DARWIN EU®
Progress and Roadmap

OHDSI Community Call
Sept. 5, 2023 • 11 am ET

Upcoming Community Calls

Date	Topic
Sept. 12	OHDSI 2023 Global Symposium Conference & Activities Preview
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 **Torunn Sivesind, Ani Oganesyan, Grace Bosma, Camille Hochheimer, Lisa Schilling, and Robert Dellavalle** on the publication of **Prescribing Patterns of Dupilumab for Atopic Dermatitis in Adults: Retrospective, Observational Cohort Study** in *JMIR Dermatology*.

Original Paper

Prescribing Patterns of Dupilumab for Atopic Dermatitis in Adults: Retrospective, Observational Cohort Study

Torunn E Sivesind[1], MD; Ani Oganesyan[2], BA; Grace Bosma[3], MSc; Camille Hochheimer[3], PhD; Lisa M Schilling[4,5], MD; Robert Dellavalle[6,7], MD, PhD

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Abstract

Background: Atopic dermatitis (AD) is a common inflammatory disease caused by a type 2 T helper cell–mediated immune response to environmental antigens. Approximately 1 in 5 patients with AD presents with moderate to severe disease, and treatments approved by the Food and Drug Administration include emollients, topical glucocorticoids, and calcineurin inhibitors. Dupilumab, a fully human monoclonal antibody, improves AD via inhibition of interleukin-4 and interleukin-13.

Objective: Our aim was to characterize the prescribing patterns of dupilumab for AD in adults at a large university-affiliated health system.

Methods: A retrospective, observational cohort study was conducted using electronic data from the Observational Health Data Sciences and Informatics database, assessing data from the University of Colorado Medical Campus and its affiliates. The outcome measured was the prevalence of dupilumab prescribed for adults with AD (n=6421), between March 28, 2013, and March 28, 2021. We assessed whether the characteristics of patients who received dupilumab were different from those who did not. Each patient characteristic was assessed using a univariate logistic regression with the binary outcome of receiving or not receiving dupilumab.

Results: We found a population prevalence of 5.6% (6421/114,476) for AD. In our cohort, Black patients with AD were more than twice as likely to have received dupilumab compared to White patients (odds ratio 2.352, 95% CI 1.58-3.39). Patients with a diagnosis of atopic neurodermatitis were approximately twice as likely to have received dupilumab compared to those with other diagnostic variants of AD (odds ratio 1.87, 95% CI 1.01-3.22).

#OHDSISocialShowcase

ohdsi.org/europe2023-showcase

#OHDSISocialShowcase

MONDAY

Community Contribution to the OHDSI Vocabularies, User-Level QA and a New Entity Mapping System SSSOM

(Oleg Zhuk, Anna Ostropolets, Nicolas Matentzoglu, Melissa Haendel, Alexander Davydov, Christian Reich)

Community Contribution to the OHDSI Vocabularies, User-Level QC and a New Entity Mapping System SSSOM

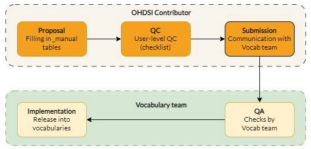
PRESENTER: **Oleg Zhuk**

BACKGROUND
OHDSI Vocabularies as of the beginning of 2023 encompass more than 130 vocabularies that are imported, manipulated and released by the OHDSI Vocabulary Team, which is a part of the OHDSI CDM Working Group.

METHODS
We split the use cases of community contribution into two groups: relatively simple, such as the addition or modification of relationships, and more complex, such as the modification of standard vocabularies and hierarchies, and then developed system to support them. Published guidelines represent the developed system and are currently only attributable to the first group of use cases.

RESULTS
According to published guidelines, every contributor needs to submit proposed changes in standardized format (*_manual* tables).
User-level QC in the form of a population of a checklist, unique for every use case, is required.
After filling out the checklist, proposed changes must be submitted to the vocabulary team. At that stage, no more input is expected from the OHDSI collaborator.
The vocabulary team continues with additional QA and incorporates proposed changes into the vocabulary ecosystem (Figure 1).

Figure 1. Community contribution dataflow



Scan QR to go to **Community contribution guidelines**

Fix your own Vocabulary:

Templates and guidelines let you

- **add** and **modify**
- **concepts** and **relationships**

QC checklists help you don't do anything wrong

SSSOM metadata save your contribution

Scan QR to go to **SSSOM documentation**

Published guidelines cover the following use cases (Table 1).

Table 1. Supported contribution use cases

#	Type
T1	Adding new non-standard concept(s) to an existing vocabulary
T2	Adding new synonym(s) to an existing concept(s)
T3	Adding a mapping to an existing concept
T4	Adding a new vocabulary as non-standard with mappings (full or partial) to a standard vocabulary
T5	Modifying attributes of an existing concept(s)
T6	Modifying mapping for an existing concept
T7	Promoting non-standard concepts to standard

Depending on the use case, the contributor needs to submit the following tables: *concept_manual, concept_relationship_manual, concept_synonym_manual, metadata, checklist*

The Vocabulary team stores metadata about the contribution. Their format is compatible with SSSOM. As of now, **date of submission, license status and contact details (email, name, organisation)** are collected per contribution and other parameters are collected per relationship (Table 2).

Table 2. Metadata collected per relationship

confidence	confidence in the new mapping (0-1)
predicate_id	type of matching (exactMatch, narrowMatch, broadMatch)
mapping_source	if applicable
mapping_justification	how the mapping was arrived at: ManualMappingCuration, LexicalMatching, etc.
mapping_tool	if applicable

Oleg Zhuk,
Anna Ostropolets,
Nicolas Matentzoglu,
Melissa Haendel,
Davera Gabriel,
Alexander Davydov,
Christian Reich

ODYSSEUS DATA SERVICES INC
OHDSI

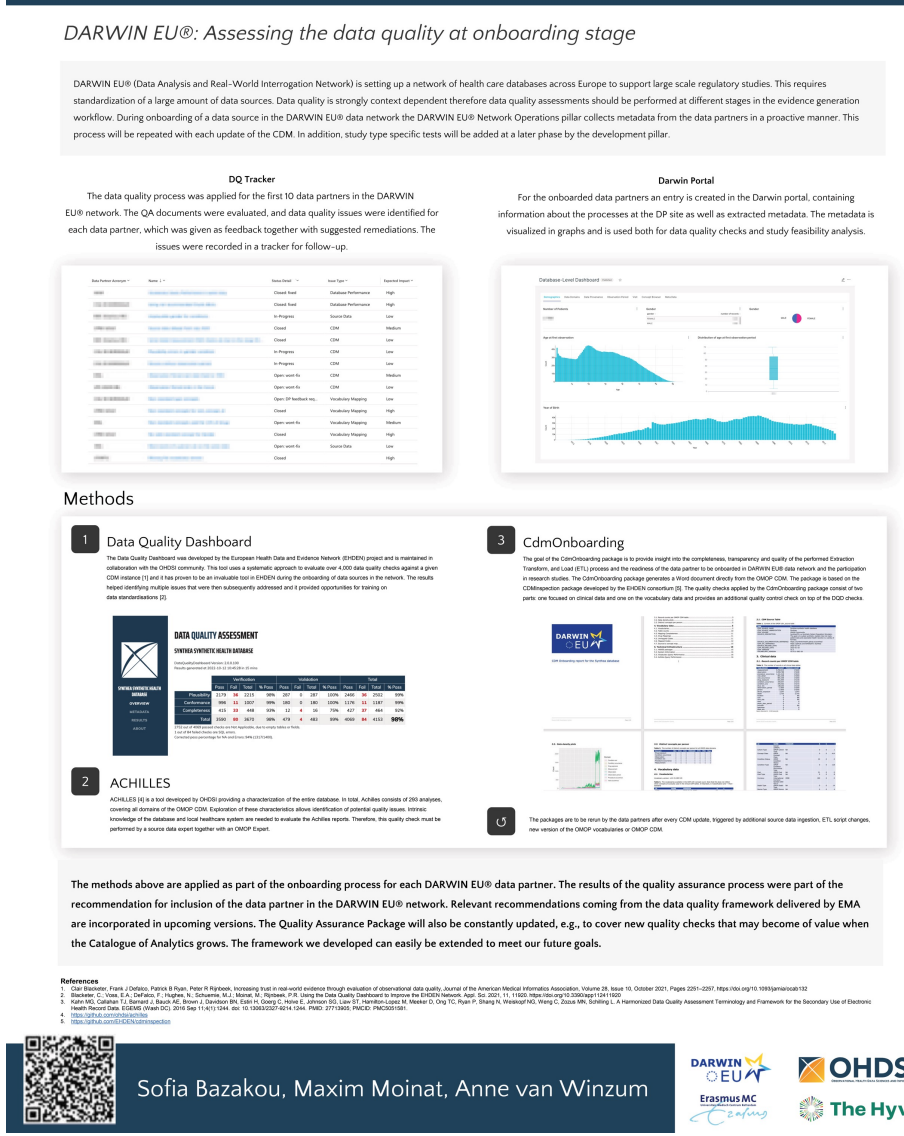
#OHDSISocialShowcase

A network of research ready data sets with a Dashboard tracking data quality issues and a Library of Metadata.

