Journal Club:
11th Revision of the ENCePP Guide on Methodological Standards in Pharmacoepidemiology

OHDSI Community Call
Sept. 19, 2023 • 11 am ET

OHDSI
OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS

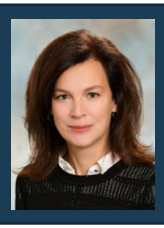
Upcoming Community Calls

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

Sept 26: Recent OHDSI Publications

Enabling data sharing and utilization for African population health data using OHDSI tools with an OMOP-common data model (Frontiers in Public Health)

Sylvia Kiwuwa-Muyingo, Biostatistician, African Population and Health Research Center



Characteristics and treatment pathways in pediatric and adult hidradenitis suppurativa: An examination using real world data (JAAD International)

Jill Hardin, Director, Observational Health and Data Analytics, Janssen Research and Development

Ontologizing health systems data at scale: making translational discovery a reality (NPJ Digital Medicine)

Tiffany Callahan, Postdoctoral Researcher, IBM

Learning important common data elements from shared study data: The All of Us program analysis (PLoS One)

Craig Mayer, Applied Clinical Informatics Branch, National Library of Medicine

Padé approximant meets federated learning: A nearly lossless, one-shot algorithm for evidence synthesis in distributed research networks with rare outcomes (Journal of Biomedical Informatics)

Qiong Wu, Research Associate of Biostatistics and Epidemiology, University of Pennsylvania

Three Stages of The Journey

Where Have We Been?

Where Are We Now?

Where Are We Going?

OHDSI Shoutouts!

Congratulations to the team of **Rowdy de Groot, Daniel Püttmann, Lucas Fleuren, Patrick Thoral, Paul Elbers, Nicolette de Keizer, Ronald Cornet; and the Dutch ICU Data Sharing Against COVID-19 Collaborators** on the publication of **Determining and assessing characteristics of data element names impacting the performance of annotation using Usagi** in the *International Journal of Medical Informatics*.

International Journal of Medical Informatics 178 (2023) 105200

Contents lists available at ScienceDirect

International Journal of Medical Informatics

journal homepage: www.elsevier.com/locate/ijmedinf

Determining and assessing characteristics of data element names impacting the performance of annotation using Usagi

Rowdy de Groot [a,*], Daniel P. Püttmann [a], Lucas M. Fleuren [b], Patrick J. Thoral [b], Paul W.G. Elbers [b], Nicolette F. de Keizer [a], Ronald Cornet [a], on behalf of The Dutch ICU Data Sharing Against COVID-19 Collaborators

[a] Amsterdam UMC Location University of Amsterdam, Department of Medical Informatics, Amsterdam, the Netherlands
[b] Department of Intensive Care Medicine, Center for Critical Care Computation Intelligence (C4i), Amsterdam Medical Data Science (AMDS), Amsterdam Public Health (APH), Amsterdam Cardiovascular Science (ACS), Amsterdam Institute for Infection and Immunity (AII), Amsterdam UMC, Vrije Universiteit, Amsterdam, the Netherlands

ARTICLE INFO

Keywords:
Data annotation
Data interoperability
Data quality
Data standardization
OMOP CDM
Usagi

ABSTRACT

Introduction: Hospitals generate large amounts of data and this data is generally modeled and labeled in a proprietary way, hampering its exchange and integration. Manually annotating data element names to internationally standardized data element identifiers is a time-consuming effort. Tools can support performing this task automatically. This study aimed to determine what factors influence the quality of automatic annotations.

Methods: Data element names were used from the Dutch COVID-19 ICU Data Warehouse containing data on intensive care patients with COVID-19 from 25 hospitals in the Netherlands. In this data warehouse, the data had been merged using a proprietary terminology system while also storing the original hospital labels (synonymous names). Usagi, an OHDSI annotation tool, was used to perform the annotation for the data. A gold standard was used to determine if Usagi made correct annotations. Logistic regression was used to determine if the number of characters, number of words, match score (Usagi's certainty) and hospital label origin influenced Usagi's performance to annotate correctly.

Results: Usagi automatically annotated 30.5% of the data element names correctly and 5.5% of the synonymous names. The match score is the best predictor for Usagi finding the correct annotation. It was determined that the AUC of data element names was 0.651 and 0.752 for the synonymous names respectively. The AUC for the individual hospital label origins varied between 0.460 to 0.905.

Discussion: The results show that Usagi performed better to annotate the data element names than the synonymous names. The hospital origin in the synonymous names dataset was associated with the amount of correctly annotated concepts. Hospitals that performed better had shorter synonymous names and fewer words. Using shorter data element names or synonymous names should be considered to optimize the automatic annotating process. Overall, the performance of Usagi is too poor to completely rely on for automatic annotation.

OHDSI Shoutouts!

Congratulations to the team of **Suehyun Lee, Hyunah Shin, Seon Choe, Min-Gyu Kang, Sae-Hoon Kim, Dong Yoon Kang, and Ju Han Kim** on the publication of **MetaLAB-HOI: Template standardization of health outcomes enable massive and accurate detection of adverse drug reactions from electronic health records** in *Pharmacoepidemiology & Drug Safety*.

PDS Pharmacoepidemiology & Drug Safety — ispe

ORIGINAL ARTICLE

MetaLAB-HOI: Template standardization of health outcomes enable massive and accurate detection of adverse drug reactions from electronic health records

Suehyun Lee, Hyunah Shin, Seon Choe, Min-Gyu Kang, Sae-Hoon Kim, Dong Yoon Kang, Ju Han Kim

First published: 14 September 2023 | https://doi.org/10.1002/pds.5694

Suehyun Lee and Hyunah Shin contributed equally to this study.

