p	Hands-on transformations
4:00 - 5:00p	Wrap-up, Next steps



2023 OMOP + FHIR Working Group & Connectathon Contributors



- | | |
|------------------------|---------------------------|
| Adam Bouras | Gary Dickenson |
| Adam Lee | Guy Tsafnat |
| Amy Loriaux | Hayden Spence |
| Andy Kanter | Henry Ogoe |
| Ann Phillips | Joe Flack |
| Anna Jojic | Mike Hamidi |
| Ben Hamlin | Morgan Vaterkowski |
| Ben Smith | Shahim Essaid |
| Chris Roeder | Thomas White |
| Christian Reich | Wesley Anderson |
| Davera Gabriel | Will Roddy |



Global Symposium

Hotel Information and Sleeping Room Block

Hotel: [Hilton East Brunswick Hotel & Executive Meeting Center](#)

Address: 3 Tower Center Blvd. East Brunswick, New Jersey, 08816

Hotel Main Number: (732) 828-2000

Reservations Toll Free: 1-800-HILTONS (1-800-445-8667) When calling, please refer to the OHDSI Symposium

You may book your hotel sleeping room for the symposium by using the link below. Please note that the room rate may fluctuate after the room block fills up.

If you have booked a sleeping room in the OHDSI room block at the discounted rate, we ask that you do not cancel your reservation. If you must cancel it, please contact us first at symposium@ohdsi.org by September 15, so we can offer it to another OHDSI community member.

OHDSI GUEST ROOM BLOCK: [Available Rooms – Hilton East Brunswick Hotel & Executive Meeting Center](#)

Exhibitor Information

For a second consecutive year, the OHDSI Global Symposium will offer a limited number of opportunities for exhibitors. Organizations that provide professional products and services to members of the OHDSI community are encouraged to apply. When inquiring about exhibit space, please explain how your product/service connects to the OMOP CDM, OHDSI tools or OHDSI stakeholders. Exhibitors will be provided a dedicated space during the symposium weekend, with a 6-ft table, two chairs, and a sign. A listing of exhibitors will be provided as part of the final program to all attendees; to inquire about reserving an exhibitor space, please contact symposium@ohdsi.org.

Frequently Asked Questions (FAQs)

Please [check out this document on FAQs](#) about the 2023 Global Symposium. If you have other questions not addressed here, please contact symposium@ohdsi.org.

2023 Symposium FAQs

What modes of transportation can I take to the hotel?

Airports (please note that there are no airport shuttles to/from the hotel)

Newark Liberty International Airport (EWR) is approximately 25 minutes (22 Miles) to the hotel. Please see this link for additional airport information [EWR - Newark Liberty International Airport \(newarkairport.com\)](#)

Please see this link below for driving directions from Newark Int'l Airport to the Hilton East Brunswick [Newark Liberty International Airport to Hilton East Brunswick Hotel & Executive Meeting Center - Google Maps](#)

For other modes of transportation from Newark Int'l Airport to the hotel, you can check out this link [Newark Airport \(EWR\) to Hilton East Brunswick \(rome2rio.com\)](#)

La Guardia Airport (LGA) is approximately one hour (50 miles) to the hotel. Please note that in traffic this travel time can be significantly longer. Please see this link for additional airport information [LGA - LaGuardia Airport](#)

Please see this link below for driving directions from La Guardia Airport to the Hilton East Brunswick [LaGuardia Airport \(LGA\), Queens, NY to 3 Tower Center Blvd - Google Maps](#)

For other modes of transportation from La Guardia Airport to the hotel, you can check out this link [New York La Guardia Airport \(LGA\) to Hilton East Brunswick \(rome2rio.com\)](#)

John. F. Kennedy International Airport (JFK) is approximately one hour (50 miles) to the hotel. Please note in traffic the travel time can be significantly longer. Please see this link for additional airport information [JFK - John F. Kennedy International Airport \(jfkairport.com\)](#)

Please see this link below for driving directions from JFK Int'l Airport to the Hilton East Brunswick [JFK Airport \(JFK\), Queens, NY to 3 Tower Center Blvd - Google Maps](#)

For other modes of transportation from JFK to the hotel, you can check out this link [New York JFK Airport \(JFK\) to Hilton East Brunswick \(rome2rio.com\)](#)

Philadelphia International Airport (PHL) is approximately 1.5 hours (70 miles) to the hotel. Please note that in traffic this travel time can be significantly longer. Please see this link

What events are taking place in New York City in October?

New York City has many events year-round in all 5 boroughs, Long Island, update New York, and neighboring states (like Connecticut and New Jersey). Below are some links to find events, tours, parks, Broadway shows, best 2023 or oldest restaurants, and the many diverse neighborhoods in NYC.

[NYC Events October 2023 | New York, NY](#)

[New York City: Tours and Tickets - Tripadvisor](#)

[The 16 Best Parks to Enjoy All Year Round in NYC | Best NYC Parks \(timeout.com\)](#)

[Broadway Tickets | Broadway Shows | Theater Tickets | Broadway.com](#)

[The 18 Best NYC Restaurants To Visit In 2023 \(tastingtable.com\)](#)

[11 Oldest Restaurants in NYC \(Open Since the 19th Century!\) \(familydestinationsguide.com\)](#)

[New York City Neighborhoods | The Official Guide to New York City \(nycgo.com\)](#)

Please click the hotel link below to find out more about the amenities offered at the Hilton East Brunswick Hotel and Executive Meeting Center

[Hilton East Brunswick Hotel & Meeting Center](#)

Need more information regarding the 2023 OHDSI Symposium? Please email us at symposium@ohdsi.org. We will try to get back to you within 48 hours.

Observational Health Data Sciences & Informatics

Department of Biomedical Informatics

Columbia University Medical Center

622 West 168th Street, PH-20

New York, NY 10032

bit.ly/OHDSI2023-Agenda

Register