TUESDAY

DARWIN EU®: Assessing the data quality at data partner onboarding

(Sofia Bazakou, Maxim Moinat, Anne van Winzum)



#OHDSISocialShowcase

WEDNESDAY

Drug utilisation of valproate-containing medicinal products in women of childbearing age: a network study part of DARWIN EU®

(Albert Prats-Uribe, Martí Català, Katia M Verhamme, Maria de Ridder, Carlen Reyes, Talita Duarte-Salles, Peter Rijnbeek, Edward Burn, Daniel Prieto-Alhambra, Annika M. Jödicke)

Drug utilisation of valproate-containing medicinal products in women of childbearing age

a network study part of DARWIN EU®

PRESENTER: **Albert** Prats-Uribe

Background

One barrier to scalability and reproducibility is the phenotyping of cohorts (exposures, outcomes) of interest. The DARWIN EU® CC has created a repository of phenotypes deemed valid for regulatory research tested across the DARWIN EU Data Partner network named DECK (DARWIN EU Cohort Knowledge). We have also created a process that guides researchers through the steps needed for the use, generation, enhancement, and storage of phenotypes based on the OMOP CDM.

RESULTS

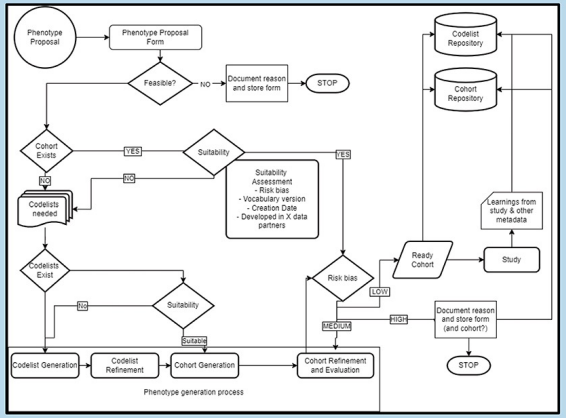
The process starts with the submission of a Phenotype Proposal Form with a semi-structured clinical description and a optimisation strategy that informs both concept set creation and the logics needed cohort creation.

After assessing the feasibility of identifying such a clinical entity, the next step is to check whether the requested phenotype exists already in the phenotype library, or if needs to be created from scratch.

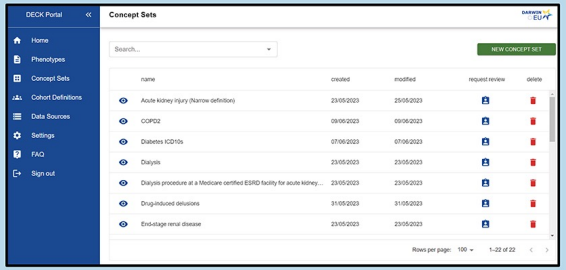
In case that a compatible phenotype already exists, the next step is to decide whether it is suitable for the proposed use, or if it needs to be modified, and how. Depending on the answer to these questions, a phenotype can be reused as is or it can be modified or adapted for the proposed new use. In case a phenotype needs modification, the resulting new version will be evaluated and (if approved) stored in DECK.

Scan QR to **download** the **protocol** and **full report** on EU PAS

Standardised procedure for creating, evaluating, and storing phenotypes in DARWIN EU®



Flow graph showing the proposed process for phenotyping in DARWIN EU®



Prototype of the phenotype tracker and library, the DECK

RESULTS

In case no compatible phenotype exists, a new one will be generated from scratch:

First, a search for potentially existing concept sets needed and evaluated or modified for the new use.

If no concept set exists, a new code list/concept set would be generated using the CodelistGenerator R package based on the specifications detailed in the Phenotype Proposal Form, and reviewed by clinical domain experts, and similarly evaluated for DARWIN EU® studies and Data Partners.

Once concept sets are available and deemed suitable, a cohort (or series of cohorts) will be created using software like ATLAS or programmatically using CapR, potentially including different flavours or optimisation strategies.

Following this step, the resulting cohorts will be evaluated using Cohortdiagnostics. Once approved, the cohorts and concept sets will be stored in DECK, with a clear registry of all the process steps, the request forms used, the clinical reviews, tracked changes, databases used for diagnostics, cohort evaluations, and the phenotyping and clinical experts involved.

CONCLUSION

A standardised procedure for creating, evaluating, and storing phenotypes has been created for DARWIN EU®, alongside of a phenotype library, i.e. DECK, that will be updated regularly as new phenotypes are added or revised. To aid in this process we are creating a web tool that follows the process and guarantees traceability, reproducibility, and reusability of concept sets and cohorts created and facilitates version control, user management.

Albert Prats-Uribe, Annika M. Jödicke, Asieh Golozar, Christian Reich, Rowan Parry, Peter Rijnbeek, Katia M Verhamme, Daniel Prieto-Alhambra

Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, University of Oxford
Odysseus Data Services
Department of Medical Informatics, Erasmus University Medical Center

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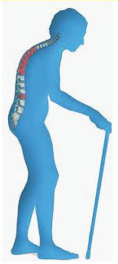
THURSDAY

Are scaphoid fractures osteoporotic?

(Yonathan Schwarcz, Chen Yanover, Inbal Goldshtein)

Which fracture types predict future osteoporotic fractures?



Background:

Current practice of risk assessment (FRAX) for major osteoporotic fractures (MOF) is based on age, sex, bone mineral density, BMI, comorbidities, and **prior osteoporotic fractures**.

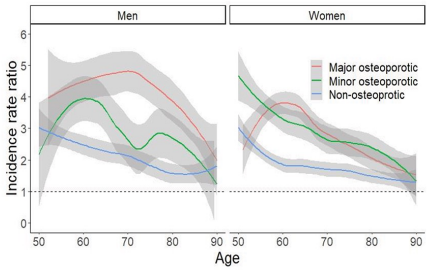
Prior **non-osteoporotic site fractures** are currently not taken into account, as their relation with MOF was not evaluated.

Even non-osteoporotic fractures are associated with excess risk for future major osteoporotic fractures, but to a lesser extent than prior minor and major osteoporotic fractures

	Men		Women	
Characteristic	SIR (95% CI)	P-value	SIR (95% CI)	P-value
Non-Osteoporotic	**3.09 (2.52 to 3.78)**	**<0.001**	**4.47 (4.06 to 4.92)**	**<0.001**
Minor	**4.95 (3.99 to 6.11)**	**<0.001**	**8.13 (7.29 to 9.05)**	**<0.001**
Major	**8.79 (7.22 to 10.7)**	**<0.001**	**9.05 (8.27 to 9.89)**	**<0.001**
Prior fracture recency				
1 year	–		–	
2 years	0.96 (0.79 to 1.17)	0.68	0.94 (0.85 to 1.03)	0.19
3+ years	0.65 (0.56 to 0.76)	<0.001	0.90 (0.84 to 0.97)	0.007
Deprivation index	1.14 (1.09 to 1.19)	<0.001	1.08 (1.06 to 1.10)	<0.001

SIR = Standardized Incidence Rate Ratio, CI = Confidence Interval

Standardized Incidence Ratio > 1 for **all types** of prior fractures (vs. the general population)



Methods

All n= 1,861,653 individuals aged 50+ on January 2010 (index date) were followed until MOF occurrence or end of observation. Incidence density rates of 3 sub-groups with prior fractures (non, minor and major osteoporotic) were compared to the overall general population after age and sex standardization. Poisson regression models included person time as offset and controlled for recency of prior fracture exposure and for Townsend deprivation index.

Limitation: The absence of bone mass density data may confound the results. Fracture classification was based mainly on location, and could not be fully ascertained due to non-availability of event circumstances or imaging.