Read the full text > PDF TOOLS SHARE

Abstract

Purpose

This study aimed to advance the MetaLAB algorithm and verify its performance with multicenter data to effectively detect major adverse drug reactions (ADRs), including drug-induced liver injury.

Methods

Based on MetaLAB, we created an optimal scenario for detecting ADRs by considering demographic and clinical records. MetaLAB-HOI was developed to identify ADR signals using common model-based multicenter electronic health record (EHR) data from the clinical health outcomes of interest (HOI) template and design for drug-exposed and nonexposed groups. In this study, we calculated the odds ratio of 101 drugs for HOI in Konyang University Hospital, Seoul National University Hospital, Chungbuk National University Hospital, and Seoul National University Bundang Hospital.

OHDSI Shoutouts!

Congratulations to the team of **Berta Raventós, Sergio Fernández-Bertolín, María Aragón, Erica Voss, Clair Blacketer, Leonardo Méndez-Boo, Martina Recalde, Elena Roel, Andrea Pistillo, Carlen Reyes, Sebastiaan van Sandijk, Lars Halvorsen, Peter Rijnbeek, Edward Burn, and Talita Duarte-Salles** on the publication of **Transforming the Information System for Research in Primary Care (SIDIAP) in Catalonia to the OMOP Common Data Model and Its Use for COVID-19 Research** in *Clinical Epidemiology*.

Clinical Epidemiology

Dovepress
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Open Access Full Text Article

ORIGINAL RESEARCH

Transforming the Information System for Research in Primary Care (SIDIAP) in Catalonia to the OMOP Common Data Model and Its Use for COVID-19 Research

Berta Raventós[1,2,*], Sergio Fernández-Bertolín[1,*], María Aragón[1], Erica A Voss[3–5], Clair Blacketer[3–5], Leonardo Méndez-Boo[6], Martina Recalde[1], Elena Roel[1,2], Andrea Pistillo[1,7], Carlen Reyes[1], Sebastiaan van Sandijk[8], Lars Halvorsen[9], Peter R Rijnbeek[4,5], Edward Burn[1,10], Talita Duarte-Salles[1,4]

[1]Fundació Institut Universitari per a la recerca a l'Atenció Primària de Salut Jordi Gol i Gurina (IDIAPJGol), Barcelona, Spain; [2]Universitat Autònoma de Barcelona, Bellaterra (Cerdanyola del Vallès), Barcelona, Spain; [3]Janssen Pharmaceutical Research and Development, Titusville, NJ, USA; [4]Department of Medical Informatics, Erasmus University Medical Center, Rotterdam, the Netherlands; [5]OHDSI Collaborators, Observational Health Data Sciences and Informatics (OHDSI), New York, NY, USA; [6]Sistemes d'Informació dels Serveis d'Atenció Primària (SISAP), Institut Català de la Salut, Barcelona, Spain; [7]Universitat Pompeu Fabra, Barcelona, Spain; [8]Odysseus Data Services s.r.o., Prague, Czech Republic; [9]edenceHealth NV, Kontich, Belgium; [10]Centre for Statistics in Medicine, University of Oxford, Oxford, UK

*These authors contributed equally to this work

Correspondence: Talita Duarte-Salles, Fundació Institut Universitari per a la recerca a l'Atenció Primària de Salut Jordi Gol i Gurina (IDIAPJGol), Gran Via Corts Catalanes, 587 àtic, Barcelona, 08007, Spain, Tel +34935824342, Email tduarte@idiapjgol.org

Purpose: The primary aim of this work was to convert the Information System for Research in Primary Care (SIDIAP) from Catalonia, Spain, to the Observational Medical Outcomes Partnership (OMOP) Common Data Model (CDM). Our second aim was to provide a descriptive analysis of COVID-19-related outcomes among the general population.

Patients and Methods: We mapped patient-level data from SIDIAP to the OMOP CDM and we performed more than 3,400 data quality checks to assess its readiness for research. We established a general population cohort as of the 1st March 2020 and identified outpatient COVID-19 diagnoses or tested positive for, hospitalised with, admitted to intensive care units (ICU) with, died with, or vaccinated against COVID-19 up to 30th June 2022.

Results: After verifying the high quality of the transformed dataset, we included 5,870,274 individuals in the general population cohort. Of those, 604,472 had either an outpatient COVID-19 diagnosis or positive test result, 58,991 had a hospitalisation, 5,642 had an ICU admission, and 11,233 died with COVID-19. A total of 4,584,515 received a COVID-19 vaccine. People who were hospitalised or died were more commonly older, male, and with more comorbidities. Those admitted to ICU with COVID-19 were generally younger and more often male than those hospitalised and those who died.

Conclusion: We successfully transformed SIDIAP to the OMOP CDM. From this dataset, a general population cohort of 5.9 million individuals was identified and their COVID-19-related outcomes over time were described. The transformed SIDIAP database is a valuable resource that can enable distributed network research in COVID-19 and beyond.

Keywords: electronic health records, medical ontologies, secondary data use, common data model, OMOP

#OHDSISocialShowcase

ohdsi.org/europe2023-showcase

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MONDAY

Roadmap and improvement of OHDSI Vocabularies

(Alexander Davydov, Christian Reich, Anna Ostropolets)

Roadmap and improvement of OHDSI Vocabularies

PRESENTER: **Alexander Davydov**

BACKGROUND

The number of requests for new content and issues with existing OHDSI Vocabularies content requires systematic management of the process and refactoring of how we do things. This poster describes three elements of the improvement initiative: landscape assessment of needs, Vocabulary Committee and Roadmap.

