



10-Minute Tutorials

OHDSI Community Call
June 21, 2022 • 11 am ET



Upcoming OHDSI Community Calls

Date	Topic
June 28	European Symposium Recap
July 5	NO MEETING
July 12	New Adopter Introductions and Q&A
July 19	Workgroup Updates
July 26	CDM Update Process



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#OHDSI2022 Collaborator Showcase

It is Collaborator Showcase Submission Week!

All submissions for poster presentations, software demos and/or lightning talks are due no later than 8pm (EST) on **Friday, June 24.**

www.ohdsi.org/ohdsi2022collaboratorshowcase



#OHDSI2022 Collaborator Showcase



OHDSI

OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS

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Welcome to OHDSI!

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

OHDSI2022 Homepage

OHDSI2022 Collaborator Showcase

OHDSI2022 Conference Registration (Oct. 14)

OHDSI2022 Tutorial

OHDSI2022 Tutorial Registration (Oct. 15)

OHDSI2022 FAQ

OHDSI2022 Workgroup Activities Schedule

OHDSI2022 Workgroup Activities Registration (Oct. 15-16)

Symposium

... held Oct.
... Hotel &
... has opened.

We will hold the main conference on Friday, Oct. 14, which will include our collaborator showcase.

www.ohdsi.org/ohdsi2022collaboratorshowcase



#OHDSI2022 Collaborator Showcase

2022 OHDSI Collaborator Showcase

Oct. 14 • Bethesda North Marriott Hotel & Conference Center

The Submission Deadline for the 2022 Collaborator Showcase is Friday, June 24 at 8 pm ET.

[Collaborator Showcase Brief Report Submission Form](#)

Thank you for your interest in the 2022 OHDSI Collaborators Showcase! We are delighted that you are considering joining our research community and presenting your work at this year's symposium showcase. The OHDSI Symposium will be held in person Oct. 14-16 this year at the Bethesda North Marriott Hotel & Conference Center, and the collaborator showcase will take place during the main symposium on Oct. 14.

OHDSI's mission is to improve health by empowering a community to collaboratively generate evidence that promotes better health decisions and better care. We envision a world in which observational research produces a comprehensive understanding of health and disease. To achieve this goal, OHDSI has formed a multi-stakeholder, interdisciplinary collaboration that aims to bring out the value of health data through large-scale analytics and open-source software tools. OHDSI has established a global community of observational health researchers and a research network covering over 810 million patients.

OHDSI's achievements to date would not be possible if not for the hard work of our growing community members. Our annual Collaborator Showcase provides our community the opportunity to share their tremendous work. Over the last two years, the OHDSI community produced more than 200 posters/talks/demos for our Collaborator Showcase.

Once again, we are inviting collaborators to participate in the Collaborator Showcase for this year's 2022 OHDSI Symposium. Collaborators will have the opportunity to submit their work for poster presentations, oral talks, and software demonstrations.

Topics of Interest include:

- Observational data standards and management
- Methodological research
- Open-source analytics development
- Clinical research from OHDSI's analytic use cases:
- Clinical characterization
- Population-level estimation
- Patient-level prediction
- Community development

SHOWCASE STRUCTURE

The showcase will be structured to highlight posters, oral talks, and software demonstrations.

We are currently working out all the details for the 2022 OHDSI Symposium. Please continue to join our community calls (Tuesdays, 11 am ET), check the forums, MSTeams, the OHDSI website and social platforms, as well as emails from OHDSI Events manager, to learn more details about an informative and productive showcase this year!

1) POSTER: a poster-board to present a static display summary of your latest research; poster measurements are to be a horizontal-orientation and 48"long x 36"high is the maximum size. Please create a paper-type poster as the poster boards at the symposium will be cork; please do not use foam core. As always you may use the traditional poster template or the Mike Morrison poster template which was introduced a few

The traditional poster template is [available here](#).
The Mike Morrison poster template is [available here](#).

The FedEx store near the hotel can assist you with your poster printing.