KI website

Yonathan Schwarcz
Chen Yanover
Inbal Goldshtein

KI Research Institute

המרכז הרפואי בני ציון

OHDSI

#OHDSISocialShowcase

FRIDAY

Software demonstration for PatientProfiles: an R package for patient characterisation based on pre-defined phenotypes and cohorts

(Mike Du, Yuchen Guo, Kim Lopez-Guell, Xintong Li, Nuria Mercade Besora, Daniel Prieto-Alhambra, Edward Burn, Marti Catala)

Software demonstration for PatientProfiles: an R package for patient characterisation based on pre-defined phenotypes and cohorts

An R package to add characteristics to your cohort CDM environment.

Background: Several R packages have been developed to facilitate standardised analytics for OMOP CDM as part of the Darwin EU project, including CDMConnector (1) and IncidencePrevalence (2). CDMConnector provides a standardised approach to read, write, and connect to the OMOP CDM. IncidencePrevalence supports the analysis of incidence and prevalence for data mapped to the OMOP CDM in a reproducible manner. Although there are existing tools that provide functionality for defining and characterising cohorts of patients (e.g. the FeatureExtraction and Characterization R packages), no existing package provides a simple and flexible user interface for describing the demographics of patients in the OMOP CDM and working with the intersections between multiple patient cohorts This functionality Is often needed in epidemiologic research for creating a cohort-based "table one" as well as estimating outcomes for cohorts of interest.

PatientProfiles aims to

1) provide functionality for identifying the demographics of patients in the OMOP CDM (e.g., age, sex, days of prior history)
2) indicate the intersection between patient cohorts (e.g., identify days from entering one cohort to the entering another).

Methods: PatientProfiles is written in R (version 4.2.1) and was built using the most common R package tools like roxygen or devtools. This R package was built using a test-driven development approach. Tests were conducted on mock OMOP CDM data using the mockPatientProfiles function (currently >97%). The tests included checks on input/output formats, logical checks, expected true tests, and edge cases. User acceptance tests were also conducted to ensure informative function/argument naming.

Results: PatientProfiles is freely available under the Apache License (Version 2.0) and can be obtained from CRAN (v0.2.0), where full details and instructions for setup and use are provided (3). Detailed vignettes on the package's functionality are also freely available online from our github repository. **(See QR code below)**

Conclusion: The R package PatientProfiles provides a standardised process for working with patient characteristics captured in the Observational Medical Outcomes Partnership (OMOP) standard data model. It simplifies writing analytic code, and increases the reliability of analysis, making it a helpful tool for researchers utilising OMOP CDM.

Key functions:

Add individual patient characteristics
Add patient characteristics to a table in the OMOP Common Data Model

addAge()
Compute the age of the individuals at a certain date
addDateOfBirth()
Add a column with the individual birth date
addFutureObservation()
Compute the number of days till the end of the observation period at a certain date
addInObservation()
Indicate if a certain record is within the observation period
addPriorHistory()
Compute the number of days of prior history in the current observation period at a certain date
addSex()
Compute the sex of the individuals

Add a value from a cohort intersection
Add a variable indicating the intersection between a table in the OMOP Common Data Model and a cohort table.

addCohortIntersectCount()
It creates columns to indicate the number of occurrences of intersections with a cohort
addCohortIntersectDate()
Date of cohorts that are present in a certain window
addCohortIntersectDays()
It creates columns to indicate the number of days between the current table and a target cohort
addCohortIntersectFlag()
It creates columns to indicate the presence of cohorts

Figure 1. Example code snippets for PatientProfiles

Example code snippet: adding patient demographics

```
cdm$cohort1 <- cdm$cohort1 %>%
  addAge(
    cdm = cdm,
    ageGroup = list(c(0, 18), c(19, 65), c(66, 100))
  ) %>%
  addSex(cdm = cdm) %>%
  addPriorHistory(cdm = cdm)
```

Example code snippet: cohort intersections

```
cdm$cohort1 <- cdm$cohort1 %>%
  addCohortIntersectDate(
    cdm = cdm,
    targetCohortTable = "cohort2",
    targetCohortId = 1,
    order = "first",
    window = c(-Inf, Inf)
  )
```

Click here for more information

Mike Du[1], Yuchen Guo[1], Kim López-Güell[1], Xintong Li[1], Nuria Mercade Besora[1], Daniel Prieto-Alhambra[1,2], Edward Burn[1], Marti Catala[1]

1 Pharmaco- and Device Epidemiology, Centre for Statistics in Medicine, Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences (NDROMS), University of Oxford, UK
2 Erasmus University Medical Centre, Rotterdam, The Netherlands

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	12 pm	Common Data Model Vocabulary Subgroup
Wednesday	2 am	Methods Research
Wednesday	7 am	Medical Imaging
Wednesday	8 am	Psychiatry
Wednesday	12 pm	Health Equity
Thursday	9 am	Medical Devices
Thursday	9:30 am	Themis
Thursday	12 pm	Methods Research
Thursday	1 pm	OMOP CDM Oncology Vocabulary/Development Subgroup
Thursday	7 pm	Dentistry
Friday	9 am	Phenotype Development & Evaluation
Friday	9 am	GIS – Geographic Information System General
Friday	11 pm	China Chapter
Monday	10 am	Healthcare Systems Interest Group
Monday	11 am	Early-Stage Researchers
Monday	6 pm	OMOP & FHIR
Tuesday	9 am	OMOP CDM Oncology Genomic Subgroup

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	State of the Community OHDSI: Where have we been? Where are we going? George Hripcsak, Columbia Univ. Community Highlights: • 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	OHDSI Community Networking Moderators: • Faaizah Arshad, Univ. of California-Los Angeles • Cynthia Sung, Duke-NUS Medical School
10:30 am - 12:00 pm Grand Ballroom	Plenary: Improving the reliability and scale of case validation Presenters: • 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	Panel: Lessons learned from OHDSI network studies Presenters: • 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 Moderator: Sarah Seager, IQVIA
2:00 pm - 2:45 pm Grand Ballroom	Collaborator Showcase, Lightning Talk Session #1: Data Standards and Methods Research • 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 Moderator: Davera Gabriel, Johns Hopkins University
2:45 - 3:30 pm Grand Ballroom	Collaborator Showcase, Poster / Demo Session #1 Poster walk leads: • 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	Collaborator Showcase, Lightning Talk Session #2: Methods Research and Clinical Applications • 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 cholangiopancreatography (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 Moderator: Atif Adam, IQVIA
4:15 - 5:00 pm Grand Ballroom	Collaborator Showcase, Poster / Demo Session #2 Poster walk leads: • 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	Closing session: Scaling community, scaling collaboration • 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!