METHODS

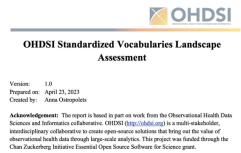
Landscape assessment

As a part of process improvement initiative, we first assessed community needs. We distributed a two-part survey (a general survey and a database-specific survey) through various channels across the community. The survey contained questions about the use of the Vocabularies in data and research, their completeness, correctness, intuitiveness of use, recency and versioning, frequency of data and Vocabularies refresh and documentation.

Vocabulary Committee and Roadmap

The report was made open for community feedback in March 2023, published (Figure 1) and was used to inform decisions on the roadmap and process improvement activities. The plan was made together with a newly formed Vocabulary Committee that meets on regular basis, oversees and prioritizes the efforts. The committee represents OHDSI and Columbia Coordinating Center: George Hripcsak, Patrick Ryan, Peter Rijnbeek, Rae Woong Park, Mui Van Zandt and Christian Reich

Figure 1. First page of 19-page landscape assessment report publicly available in OHDSI Teams


OHDSI

OHDSI Standardized Vocabularies Landscape Assessment

Version: 1.0
Prepared on: April 23, 2023
Created by: Anna Ostropolets

Acknowledgement: The report is based in part on work from the Observational Health Data Sciences and Informatics collaborative. OHDSI (http://ohdsi.org) is a multi-stakeholder, interdisciplinary collaborative to create open-source solutions that bring out the value of observational health data through large-scale analytics. This project was funded through the Chan Zuckerberg Initiative Essential Open Source Software for Science grant.

Scan QR to go to Roadmap

Expect in the upcoming Vocabularies releases:

-Semi-annual releases

-Condition domain overhauled in 2023

-More detail in each release

-Inclusion of content contributed by the community

Scan QR to watch community call

RESULTS

We collected 183 responses from the OHDSI members across the globe and gathered the information about the Vocabularies use across 60 US and international data sources.

As we observed that most of the community members refresh the Vocabularies and the data annually or semi-annually, we established cadence of releases twice a year. We used the most common vocabularies and issues to create a roadmap for 2023-Q2 2024, which is now publicly available on GitHub. It has the maintenance activities for the most commonly used vocabularies (SNOMED, ICD family, RxNorm, CVX, LOINC, CPT4, ATC, HCPCS, MedDRA, Figure 2) as well as the improvement activities for issues of stability and accurateness of the vocabularies in condition domain (SNOMED, ICD family and MedDRA). It also shows planned efforts to enable community contribution and improve quality assurance and control.

Figure 2. Roadmap overview

While more details can be found on GitHub, Table 1 shows activities for the next release in August.

Table 1. Content of August 2023 release

Vocabulary	Version and content
CPT4	refresh (Spring 2023 version)
LOINC	refresh (2.74 version)
NDC, SPL, RxNorm and RxNorm Extension	refresh (Aug 2023 version)
VANDF	refresh (20230306 version)
External contribution guidelines (part 1)	coverage of basic use cases
Vocabulary Quality System (part 1)	conformance checks publicly available with each release

Christian Reich, Alexander Davydov, Anna Ostropolets

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TUESDAY

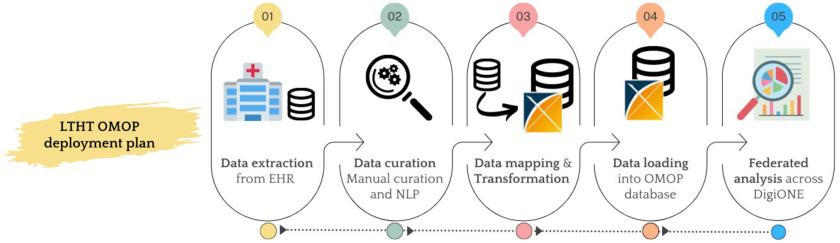
OMOP for oncology data: a single-centre and network perspective

(Stelios Theophanous, Kieran Zucker, Louise Hick, Edward Bolton, Majid Riaz, Hayley Fenton, John Corkett, Sue Cheeseman, Geoff Hall)

Real-world data, OMOP, plus federated analysis – a new standard for multi-centre, multi-national studies in cancer? A UK NHS perspective

OMOP for oncology data: a single-centre and network perspective

Background: Leeds Teaching Hospitals NHS Trust (LTHT) in the North of England is participating in the Digital Oncology Network for Europe (DigiONE), a European real-world evidence network that aims to establish an international digital infrastructure for oncology care management and research. LTHT aims to contribute to and benefit from the expertise present across the network to transform cancer-specific data to the OMOP common data model.



Methods & Results

1 Data extraction
- LTHT uses an in-house developed Electronic Health Record (EHR) system called PPM+ to collect diverse and robust data for all cancer patients.
- Aims to ensure healthcare data conforms to the FAIR Guiding Principles.

2 Data curation
- Currently, data curation is carried out manually.
- The capabilities of NLP platforms will be assessed, in order to automate the extraction of data from unstructured free-text clinical data sources.

3 LTHT EHDEN OMOP project
- LTHT was awarded funding from the European Health Data Evidence Network (EHDEN) to support the adoption of the OMOP CDM.
- We standardised a subset of patient data to the OMOP CDM v5.3 and will extend this to include generic healthcare data on all patients.
- This will facilitate the implementation and adoption of OMOP for cancer data that will be collected and analysed.

4 OMOP for DigiONE
- DigiONE has achieved consensus on the core cancer concepts that will be standardised to the OMOP CDM in all participating hospitals.
- MEDOC: a minimal cancer dataset. Consists of 36 clinically important concepts that accurately describe cancer, enabling outcome research.
- LTHT will collect MEDOC data for all cancer patients diagnosed and treated in Leeds. This data will be converted to the OMOP CDM v5.4.