Contact: FedEx Print and Ship, 12125 Rockville Pike Rockville, MD 20852

Phone: (301) 881-6810

Email: usa1829@fedex.com

Website: [FedEx Office – Rockville, MD – 12125 Rockville Pike 20852 – Print & Ship | Kinkos](#)

2) ORAL PRESENTATION: a 7-minute podium presentation to verbally share your story with the community. In addition, if you are selected to give an oral talk, you will also be responsible for creating a poster to submit for the showcase so the community can ask you questions about your work.

3) SOFTWARE DEMONSTRATION: an interactive display of open-source analytics; a table and monitor will be provided.

SUBMISSION INSTRUCTIONS

A brief report submission template can be found here: [Submission Template](#). The document can be downloaded as a Microsoft Word document by clicking on the link and selecting File->Download As...-> Microsoft Word (.docx).

Each presenting author should upload their document as a PDF. The submission should meet the following guidelines:

- Maximum 1000 words of text (exclusive of references/citations)
- Maximum 10 MB
- Clearly state the names of all co-authors and list them in the order that will appear on the presentation (**please do not include titles or degree/certificate credentials**)
- Have the following components: Title, Background, Methods, Results, Conclusions.
- References/citations are recommended (maximum 15; suggested style is Vancouver).
- Unpublished in the peer-review literature at the time of submission; preprints are acceptable
- [Optional] up to 3 additional Figures, tables can be added to support description of the methods or results

By submitting your work, the presenting author (or representative) agrees to present at the OHDSI Symposium in person if their work is selected. Your document should be saved as a PDF using the following naming convention, where the "firstname" and "lastname" correspond to the name of the presenting author, and "title" should include keywords that summarize the title: `firstname-lastname_title_2022symposium`

As we have done over the last two years, we strongly suggest all showcase participants create a video about their work that is shared over the OHDSI social platforms following the symposium. The video must be .mp4 format, under 2:20 in time and < 512 MB. Over the last two years, video submissions were viewed more than 5,400 times on the OHDSI twitter feed. Those videos will be due prior to the symposium; please reach out to symposium@ohdsi.org if you have any questions.

IMPORTANT DATES

- All submissions are due no later than 8pm (EST) on **Friday, June 24.**
- All submissions will be peer-reviewed by the OHDSI Scientific Review Committee between **June 25-July 24.**
- If you have been selected to present your work for the 2022 Symposium Collaborators Showcase, you will be notified via email by **Monday, August 1, 2022.**
- Please fill out the Conflict of Interest (COI) form below at time of submission.

Should you need additional assistance, please email us at symposium@ohdsi.org.

[Collaborator Showcase Brief Report Submission Form](#)

[Collaborator Showcase Conflict of Interest Form](#)

www.ohdsi.org/ohdsi2022collaboratorshowcase



Three Stages of The Journey

Where Have We Been?

Where Are We Now?

Where Are We Going?





OHDSI Shoutouts!



Congratulations to the team of **Jiayi Tong, Chongliang Luo, Md Nazmul Islam, Natalie E. Sheils, John Buresh, Mackenzie Edmondson, Peter A. Merkel, Ebbing Lautenbach, Rui Duan and Yong Chen** on the publication of **Distributed learning for heterogeneous clinical data with application to integrating COVID-19 data across 230 sites** in Digital Medicine.

npj | digital medicine

www.nature.com/npjdigitalmed

ARTICLE OPEN



Distributed learning for heterogeneous clinical data with application to integrating COVID-19 data across 230 sites

Jiayi Tong¹, Chongliang Luo², Md Nazmul Islam³, Natalie E. Sheils⁴, John Buresh³, Mackenzie Edmondson¹, Peter A. Merkel¹, Ebbing Lautenbach¹, Rui Duan⁴ and Yong Chen⁵