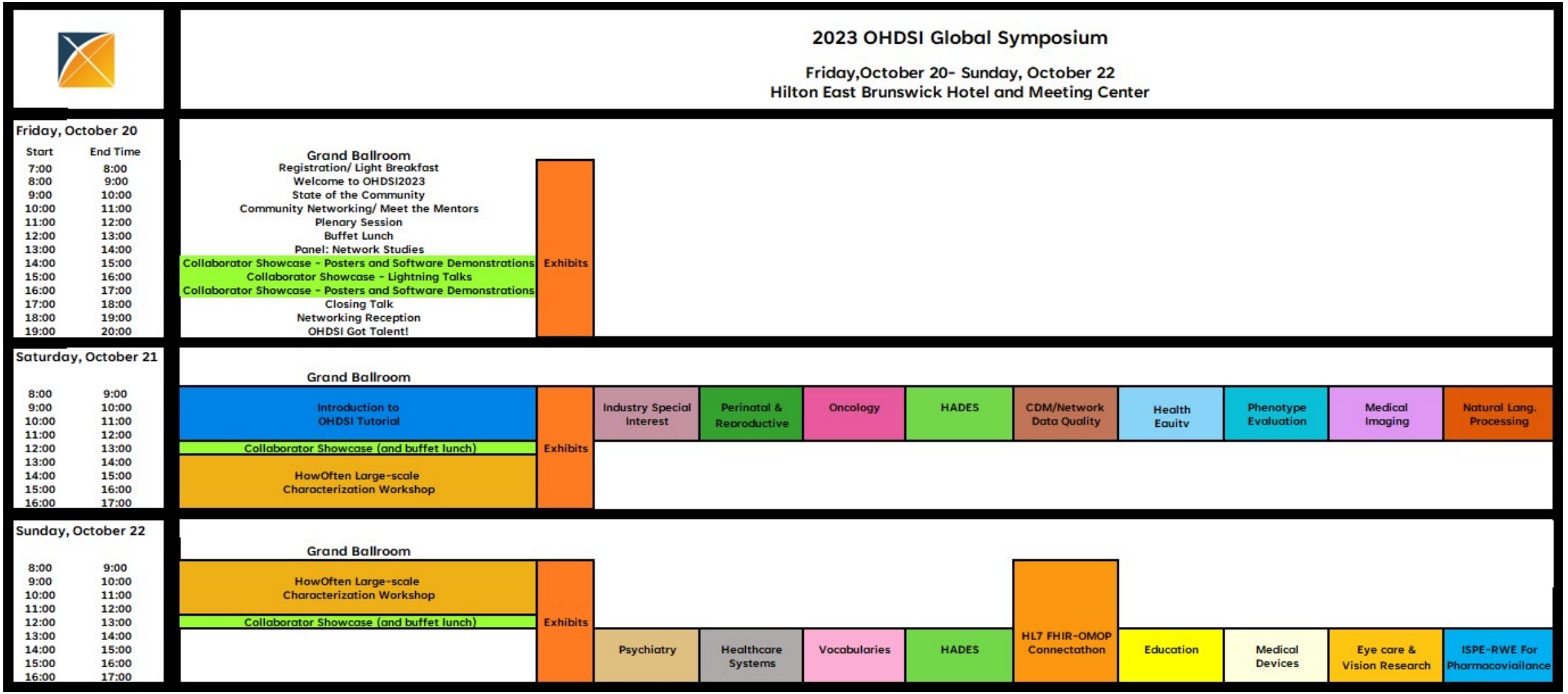
bit.ly/OHDSI2023-Agenda

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	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 activites
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



Global Symposium

Oct. 20-22 • East Brunswick, NJ, USA

Hilton East Brunswick Hotel & Executive Meeting Center

bit.ly/OHDSI2023Registration

September Newsletter

OHDSI

The Journey Newsletter (September 2023)

The **2023 OHDSI Global Symposium agenda** is now available and includes sessions focused on improving the reliability and scale of case validation, lessons learned from OHDSI network studies, and recent research advances within the OHDSI community. Register now for the Oct. 20-22 event at the Hilton East Brunswick Hotel & Executive Meeting Center! This newsletter also looks at the latest release of OHDSI Standardized Vocabularies, the OMOP CDM database survey, a new collaborator spotlight, and plenty more! **#JoinTheJourney**

OHDSI Videocast: Symposium Agenda, Vocabularies, CDM Survey

In the latest On The Journey video, Patrick Ryan and Craig Sachson go through the agenda for the 2023 OHDSI Global Symposium main conference. They also reflect on the summer release of the OHDSI standardized vocabularies, and they discuss the OMOP CDM database survey, as well as other key deadlines in September. *(if video does not appear, click 'view this email in your browser')*

Community Updates

Where Have We Been?

- The Summer 2023 OHDSI Standardized Vocabulary Release was announced during the Aug. 29 community call, and it included a discussion on the seven vocabularies (CPT4, LOINC, NDC, RxNorm, RxNorm Extension, SPL and VANDF) that are either being refreshed or updated. There was also a look ahead to the February 2024 update, which is planned to include work on SNOMED and ICD10, among others.
- All presentations from both the 2023 Europe and Asia-Pacific Symposiums have been posted to the OHDSI homepage and YouTube channel. Both homepages also include links to the posters from their respective collaborator showcases, as well as the tutorials hosted at both symposiums.

Where Are We Now?

- Our community is working to identify all of the global databases that have standardized their data to the OMOP CDM. If your institution holds such data, please fill out this BRIEF survey; if you do so by **Sept. 8**, your place in the next version of the Our Journey annual report will be ensured.
- As discussed during the Aug. 15 community call, the OHDSI community is looking for community-contributed phenotypes to be used during the HowOften large-scale incidence characterization workshop at the Global Symposium. Please contribute phenotypes that we can use as target or outcome cohorts in the analysis. More information is available here, and all phenotypes are due by **Sept. 15**.
- The Titan Awards honor individuals, teams and institutions who have made significant contributions over the previous year towards advancing OHDSI's mission, vision and values, and they are presented during the Global Symposium closing talk. Nominations are open for each of OHDSI's seven Titan Award categories, but please submit them before the **Sept. 15** deadline.

Where Are We Going?

- The 2023 OHDSI Global Symposium will be held Oct. 20-22, 2023, in East Brunswick, New Jersey, USA, at the Hilton East Brunswick Hotel & Executive Meeting Center. Registration is open for this event; at your time of registration, please choose which weekend activities (tutorial, work group meetings, etc.) you would like to join.

2023 Global Symposium Agenda Announced!

The 2023 OHDSI Global Symposium agenda is now available and highlights the most diverse agenda in our event history. More than 35 community members from around the world will help put together an event that will include a plenary on "Improving the reliability and scale of case validation," a panel session on "Lessons learned from OHDSI network studies," 10 lightning talks, a look at the state of the OHDSI community, and plenty more.

A record-setting amount of collaborator showcase submissions will be shared throughout the weekend. There will be multiple poster/demo sessions and lightning talks during the main conference, but there will also be poster sessions throughout the weekend as well.

Please join us Oct. 20-22 at the Hilton East Brunswick Hotel & Executive Meeting Center in East Brunswick, NJ, USA for our ninth Global Symposium!

Main Conference Agenda

Weekend Schedule

Register

Symposium Homepage

mailchi.mp/ohdsi/september2023

Publications

Lee YJ, Kim J, Han Y, Hwang K, Choi B, Oh TR, Kim IY, Rhee H. Risk of Hyponatremia after Tramadol/Acetaminophen Single-Pill Combination Therapy: A Real-World Study Based on the OMOP-CDM Database. Drugs R D. 2023 Sep;23(3):289-296. doi: 10.1007/s40268-023-00436-4. Epub 2023 Jul 28. PMID: 37507616; PMCID: PMC10439094.

Ahmadi N, Zoch M, Kelbert P, Noll R, Schaaf J, Wolfien M, Sedlmayr M. Methods Used in the Development of Common Data Models for Health Data: Scoping Review. JMIR Med Inform. 2023 Aug 3;11:e45116. doi: 10.2196/45116. PMID: 37535410; PMCID: PMC10436118.

Birch RJ, Umbel K, Karafin MS, Goel R, Mathew S, Pace W; NHLBI Recipient Epidemiology and Donor Evaluation Study-IV-Pediatric (REDS-IV-P). How do we build a comprehensive Vein-to-Vein (V2V) database for conduct of observational studies in transfusion medicine? Demonstrated with the Recipient Epidemiology and Donor Evaluation Study-IV-Pediatric V2V database protocol. Transfusion. 2023 Aug 19. doi: 10.1111/trf.17507. Epub ahead of print. PMID: 37596918.

Wu Q, Schuemie MJ, Suchard MA, Ryan P, Hripcsak GM, Rohde CA, Chen Y. Padé approximant meets federated learning: A nearly lossless, one-shot algorithm for evidence synthesis in distributed research networks with rare outcomes. J Biomed Inform. 2023 Aug 18:104476. doi: 10.1016/j.jbi.2023.104476. Epub ahead of print. PMID: 37598737.

Adelman MJ, Sivesind TE, Weber I, Bosma G, Hochheimer C, Karimkhani C, Schilling LM, Barbieri JS, Dellavalle RP. Prescribing Patterns of Oral Antibiotics and Isotretinoin for Acne in a Colorado Hospital System: Retrospective Cohort Study. JMIR Dermatol. 2023 Aug 21;6:e42883. doi: 10.2196/42883. PMID: 37603402.

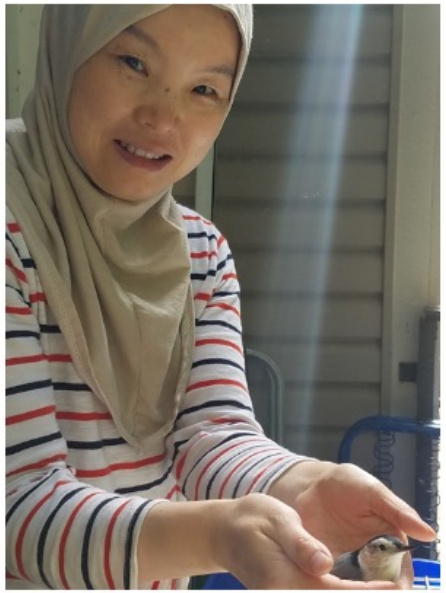
Li M, Itzel T, Montagut NE, Falconer T, Daza J, Park J, Cheong JY, Park RW, Wiest I, Ebert MP, Hripcsak G, Teufel A. Impact of concomitant cardiovascular medications on overall survival in patients with liver cirrhosis. Scand J Gastroenterol. 2023 Aug 22:1-9. doi: 10.1080/00365521.2023.2239974. Epub ahead of print. PMID: 37608699.