5 Federated data analytics
- Federated data analytics will be implemented on OMOP data using Vantage6 to draw insights across the DigiONE network.
- This approach eliminates the need for LTHT to release highly detailed patient-level data to the DigiONE partners, enhancing data privacy.

Stelios Theophanous, Kieran Zucker, Louise Hick, Edward Bolton, Majid Riaz, Hayley Fenton, John Corkett, Sue Cheeseman, Geoff Hall

DigiCore IQVIA NHS The Leeds Teaching Hospitals NHS Trust

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WEDNESDAY

Evaluation of treatment effect heterogeneity in the LEGEND-Hypertension study

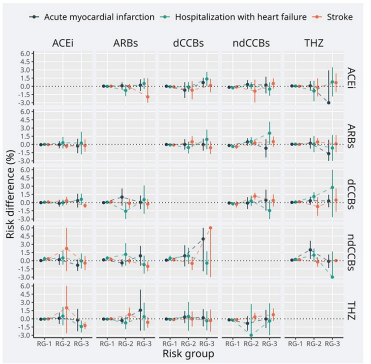
(Alexandros Rekkas, David van Klaveren, Jenna M. Reps, Peter R. Rijnbeek)

Overall treatment effect estimates derived from the LEGEND-Hypertension study can be supplemented with risk stratified analyses

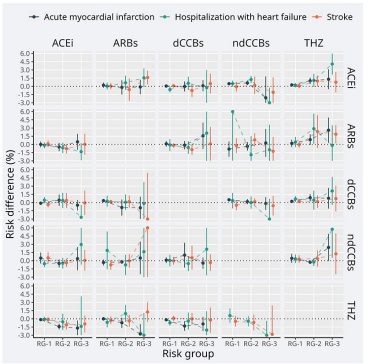
Title: Evaluation of treatment effect heterogeneity in the LEGEND-Hypertension study.

Background: The LEGEND-Hypertension study generated overall effect estimates for all drug classes used in the treatment of hypertension. We supplement these results with evaluation of treatment effect heterogeneity using a new risk-based framework.

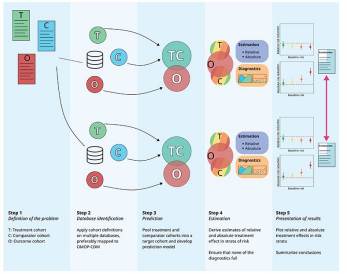
Result 1: Results within strata of predicted acute MI risk on the absolute scale in CCAE.



Result 2: Results within strata of predicted acute MI risk on the absolute scale in MDCD.



Methods



Prediction: We stratify the population on their baseline acute MI risk. We develop prediction models for each database and treatment-comparator pair separately using LASSO logistic regression based on a large pre-defined set of baseline covariates

Estimation: We stratify patients into three risk groups (acute MI risk below 1%, between 1% and 1.5%, and above 1.5%). We use Cox regression to estimate relative effects. We derive absolute risk differences from the differences between the Kaplan-Meier curves on day 730 from treatment initiation

Alexandros Rekkas, Jenna M. Reps, Peter R. Rijnbeek, David van Klaveren

Erasmus MC University Medical Center Rotterdam
Health Data Science
OHDSI

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THURSDAY

The use of contraception in females with underlying conditions

(Emma Lippens, Victor Pera, Peter R. Rijnbeek, Katia M.C. Verhamme)

Contraception use in females with underlying conditions

PRESENTERS: Emma Lippens & Victor Pera

INTRODUCTION:

- Choice for a proper contraceptive method for females depends on comorbidities, concomitant medication, contraceptive risk profile, and personal preference.
- There is limited information on the use of contraceptive methods among Dutch women with various comorbidities and within different age groups.

OBJECTIVE

Study the use of different contraceptive methods among females with various comorbidities and within different age groups.

METHODOLOGY

- **Database:** Integrated Primary Care Information (IPCI) database mapped to OMOP-CDM.
- **Study period:** 1 Jan. 2010 - 31 Dec. 2022.
- **Study population:** Dutch females with or without a disease of interest.
- **General population:** The reference population, being Dutch females diagnosed with any disease.
- **Index date:** Date of first disease diagnosis.
- **Inclusion criteria:** ≥ 1 year of history before the index date, no pregnancy up to 1 year before and after index date, ≥ 1 year follow up time, and age 12-55 years (41-55 years for COPD) at index date.
- **Cohort exit criteria:** Pregnancy, menopause, or end of observation period.
- **Outcome of interest:** Period prevalence of contraceptive users.
- **Analysis software:** R packages 'DrugUtilisation' and 'IncidencePrevalence' from Darwin EU®.

RESULTS

- 503,203 females fulfilled inclusion criteria. Various cohort sizes are described in Table 1.
- Irrespective of age and comorbidity, use of combination monophasic preparation was much higher compared to the use of any other contraceptive agents. (Figure 1B) and lowest for progestins implants (Figure 1A).
- Choice for type of contraceptive agent varied by underlying condition (Figure 1).
- Proportion of women using a contraceptive agent was highest in women with acne except for progestin injectables where use was highest in women with epilepsy (Figure 1A).
- The effect of age is obvious with a decrease in prescribing of combination monophasic preparations by increasing age (Figure 2). Use of intrauterine devices was mainly prescribed in women 18-40.

In conclusion, the choice of contraceptive method depends on age and even more on comorbidity

Figure 1A. Prevalence of contraception users in females with a comorbidity.

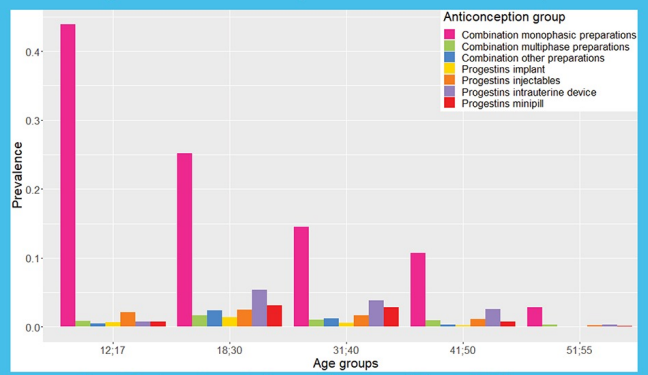


Figure 2. Contraception use in the general female population, stratified by age groups.

E. Lippens[1,2], V. Pera[1], P.R. Rijnbeek[1], K.M.C. Verhamme[1]

[1] Department of Medical Informatics, Erasmus University Medical Center - Rotterdam (Netherlands)
[2] Faculty of Pharmaceutical Sciences, Ghent University (Belgium)

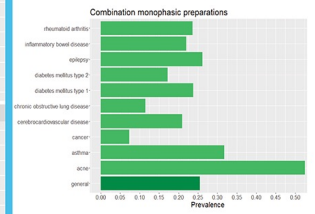


Figure 1B. Prevalence of the use of combination monophasic preparation in females with a comorbidity.

Table 1. Overview of target cohorts and size.

Target cohort	Cohort size (%)
General population	503,203 (100)
Cerebrocardiovascular disease	46,424 (9.2)
Acne	30,121 (6.0)
Asthma	28,584 (5.7)
Cancer	9,796 (1.9)
COPD	3,502 (0.7)
Rheumatoid arthritis	3,461 (0.7)
Epilepsy	2,336 (0.5)
Inflammatory bowel disease	496 (0.1)

ABSTRACT & REFERENCES

Interested in more about this research? Contact:
E. Lippens at emmalipp.lippens@ugent.be
V. Pera at v.pera@erasmusmc.nl

#OHDSISocialShowcase

The 'IncidencePrevalence' R package enables flexible and reproducible analyses of incidence and prevalence in data mapped to the OMOP CDM

FRIDAY

IncidencePrevalence: An R package to calculate population-level incidence and prevalence rates using the OMOP Common Data Model

(Martí Català, Berta Raventós, Mike Du, Yuchen Guo, Adam Black, Ger Inberg, Xintong Li, Kim López-Güell, Danielle Newby, Maria de Ridder, Cesar Barboza, Talita Duarte-Salles, Katia Verhamme, Peter Rijnbeek, Daniel Prieto Alhambra, Edward Burn)

IncidencePrevalence: An R package to calculate population-level incidence and prevalence rates using the OMOP Common Data Model

Background: Real world data offers a valuable resource for informing population-level disease epidemiology metrics.

Result 1: Steps to use IncidencePrevalence

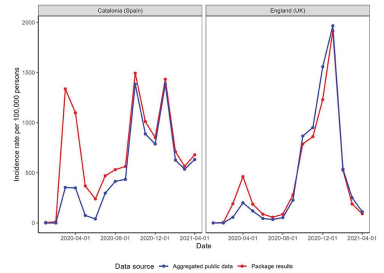
1. Define and instantiate strata and outcome cohorts.
2. Identify denominator populations based on stratification constrains (dates, age, sex, prior history, strata cohorts).
3. Compute incidence rates of first-ever or repeated events. Outcome washout periods can be specified.
4. Compute point and period point and period-prevalence.

Available on CRAN with full details for setup and use

Result 2: Unit testing

>99 % Test coverage (>500 tests)

Result 3: Face validity of IncidencePrevalence. Discrepancies can be attributed to the COVID-19 definitions used.



Methods

1 Development approach

- Built using a test-driven development approach,
- Rigorous unit testing on mock OMOP CDM data
- User interface designed with epidemiologists
- It can connect to several database management systems through the DBI R package.

2 Face validity of IncidencePrevalence

- Compute incidence rates of COVID-19 (positive tests or diagnostic codes) using IncidencePrevalence and compare results to COVID-19 public data (positive tests)
- Data sources: CPRD Aurum (England, UK) and SIDIAP (Catalonia, Spain).

Conclusion: The IncidencePrevalence R package enables reliable estimation of incidence and prevalence from data mapped to the OMOP CDM.

Martí Català, **Berta Raventós**, Mike Du, Yuchen Guo, Adam Black, Ger Inberg, Xintong Li, Kim López-Güell, Danielle Newby, Maria de Ridder, Cesar Barboza, Talita Duarte-Salles, Katia Verhamme, Peter Rijnbeek, Daniel Prieto Alhambra, Edward Burn

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	10 am	Perinatal & Reproductive Health
Wednesday	12 pm	Health Equity Journal Club
Wednesday	7 pm	Medical Imaging
Thursday	9 am	OMOP CDM Oncology Vocabulary/Development Subgroup
Thursday	9:30 am	Themis
Thursday	12 pm	HADES
Thursday	7 pm	Dentistry
Friday	9 am	Phenotype Development & Evaluation
Friday	9 am	GIS – Geographic Information System General
Friday	11 am	Clinical Trials
Friday	11:30 am	Steering Group
Monday	10 am	Healthcare Systems Interest Group
Monday	4 pm	Eyecare & Vision Research
Monday	6 pm	OMOP & FHIR
Tuesday	9 am	OMOP CDM Oncology Vocabulary/Development Subgroup
Tuesday	10 am	Registry

Identification of cardiotoxicity related to non-small cell lung cancer (NSCLC) treatments

Stefanie Ho Yi Chan
Supervised by Professor Sam Salek, Professor Deborah Layton and Dr Sherael Webley

Introduction

Cardio-oncology is a field that focuses on the cardiovascular diseases in cancer patients and work on the prevention, diagnosis and treatment of cardiotoxicity brought by oncology drugs or radiotherapy.