Collaborator Spotlight: Asiyah Lin

Dr. Asiyah Lin is a passionate community builder, thinker, mentor, and a senior data scientist/ontologist with a diverse interdisciplinary background in medicine, immunology, molecular biology, medical informatics, and e-commerce entrepreneurship. She studied Pediatrics and Molecular Immunology from Tongji Medical College at Wuhan, China. She obtained her PhD degree from the Kobe University Medical School in Kobe, Japan. She completed her post-doc training with Dr. Yongqun "Oliver" He's lab in University of Michigan. After that, she started her journey with the US federal agencies at the FDA and NIH. She is now working as a consultant as well as an independent contractor to serve the NIH and other organizations for data science strategies and ontology development.

Asiyah initiated the Medical Device WG together with Vojtech Huser in the fall of 2019 with a goal of growing a community for all people who are interested in using and expanding OHDSI tools and standards for medical device related research.

Asiyah discusses her career journey, some of the exciting breakthroughs in the area of biomedical ontology, the collaboration between OHDSI and the FDA, and more in the latest edition of the Collaborator Spotlight.



You originally studied medicine, so what first inspired your interest in data science and informatics?

My mom is a retired librarian. When I was in high school, I spent my summers reading the books from A to Z in her library. Although I studied medicine, I've been always interested in learning about computers and informatics. I went to computer training classes outside of school to learn. I was working in a dot com startup company in China after I finished my master's degree in Immunology. This startup company accelerated my understanding of the web, internet, and business. I am a curious, motivated self-learner and doer. I am always curious about learning new skills and technologies. I started with self-learned bioinformatics during my master's years in China. After the start-up experience, I then joined the PhD program in Japan for medical informatics. Along with years of working experience, the interest just naturally grew while the technology is advancing. However, I have a passion in getting data ready for AI/ML, because we spent 60-80% of the time preparing data for the next step. If we can reduce that time, how wonderful will the science and research be?

Spotlight: Asiyah Lin

There is something unique about the OHDSI organization and how they support the community, which motivates the community to work as a whole. We know that with greater diversity and inclusiveness, there is greater creativity and innovation.

OHDSI
OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS

ohdsi.org/spotlight-asiyah-lin

Sept. 8: OMOP CDM Survey

OMOP CDM Survey 2023

Please fill in the responses below for **each database** at your institution that has been converted to the OMOP Common Data Model. This information will be used to build our list of databases currently using the OMOP CDM and Standard Vocabularies. Our most recent list can be found on pages 46-47 of the 2022 Our Journey publication. **If you would like to be included in the 2023 edition of *Our Journey* be sure to fill out the survey by *September 8th*!**

OHDSI will not use your contact information for any purpose other than to inquire about your responses or if you select "yes" as the answer to the final question about your interest in your database becoming a network study candidate. To be compliant with GDPR, your name and email will not be shared.

Sept. 8: OMOP CDM Survey – be in the next Our Journey!

OHDSI Data Partners

What does it take to be an OHDSI data partner? Anyone with access to observational data can standardize their database in the OMOP Common Data Model, apply OHDSI's open-source tools, and participate in collaborative research.

Who has already joined the journey and adopted the OMOP CDM? There are currently 453 databases, including 374 electronic health records, 34 registries and 30 administrative claims sources, that come from 41 different countries. Together, these databases represent more than 928 million unique patient records, approximately 12% of the world's population.

Australia (14)
AOA National Joint Replacement Registry
AU-ePBRN (Australian Electronic practice based research network)
AUS Department of Veterans Affairs
Austin Health
IQVIA Australia LPD
Melbourne Childrens Hospital
NPS MedicineWise
Pharmaceutical Benefits Scheme 10% extract
Primary Care GP data (Patron)
Royal Melbourne Hospital and Western Health Hospital Admissions
South Western Sydney LHD
Sydney Childrens Hospital
Sydney Local Health District (LHD)
University of Queensland - Queensland Health

Austria (1)
Medical University of Vienna

Belgium (18)
Az Damiaan Oostende
AZ Delta
AZ Klina
AZ Maria Middelares
Icometrix
IQVIA Belgium LPD
LynxCare
Medaman
Onze-Lieve-Vrouwziekenhuis Aalst-Asse-Ninove
THIN BE
Universitaire Ziekenhuizen KU Leuven
University Hospital Antwerp
University MS Center
University MS Center
UZ Brussel
UZ Leuven
VZW AZ Groeninge
Ziekenhuis Oost-Limburg

Bosnia and Herzegovina (1)
E-MEDIT D.O.O. & Hospital Travnik

Brazil (4)
Centre of Health Data and Knowledge Integration - Cidacs
DataSUS Ambulatory
Hospital Israelita Albert Einstein
IQVIA Brazil

Bulgaria (2)
National Scientific Programme "E-Health in Bulgaria"
SAT Health

Canada (3)
IQVIA Canada EMR
Provincial Health Services Authority (British Columbia)
The Hospital for Sick Children

China (7)
Beijing Anding Psychiatry Hospital
Beijing Smindu Medical Science & Technology CO., Ltd.
Hebei Province Psychiatry Hospital
Jiangsu Province People's Hospital
Nanfang Hospital COVID-19 Research Database (NFHCRD)
Tianjin Anding Psychiatry Hospital
Wordcare Information

Colombia (1)
Hospital Universidad del Norte

Croatia (7)
Bács-Kiskun Megyei Kórház a Szegedi Tudományegyetem Általános Orvostudományi Kar Oktató Kórháza
Clinical Hospital Dubrava
Hierarchia & University Hospital Centre Zagreb
IGEA d.o.o. & University Hospital Center Sestre milosrdnice
IN2 d.o.o. & Clinical Hospital Center Osijek
MOS Grupa d.o.o. & Health Care Center of Primorje-Gorski Kotar County
Szabolcs-Szatmár-Bereg Megyei Kórházak és Egyetemi Oktatókórház

Czechia (3)
Czech Myeloma Group
Institute of Rheumatology
OAKS Consulting s.r.o.

Denmark (2)
Aarhus University Hospital Database
Center for Surgical Science (CSS)

Estonia (2)
Estonian Genome Center at the University of Tartu (EGCUT)
University of Tartu

Finland (10)
Auria Clinical Informatics
BCB Medical Ltd.
Finnish Clinical Biobank Tampere
Finnish Hematology Registry/ HUS
Finnish Institute for Health and Welfare (THL)
Hospital District of Helsinki and Uusimaa
Hospital District of Southwest Finland
HUS Datalake eCare/eMe POC
Pirkanmaa Hospital District
University of Turku (Prostate Cancer Registry of South West Finland)

France (13)
APHP-EDS
Assistance Publique - Hopitaux de Marseille
Assistance Publique – Hôpitaux de Paris (AP-HP)
Bordeaux University Hospital
CEGEDIM HEALTH DATA
Centre Hospitalier Universitaire de Lille
Centre Hospitalier Universitaire de Montpellier
Centre Hospitalier Universitaire de Toulouse
IQVIA France DA
IQVIA France LPD
Lille University Hospital
SNDS
THIN FR

Germany (11)
CancerDataNet GmbH
Charité - Universitätsmedizin Berlin
European Rare Kidney Disease Registry (ERKReg)
GermanOncology
Hanover Medical School, Germany
IQVIA Germany DA
Krebsregister Rheinland-Pfalz
MIS Forschungs- und Projektentwickl-lungs-gGmbH
UKER
University Medicine Dresden
University of Ulm, ZIBMT

Greece (4)
Diagnostic & Therapeutic Center Of Athens "Hygeia" Single Member Societe Anonnyme
General Hospital of Kavala
Innovative Medical Research SA
Papageorgiou General Hospital

Hungary (2)
Semmelweis University
University of Pécs

India (1)
Buddhimed Technologies

Ireland (1)
Trinity St James's Cancer Institute, Dublin

Israel (4)
Hadassah CBGYN
Kinesh (Ministry of Health medical center network)
Loccese
The Directorate of Government Medical Centers at the Israeli Ministry Of Health