Rapid development in cancer therapies and improved detection strategies

→ death rates caused by cancer decreased

Cardiovascular disease

→ 2nd leading cause of long-term morbidity and fatality among cancer survivors

Aim and objectives

Aim: To investigate how different classes of NSCLC drugs demonstrate different cardiotoxicity potentials.

Primary Objective

- Describe the frequencies of cardiotoxicity-related outcomes of interest within first 6 months following diagnosis index date in patients diagnosed with NSCLC.

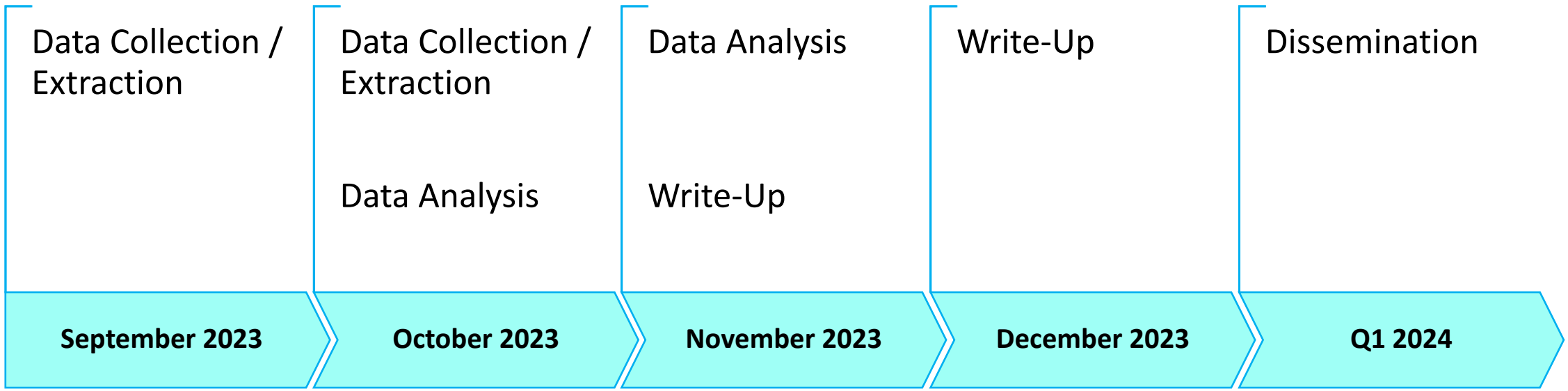
Secondary Objectives

- Clinical characteristics of the overall cohort of patients.
- Treatment / Drug utilisation patterns.
- Association between first

Exploratory Objectives

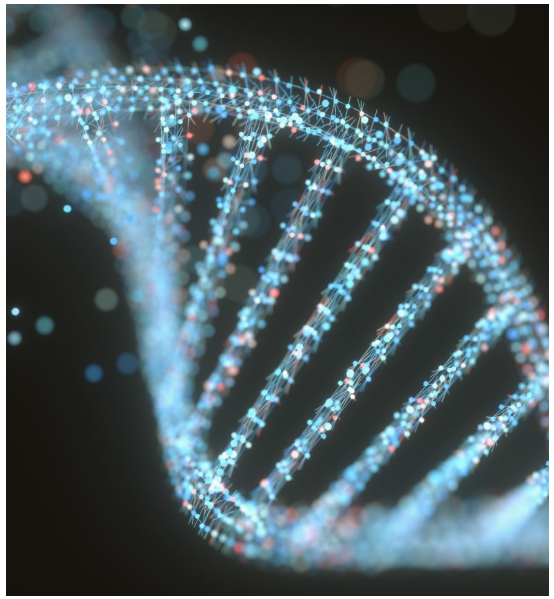
- Associated healthcare cost (including hospital utilisation and drug prescription costs) from diagnosis date through till the end of follow-up

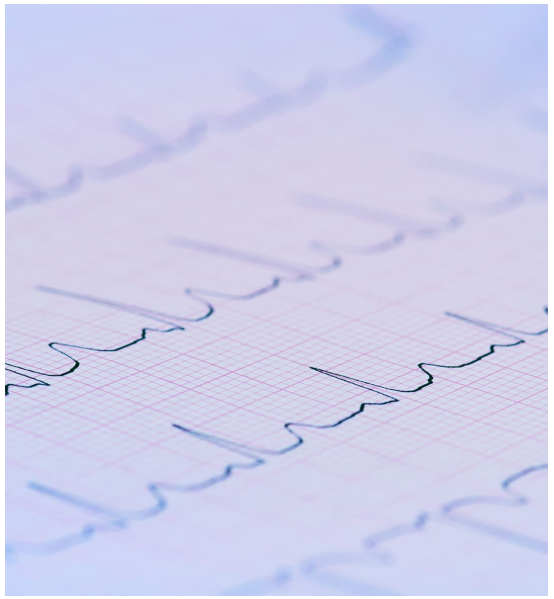
Timeline


Data Collection / Extraction
Data Collection / Extraction
Data Analysis
Data Analysis
Write-Up
Write-Up
Dissemination
September 2023
October 2023
November 2023
December 2023
Q1 2024

Next steps …

- Database / data partners required
  (does not necessarily need to be in the UK)
- Ideally be able to access the data by mid-October





Thank you !