Italy (28)
Agenzia regionale di sanità della Toscana (ARS)
AO Card. G. Panico - Center for Neurodegenerative Diseases and Aging Brain
ASL Roma 1
ATS Bergamo
Azienda Ospedaliera SS Antonio e Biagio e Cesare Arrigo
Azienda Ospedaliera Universitarie Integrata Verona
AZIENDA OSPEDALIERO UNIVERSITARIA SAN LUIGI GONZAGA
Azienda Ospedaliero-Universitaria di Modena
Bambino Gesù Children's Hospital
Basilicata Cancer Registry
Casa di Cura Privata del Policlinico (CCPP)
Fondazione Case Sollievo della Sofferenza
Fondazione IRCCS Ca' Grande Ospedale Maggiore Policlinico
Fondazione IRCCS Istituto Neurologico Carlo Besta
Fondazione IRCCS Policlinico San Matteo
Fondazione Istituto Nazionale dei Tumori
Fondazione Policlinico Universitario A. Gemelli IRCCS
FONDAZIONE TOSCANA GABRIELE MONASTERIO PER LA RICERCA MEDICA E DI SANITÀ PUBBLICA (FTGM)
Grande Ospedale Metropolitano "Bianchi-Melacrino-Morelli"
Inspire-srl
IQVIA Italy LPD
IRCCS Azienda Ospedaliero-Universitaria di Bologna Policlinico di Sant'Orsola
IRCCS Policlinico San Donato
ISMETT
Modena Oncology Center - Azienda Ospedaliera Modena
Pediatnet
Società Italiana di Medicina Generale e delle cure Primarie (SIMG)
University Hospital of Parma

Japan (4)
IQVIA Japan Claims
IQVIA Japan HIS
Japan Medical Data Center (JMDC)
MDV (Medical Data Vision)

Luxembourg (1)
Registre National du Cancer du Luxembourg

Montenegro (1)
Clinical Center of Montenegro

Netherlands (12)
Amsterdam UMC
EBMT: The European Society for Blood and Marrow Transplantation
European Clinical Research Alliance on Infectious Diseases (ECRAID) and University Medical Center Utrecht (UMCU)
Hanns Stiger
INNL
Integrated Primary Care Information (IPCI)
National Intensive Care Evaluation foundation
Netherlands Cancer Registry
Pharmo
Stichting VUmc-
STIZON
VeCuri Medisch Centrum

Norway (2)
The Norwegian Cancer Registry
University Of Oslo

Portugal (11)
APDP
Centro Clínico Académico e Braga, Associação (2CA-Braga)
Centro Hospitalar Universitário de Coimbra (CHUC)
CUF
EGAS MONIZ HEALTH ALLIANCE
Hospital da Luz Learning Health
Hospital Distrital de Santarém (HDS)
Hospital do Espírito Santo de Evora
Instituto de Medicina Molecular
Registo Portugues de Doenties Reumaticos
Unidade Local de Saúde de Matosinhos

Republic of Korea (59)
Ajou University Hospital
Asan Medical Center
Bucheon Sejong Hospital
Catholic Kwandong University International ST. Mary's Hospital
Cha University Bundang Medical Center
Chonnam National University Hwasun Hospital
Chonnam National University Hospital
Chungnam National University Hospital
Chungnam National University Sejong Hospital
Daegu Catholic University Medical Center
Dankook University Hospital
Dongguk University Medical Center
Ewha Womans University Medical Center (Mokdong)
Ewha Womens University Medical Center (Seoul)
Gachon University Gil Medical CenterGachon University Gil Medical Center
Gangnam Severance Hospital
Gangneung Asan Hospital
Gyeongsang National University Changwon Hospital
Gyeongsang National University Hospital
Hanyang University Seoul Hospital
Health Insurance Review & Assessment Service
Incheon Sejong Hospital
Inha University Hospital
Jeonbuk National University Hospital
Kangbuk Samsung Hospital
Kangdong Sacred Heart Hospital
Kangwon National University Hospital
Konkuk University Medical Center
Korea University Hospital
Korea Institute of Radiological & Medical Sciences
Korea University Anam Hospital
Korea University Ansan Hospital
Korea University Guro Hospital
Kyung Hee University Hospital At Gangdong
Kyung Hee University Medical Center
Kyungpook National University Chilgok Hospital
Kyungpook national university hospital
Myongji Hospital
Myongji Hospital (Jecheon)
National Cancer Center
National Health Insurance Service
National Health Insurance Service Ilsan Hospital
Pusan National University Hospital
Samsungmedical Center
Seoul National University Bundang Hospital
Seoul National University Hospital
Severance Hospital
Soonchunghyang University Hospital (Bucheon)
Soonchunghyang University Hospital (Chonan)
Soonchunghyang University Hospital (Gumi)
Soonchunghyang University Hospital(Seoul)
The Catholic University of Korea, Seoul ST. Mary's Hospital
The Catholic University of Korea, ST. Vincent's Hospital
The Catholic University of Korea, Uijeongbu ST. Mary's Hospital
The Catholic University of Korea, Yeouido ST. Mary's Hospital
Ulsan University Hospital
Wonju Severance Christian Hospital
Wonkwang University Hospital
Yongin Severance Hospital

Romania (1)
Thin Ro

Saudi Arabia (1)
Saudi Food and Drug Authority

Scotland (1)
HIC Dundee

Serbia (5)
Clinical-hospital center Zvezdara
Klinički-bolnički centar Zvezdara (Clinical-hospital center Zvezdara)
Primary Healthcare Center Zemun
University Clinical Center of NiŠ
University Clinical Center of Serbia

Singapore (3)
Growing Up in Singapore Towards healthy Outcomes (GUSTO)
Khoo Teck Puat Hospital (SG_KTPH)
National University Hospital Singapore

Spain (37)
Agencia Española de Medicamentos y Productos Sanitarios, AEMPS
BIOCRUCES BIZKAIA HEALTH RESEARCH INSTITUTE
Conselleria de Sanidade
Consorci Corporació Sanitària Parc Taulí
Consorci Mar Parc de Salut de Barcelona (PSMAR)
CORPORACIÓ SANITARIA PARC TAULI
FISABIO-HSRU
Fundació Institut d'investigació Sanitària Illes Balears
Fundació Institut d'investigacions Mèdiques (FIMIM)
Fundacion de investigacion Biomedica del Hospital Universitario 12 de Octubre
Fundación para la Investigación Biomedica INCLIVA
FUNDACION PARA LA INVESTIGACION DEL HOSPITAL UNIVERSITARIO LA FE DE LA COMUNIDAD VALENCIANA (HULAFE)
Fundación para la Investigación del Hospital Universitario La Fe de la Comunidad Valenciana (HULAFE)
Fundación para la Investigación e Innovación Biosanitaria en Atención Primaria (FIBAP)
Healthcare Service of the Principality of Asturias
HM Hospitales
Hospital del Mar (HMAR)
Hospital Sant Joan de Déu
Hospital Universitario 12 de Octubre
INFOSANCO12
Information System of Parc de Salut Mar (IMASIS)
Institut Català d'Oncologia
Instituto Aragonés de Ciencias de la Salud (IACS)
IQVIA Spain LPD
Marina Salud (Hospital de Denia)
Parc Sanitari Sant Joan de Déu
Pedro Mellol
Research Institute - Hospital de la Santa Creu i Sant Pau
Rioja Salud
Servicio Cántabro de Salud and IDIVAL
Servicio Madrileño de Salud
Servicio Navarro de Salud Osasunbidea (SNS-O)
The information System for Research in Primary Care
The Information System for Research in Primary Care – Hospitalization Linked Data (SIDIAP-HI)
Vall d'Hebron Hospital Campus
Vall d'Hebron Hospital Campus
Virgen Macarena University Hospital

Sweden (2)
MEB KI
Swbreg

Switzerland (5)
CancerDataNet

Data2time
Geneva Cancer Registry
HUG and SCCM
Institute of Social and Preventive Medicine, University of Bern

Taiwan (5)
NHIRD
Shuang Ho Hospital
Taipei Medical University Clinical Research Database (TMUCRD)
Taipei Medical University Hospital
Wanfang Hospital

Turkey (2)
Istanbul University Istanbul Faculty of Medicine
IUC Cerrahpaşa TIP Fakültesi

United Kingdom (25)
Alerta Health
Barts Health NHS Trust
Clinical Practice Research Datalink (CPRD GOLD)
Clinical Practice Research Datalink Aurum (CPRD Aurum)
Connected Bradford
DataLoch
GOSH
Harvey Walsh Ltd
King's College London
Leeds Teaching Hospitals
OPEN Health
Optimum Patient Care Limited
Queen Mary University of London
Royal College of General Practitioners Research and Surveillance Centre
SAIL Databank
THIN UK
UCL
UK Biobank
UK Integrated Medical Record Database (IMRD) THIN
UK National Neonatal Research Database (UKNRS)
University College London CALIBER
University College London Hospitals
University College London Hospitals NHS Foundation Trust
University of Edinburgh
University of Edinburgh DataLoch

United States (136)
5up health
Advocate Aurora Health & University of Madison Health Non-Muscle Invasive Bladder Cancer
Advocate Aurora Health COVID Database
All of Us Research Program
ALTAMED (University of Southern California)
Atrium - Wake Forest Baptist Health
Blue Health Intelligence
Boston Medical Center
Brown University - Rhode Island HIE
C-Path
Carilion Clinic
Case Western
Cerner HealthFacts
Cherokee Health Systems
Children's Hospital of Colorado
Children's Hospital of Los Angeles
Children's Hospital of Philadelphia
Children's National
Columbia University Irving Medical Center
CRHFEI
DARTNet Institute: CER2 Study
Decision Resources Group (DRG)
Department of Health Services - Los Angeles
Duke University
Eau Claire Cooperative Health Center
Flatiron - OSCER
Geisinger Health System
George Washington University
Georgetown University ARIA
Georgia Tech Research Institute
GeriOMOP
Harvard University Mass General Brigham
Healthverity
IBM(R) MarketScan(R) Commercial Claims (CCAE)
IBM(R) MarketScan(R) Medicare Supplemental Database (MDCR)
IBM(R) MarketScan(R) Multi-State Medicaid Database (MDCD)
Icahn School of Medicine at Mount Sinai
Indiana University School of Medicine / Regenstrief Institute
Inova Health System
IQVIA US Ambulatory EMR
IQVIA US Hospital Charge Data Master (CDM)
IQVIA US Oncology EMR
IQVIA US Open Claims
IQVIA US Pharmetrics Plus
Johns Hopkins University
Keck Medicine of University of Southern California
Loyola University New Orleans
Maine Medical Center
Mayo Clinic
Medical University of South Carolina
Medicare Research Identifiable Files
MedStar Health
Memorial Sloan Kettering Cancer Center
Momentum AD
Montefiore Medical Center (Albert Einstein College of Medicine)
N3C
Nemours Children's Health System
NorthShore University HealthSystem
Northwestern Medicine Enterprise Data Warehouse (NMEDW)
NYC-CDRN
NYU Langone
OCHIN (Oregon Community Health Information Network)
Ochsner Medical Center
Oklahoma University
One Fact Foundation Payless Health
OptumⓇ De-identified Clinformatics(R) Data Mart Database - SES & DOD
OptumⓇ de-identified Electronic Health Record Dataset (PANTHER)
Oregon Health & Science University
Panito Intelligence
PEDSnet
Penn State
Premier Healthcare Database
QueensCare - Los Angeles
Reliant Medical Group
Rhode Island Quality Institute
Rush University Medical Center
Rutgers
Shriners Children's
Spectrum Health West Michigan
STAnford medicine Research data Repository (STARR)
Stony Brook
Surveillance, Epidemiology, and End Results Program (SEER): B-Cell
TOC - Los Angeles
The Healthcare Cost and Utilization Project (HCUP), Nationwide Inpatient Sample (NIS)
The National Health and Nutrition Examination Survey (NHANES)
The Ohio State University Medical Center
TrialSpark
Tufts MC Research Data Warehouse (TRDW)
Tulane
UMass Memorial Medical Center
UNC Chapel Hill
University Medical Center New Orleans
University of Alabama at Birmingham
University of Arkansas
University of Buffalo
University of California Health
University of California, Davis
University of California, Irvine
University of California, Los Angeles
University of California, Riverside
University of California, San Diego
University of California, San Francisco
University of Chicago
University of Cincinnati
University of Colorado
University of Colorado, Anschutz Medical Center
University of Illinois Chicago
University of Iowa
University of Kentucky
University of Miami
University of Michigan
University of Minnesota
University of Mississippi Medical Center
University of Nebraska Medical Center
University of New Mexico Health Sciences Center
University of Pittsburgh
University of Pittsburgh - Banner
University of Rochester
University of Texas Houston
University of Texas Medical Branch
University of Texas Southwestern Medical Center
University of Utah
University of Virginia
University of Washington
University of Wisconsin Madison
US Department of Defense
US Department of Veterans Affairs
UTPhysicians
Vanderbilt University
Veradigm Health Insights Data - Allscripts
Veradigm Health Insights Data - Practice Fusion
Virginia Commonwealth University
Wake Forest University
WashU St Louis
Weill Cornell Medicine/NewYork-Presbyterian Hospital (East Campus)
West Virginia University
Winship Cancer Institute of Emory University

Sept. 15: HowOften Phenotype Library Contribution Deadline

OHDSI

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

Europe Symposium Presentations Are Posted!

Presentations

Journey of OHDSI: Where have we been and where we can go together?

Speaker: Patrick Ryan, PhD, Janssen Research and Development, Department of Biomedical Informatics, Columbia University Medical Center

European Initiatives Using the OMOP CDM

Moderator: Renske Los, PhD, Assistant Professor of Medical Informatics, Department of Medical Informatics, Erasmus MC

1. European Health Data and Evidence Network: building a sustainable ecosystem for generating reliable evidence in Europe – Speaker: **Carlos Diaz**, Synapse
2. Harmonizing rare cancer data: lessons learned in EURACAN – Speaker: **Maaike van Swieten**, IKNL
3. HONEUR: Building a federated network in haematology – Speaker: **Michel van Speybroeck**, Janssen Pharmaceutica
4. PIONEER and OPTIMA, two EU-IMI funded big data projects led by the European Association of Urology – Speaker: **Monique Roobol**, Professor Decision Making in Urology, Erasmus MC
5. Panel Discussion and Q/A

Closure

Peter Rijnbeek — with a little bit of help — provides the closing remarks for the 2023 OHDSI Europe Symposium.

Collaborator Showcase: Rapid-Fire Presentations

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

0:44 – Tools for the collaborative maintenance of national vocabularies and mappings (Speaker: **Javier Gracia-Tabuenca**)
6:09 – Implementation of the ARES application to monitor network-wide data quality and mapping coverage for 16 unique OMOP sources across Rwanda (Speaker: **Jared Houghtaling**)
12:11 – Multi-site Cost-effectiveness and Markov Chain analysis of heart failure (Speaker: **Markus Haug**)
18:41 – Deep Learning Comparison (Speaker: **Henrik John**)
24:21 – The association of short-, medium and long-term cardiovascular sequelae with COVID-19 infection: a multinational pilot study (Speaker: **Ian Wong**)
27:54 – Supporting pharmacovigilance signal validation and prioritization with analyses of routinely collected health data – lessons learned from an EHDEN network study (Speaker: **Judith Brand**)
35:54 – Pattern of long COVID symptoms and conditions: clustering analysis based on large multinational cohorts as part of an EHDEN Study-A-Thon (Speaker: **Marti Catala Sabate**)
42:36 – Evaluation of treatment effect heterogeneity in the LEGEND-Hypertension study (Speaker: **Alexandros Rekkas**)
48:36 – Characteristics and outcomes of over a million inflammatory bowel disease subjects in seven countries: a multinational cohort study (Speaker: **Chen Yanover**)
57:13 – Prediction of 30-day, 90-day and 1 year mortality after colorectal cancer surgery using a data-driven approach (Speaker: **Ismail Gögenur**)

Real-World Evidence use in Medicines Regulation

Moderator: Dani Prieto-Alhambra, PhD, Professor of Pharmaco- and Device Epidemiology at Oxford University

1:20 – Development (Speaker: **Ed Burn**)
12:03 – Study Operations (Speaker: **Katia Verhamme**)
20:17 – The SIDIAP experience as Data Partner in DARWIN EU® (Speaker: **Talita Duarte-Salles**)
30:34 – Drug utilisation of valproate-containing medicinal products in women of childbearing age: a network study part of DARWIN EU® (Speaker: **Albert Prats-Uribe**)
40:07 – Drug utilisation of antibiotics in the 'Watch' category of the WHO AWaRe classification of antibiotics for evaluation and monitoring of use: a network study part of DARWIN EU® (Speaker: **Johnmary Arinze**)
47:53 – Panel Q&A session

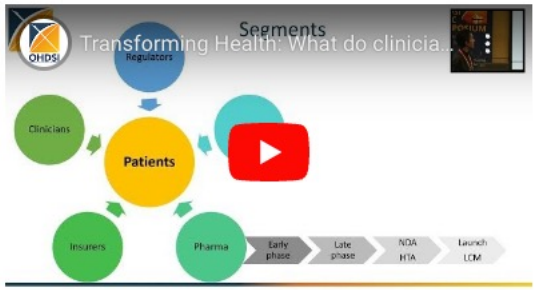
APAC Symposium Presentations Are Posted!