Stefanie Ho Yi Chan

PhD Researcher

University of Hertfordshire, UK

h.chan7@herts.ac.uk / stefanie.chanhy@gmail.com

Global Symposium

Oct. 20-22 • East Brunswick, NJ, USA

Hilton East Brunswick Hotel & Executive Meeting Center

bit.ly/OHDSI2023Registration

Global Symposium

OHDSI
Observational Health Data Sciences and Informatics

OHDSI 2023 Symposium
Oct. 20-22, 2023
Hilton East Brunswick Hotel & Executive Meeting Center

Agenda • Friday, Oct. 20

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

Common Data Model / Network Data Quality – Global Symposium Meeting
When: Saturday, October 21, 8:00am-12:00pm EST

The Common Data Model and Network Data Quality working groups will host an in-person meeting at the 2023 OHDSI Global Symposium on **Saturday, October 21, 2023, from 8:00am-12:00pm**.

Common Data Model/Network Data Quality: In this session we will discuss the **OHDSI Data Network**, including goals, incentives, and plans for the future. We would like to hear from current and potential data partners about the barriers they face to joining and how we as a community can work together to overcome them. We will also highlight potential network studies and grant opportunities.

You should join this session if you:

- Are a collaborator currently participating in the OHDSI Data Network, meaning you shared a Database Profile with the OHDSI Coordinating Center.
- Are a data owner who would like to participate in a network study.
- Are a data vendor looking to market their data to potential customers.
- Are a researcher looking for databases with particular attributes.
- Are interested in the OHDSI Data Network and want to contribute to the planning and discussion.

Agenda

Time	Topic
8:00 – 8:30	Data Network Intro and Purpose
8:30 – 10:00	Guided discussion on barriers to data network participations
10:00 – 10:15	Break
10:15 – 10:30	Intro to SOS challenge
10:30 – 11:00	Demo of database profile and data diagnostics
11:00 – 11:45	Open discussion on how to open up the network and share data diagnostic capabilities
11:45 – 12:00	Closing

Health Analytics Data-to-Evidence Suite (HADES) Hackathon
When: Saturday, October 21, 8:00am-12:00pm and Sunday, October 22, 1:00pm-5pm EST

During the HADES hackathon, participants will work on the HADES codebase with support from several HADES maintainers. Participants can work in groups, and we welcome both new and experienced contributors to join. Part 1 takes place Saturday morning and Part 2 takes place Sunday afternoon.

Target audience: Developers interested in working on the HADES codebase. Some experience in R is recommended.

OHDSI

2023 Poster Presentations

Odd-numbered posters will be presented during the collaborator showcase Friday 2:45pm to 3:30pm and Saturday 12:00pm-1:00pm

Even-numbered posters will be presented during the collaborator showcase Friday 4:15pm to 5:00pm and Sunday 12:00pm-1:00pm

OBSERVATIONAL DATA STANDARDS & MANAGEMENT (#s 1-43)		
2	FinOMOP - a population-based data network	Javier Gracia-Tabuenca, Perttu Koskenvesa, Pia Tajanen, Sampo Kukkurainen, Gustav Klingstedt, Anna Hammais, Persephone Doupi, Oscar Brück, Leena Hakkarainen, Annu Kaila, Marco Hautalahti, Toni Mikkola, Marianna Niemi, Pasi Rikala, Simo Ryhänen, Anna Virtanen, Arto Mannermaa, Arto Vuori, Joanne Demmler, Eric Fey, Terhi Kilpi, Arho Virkki, Tarja Laitinen, Kimmo Porkka
3	From OMOP to CDISC SDTM: Successes, Challenges, and Future Opportunities of using EHR Data for Drug Repurposing in COVID-19	Wesley Anderson, Ruth Kurtycz, Tahsin Farid, Shermarke Hassan, Kalynn Kennon, Pam Dasher, Danielle Boyce, Will Roddy, Smith F. Heavner
4	Augmenting the National COVID Cohort Collaborative (N3C) Dataset with Medicare and Medicaid (CMS) Data, Secure and Deidentified Clinical Dataset	Stephanie Hong, Thomas Richards, Benjamin Amor, Tim Schwab, Philip Sparks, Maya Choudhury, Saad Ljazouli, Peter Leese, Amin Manna, Christophe Roeder, Tanner Zhang, Lisa Eskenazi, Bryan Laraway, James Cavallon, Eric Kim, Shijia Zhang, Emir Amaro Syailendra, Shawn O'Neil, Davera Gabriel, Sigfried Gold, Tricia Francis, Andrew Girvin, Emily Pfaff, Anita Walden, Harold Lehmann, Melissa Haendel, Ken Gersing, Christopher G Chute
5	Integrating clinical and laboratory research data using the OMOP CDM	Edward A. Frankenberger, Chun Yang, Vamsidhar Reddy Meda Venkata, Alyssa Goodson
6	Development of Medical Imaging Data Standardization for Imaging-Based Observational Research: OMOP Common Data Model Extension	Woo Yeon Park, Kyulee Jeon, Teri Sippel Schmidt, Haridimos Kondylakis, Seng Chan You, Paul Nagy
7	Conversion of a Myositis Precision Medicine Center into a Common Data Model: A Case Study	Zachary Wang, Will Kelly, Paul Nagy, Christopher A Mecoli

bit.ly/OHDSI2023-Agenda

OHDSI HADES releases: ResultModelManager 0.5.1

ResultModelManager 0.5.1 | Reference | Articles | Changelog | HADES

ResultModelManager

R-CMD-check passing | codecov 94%

ResultModelManager (RMM) HADES.

Introduction

RMM is an R package designed to handle common ohdsi results data management functions by providing a common API for data model migrations and definitions

System Requirements

Requires R. Some of the packages used by ResultModelManager require Java.

Installation

1. See the instructions here for configuring your R environment, including Java.
2. In R, use the following commands to download and install ResultModelManager:

Links

Ask a question

License

Apache License

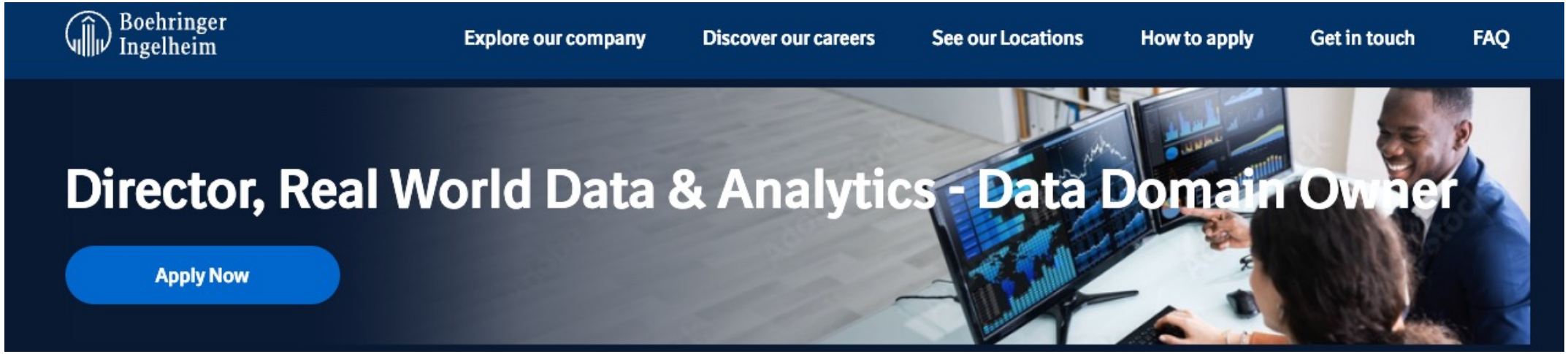
Citation

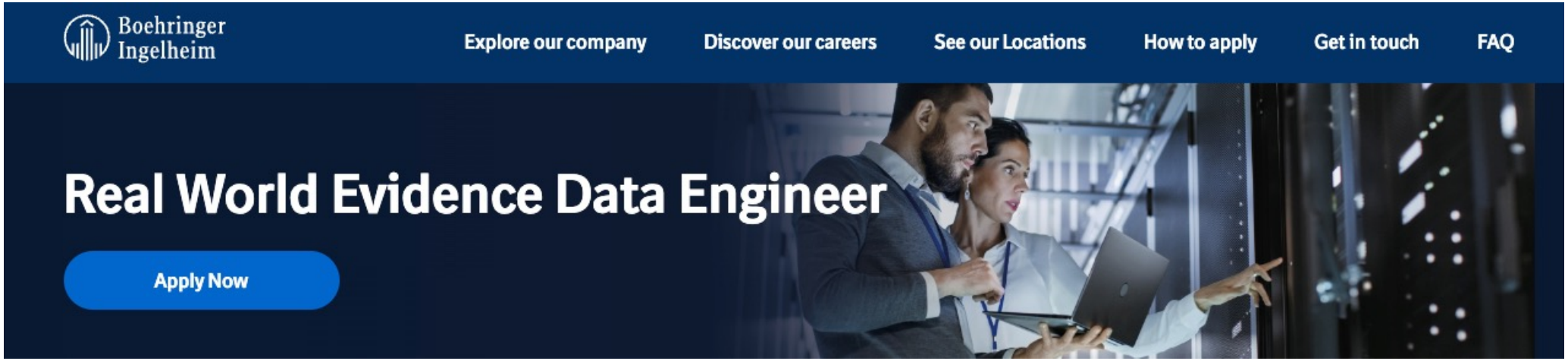
Citing ResultModelManager

Developers

Jamie Gilbert
Author, maintainer

Openings at Boehringer Ingelheim





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?

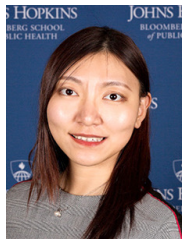
Where Are We Now?

Where Are We Going?

Sept. 19 • OHDSI Journal Club: 11th Revision of the ENCePP Guide on Methodological Standards in Pharmacoepidemiology

Catherine Cohet

Pharmacoepidemiology Senior Specialist, RWE Workstream, Data Analytics & Methods Task Force, European Medicines Agency



Xintong Li

DPhil student in Medical Statistics and Clinical Epidemiology, University of Oxford

Kim López Güell

DPhil student in Medical Statistics and Clinical Epidemiology, University of Oxford

Daniel Morales

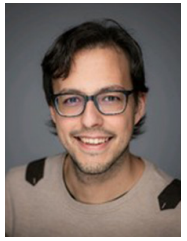
Senior Pharmacoepidemiologist, European Medicines Agency

Niklas Norén

Chief Science Officer, Uppsala Centre

Luis Pinheiro

Senior Epidemiology Expert, European Medicines Agency



Albert Prats-Uribe

Senior Clinical Researcher and Public Health Specialist, University of Oxford

Dani Prieto-Alhambra

Section Head - Health Data Sciences, Botnar Research Centre and Professor, University of Oxford and Erasmus MC