Symposium Presentations

Welcome, Keynote

Speakers: Nicole Pratt (President OHDSI Australia Chapter, University of South Australia) and **Patrick Ryan** (Vice President, Observational Health Data Analytics, Janssen Research and Development)

Transforming health: What do regulators, clinicians, and consumers really want to know about healthcare and how can OHDSI help



Speaker: Asieh Golozar (Vice President, Global Head of Data Science at Odysseus Data Services, Inc. Professor of the Practice & Director of Clinical Research at the OHDSI Center, Northeastern University)

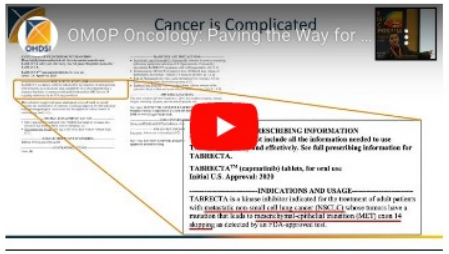
Research Study presentation: Fluroquinolones antibiotics and the risk of aortic aneurysm and dissection – A study of 12 million patients

Speaker: Jack Janetzki (University of South Australia)

Panel discussion: Regulators, Clinicians and Consumers

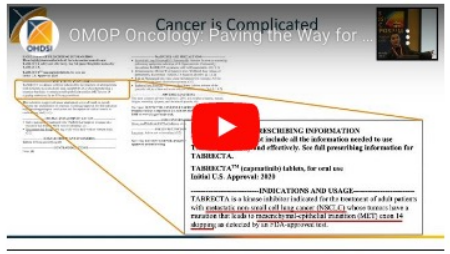
Panelists: Grant Pegg (Regulator), **Seng Chan You** (Policymaker/ Clinician), **Anne McKenzie** (Consumer), **Yong Chen** (Researcher)

OMOP/FHIR: challenges of each model and how the collaboration can resolve those challenges



Speaker: Grahame Grieve (Principal at Health Intersections Pty Ltd)

OMOP Oncology: Paving the Way for Patient-Centric Cancer Care



Speakers: Kim Carter (Data Science Manager, Minderoo Foundation) & **Georgina Kennedy** (Ingham Institute for Applied Medical Research)

Lightning Talks

0:10 – Gusto Data Vault: Laying the Foundations for an Open Science System with OMOP Data Catalogue. **Speaker: Cindy Ho** (Singapore)
4:40 – Establishment of Evidence Sharing Network Through Common Data Model for Chinese Clinical Research: an Overview. **Speaker: Lei Liu** (China)
11:28 – Internationalization Efforts for Real-World Evidence Creation at Core Hospitals for Clinical Research in Japan. **Speaker: Yoshihiro Aoyagi** (Japan)
17:21 – Successes and Challenges of a Multi-State Electronic Medical Record (EMR) to OMOP Conversion Project. **Speaker: Roger Ward** (Australia)
22:54 – The association of short-, medium- and long-term cardiovascular sequelae with COVID-19 infection: a multinational pilot study. **Speaker: Ivan Lam** (Hong Kong)
28:56 – Comparative Risk for Neuropsychiatric Events in Leukotriene Receptor antagonists versus Inhaled Corticosteroids in Children with Asthma. **Speaker: Subin Kim** (Korea)
34:20 – Prediction of Dementia incidence among patients with Type 2 Diabetes. **Speaker: Thanh-Phuc Phan** (Taiwan)

Regional Chapter Panel + Closing Talk

Panel: We have the ingredients, now let's generate evidence!

Panelists: APAC Regional Chapter leads (seated left to right): **Nicole Pratt**, Australia; **Jason Hsu**, Taiwan; **Tatsuo Hiramatsu**, Japan; **Seng Chan You**, Korea; **Lei Liu**, China; **Mengling 'Mornin' Feng**, Singapore.

39:37 – Closing: **Nicole Pratt** and **Patrick Ryan**

OHDSI HADES releases: ParallelLogger 3.3.0

ParallelLogger 3.3.0 | Reference | Articles | Changelog | HADES

ParallelLogger

R-CMD-check passing | codecov 81% | CRAN 3.3.0 | downloads 2370/month

ParallelLogger is part of HADES.

Introduction

Support for parallel computation with progress bar, and option to stop or proceed on errors. Also provides logging to console and disk, and the logging persists in the parallel threads. Additional functions support function call automation with delayed execution (e.g. for executing functions in parallel).

Features

- Functions for parallel computation.
- Functions for logging, including automated logging for errors and warnings.
- Functions used for automating analyses.

Examples

Links

View on CRAN

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Ask a question

License

Apache License 2.0

Citation

Citing ParallelLogger

Developers

Martijn Schuemie
Author, maintainer

Marc Suchard
Author

More about authors...

OHDSI HADES releases: CohortMethod 5.1.0

CohortMethod 5.1.0 | Reference | Articles | Changelog | HADES

CohortMethod

R-CMD-check passing | codecov 88%

CohortMethod is part of HADES.

Introduction

CohortMethod is an R package for performing new-user cohort studies in an observational database in the OMOP Common Data Model.

Features

- Extracts the necessary data from a database in OMOP Common Data Model format.
- Uses a large set of covariates for both the propensity and outcome model, including for example all drugs, diagnoses, procedures, as well as age, comorbidity indexes, etc.
- Large scale regularized regression to fit the propensity and outcome models.
- Includes function for trimming, stratifying, matching, and weighting on propensity scores.
- Includes diagnostic functions, including propensity score distribution plots and plots showing covariate balance before and after matching and/or trimming.
- Supported outcome models are (conditional) logistic regression, (conditional) Poisson regression, and (conditional) Cox regression.

Links

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Citation

Citing CohortMethod

Developers

Martijn Schuemie
Author, maintainer

Marc Suchard
Author

Patrick Ryan
Author

OHDSI HADES releases: PatientLevelPrediction 6.3.5

PatientLevelPrediction 6.3.5 | Get started | Videos | Reference | Articles | Tutorial | Best Practices | Changelog | HADES

PatientLevelPrediction

R-CMD-check passing

codecov 89%

PatientLevelPrediction is part of HADES.

Introduction

PatientLevelPrediction is an R package for building and validating patient-level predictive models using data in the OMOP Common Data Model format.

Reps JM, Schuemie MJ, Suchard MA, Ryan PB, Rijnbeek PR. Design and implementation of a standardized framework to generate and evaluate patient-level prediction models using observational healthcare data. J Am Med Inform Assoc. 2018;25(8):969-975.

The figure below illustrates the prediction problem we address. Among a population at risk, we aim to predict which patients at a defined moment in time (t = 0) will experience some outcome during a time-at-risk. Prediction is done using only information about the patients in an observation window prior to that moment in time.

Links

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Citation

Citing PatientLevelPr

Developers

Jenna Reps
Author, maintainer

Martijn Schuemie
Author

Marc Suchard
Author

Patrick Ryan
Author

OHDSI HADES releases: PheValuator 2.2.10

PheValuator 2.2.10 Reference Articles Changelog hadesLogo

PheValuator

PheValuator is part of HADES.

Introduction

The goal of PheValuator is to produce a large cohort of subjects each with a predicted probability for a specified health outcome of interest (HOI). This is achieved by developing a diagnostic predictive model for the HOI using the PatientLevelPrediction (PLP) R package and applying the model to a large, randomly selected population. These subjects can be used to test one or more phenotype algorithms.

Process Steps

The first step in the process, developing the evaluation cohort, is shown below:

Step 1: Develop Evaluation Cohort from Diagnostic Predictive Model

Create **Evaluation Cohort** of 1M randomly selected subjects from

Links

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Report a bug

Ask a question

License

Apache License 2.0

Citation

Citing PheValuator

Developers

Joel N. Swerdel

Maintainer

Dev status

R-CMD-check pass

codecov 85%

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?

Sept. 5: DARWIN EU® Progress and Roadmap

Peter Rijnbeek

Professor of Medical Informatics and Chair, Department of Medical Informatics, Erasmus MC

Katia Verhamme

Associate Professor of Use and Analysis of Observational Data, Department of Medical Informatics, Erasmus MC

Ed Burn

Senior Researcher in Epidemiology and Health Economics, University of Oxford