Integrating real-world data (RWD) from several clinical sites offers great opportunities to improve estimation with a more general population compared to analyses based on a single clinical site. However, sharing patient-level data across sites is practically challenging due to concerns about maintaining patient privacy. We develop a distributed algorithm to integrate heterogeneous RWD from multiple clinical sites without sharing patient-level data. The proposed distributed conditional logistic regression (dCLR) algorithm can effectively account for between-site heterogeneity and requires only one round of communication. Our simulation study and data application with the data of 14,215 COVID-19 patients from 230 clinical sites in the UnitedHealth Group Clinical Research Database demonstrate that the proposed distributed algorithm provides an estimator that is robust to heterogeneity in event rates when efficiently integrating data from multiple clinical sites. Our algorithm is therefore a practical alternative to both meta-analysis and existing distributed algorithms for modeling heterogeneous multi-site binary outcomes.

npj Digital Medicine (2022)5:76; <https://doi.org/10.1038/s41746-022-00615-8>

INTRODUCTION

Starting from the 2010s, the adoption of Electronic Health Record (EHR) systems grows rapidly in the United States. A large range of detailed clinical data, including medications, laboratory test results, disease status, and treatment outcomes, are available to facilitate research. The real-world data (RWD), including EHRs, claims, and billing data among others, have become an invaluable data source for comparative effectiveness research (CER) during the past few years^{1,2}. Synthesis of the RWD stored electronically in the EHR systems from multiple clinical sites provides a larger sample size of the population compared to a single site study³. Analyses using larger populations can benefit the accuracy in estimation and prediction. The integration of research networks inside healthcare systems also allows rapid translation and dissemination of research findings into evidence-based healthcare decision making to improve health outcomes, consistent with the idea of a learning health system⁴⁻⁹.

In the past few years, several successful networks have been founded and become beneficial to multicenter research. One of them is the Observational Health Data Sciences and Informatics (OHDSI) consortium¹⁰. OHDSI was founded for the primary purpose of developing open-source tools that could be shared across multiple sites. OHDSI developed the Observational Medical Outcomes Partnership (OMOP) Common Data Model (CDM) for data standardization¹¹. The OMOP allows each institution to transform the local EHR data to the CDM's standards. This procedure makes it feasible for the researchers to develop methods that can be simultaneously applied to the datasets from many institutions. The conversion and standardization of the data

pediatric health systems in the US. Comprising clinical information from millions of children, PEDSnet offers the capacity to conduct multicenter pediatric research with broad real-world evidence. Other significant efforts include Sentinel System, which is a multi-site network of a national electronic system for monitoring performance of FDA-regulated medical products¹⁴ and the Consortium for Clinical Characterization of COVID-19 by EHR (4CE)¹⁵, which is an international consortium for electronic health record (EHR) data-driven studies of the COVID-19 pandemic, among others.

In multi-center studies, maintaining privacy of patient data is a major challenge⁶⁻¹⁹. Due to data privacy policies, directly sharing patient-level data, especially demographic, comorbidity, and outcome data, is restricted and poorly feasible in practice. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) introduced a privacy rule to regulate use of protected health information (PHI) often found in EHRs, requiring de-identification of PHI before use in biomedical research¹⁷. De-identified PHI has been shown to be susceptible to re-identification, causing concern among patients^{20,21}.

In light of patient privacy concerns, many multicenter studies currently conduct analyses by combining shareable summary statistics through meta-analysis²²⁻²⁴. While relatively simple to use, meta-analysis has been shown to result in biased or imprecise estimation in the context of rare outcomes, as well as with smaller sample sizes²⁵. Other than meta-analysis, several distributed algorithms have been developed and considered in studies with multi-site data. In these distributed algorithms, a model estimation process is decomposed into smaller computational tasks that are



OHDSI Shoutouts!



Congratulations to the team of **Emmanuel Uchenna Agu, Arman Mosenia, Jacob A Lifton, Lawrence Chan, Katherine G Ligtenberg, Drew Saylor, Reza Vagefi, Seanna R Grob, Robert Kersten, Melena Ahmad, and Bryan Winnon** on the publication of **The Impact of COVID-19 on Periocular Non-Melanoma Skin Cancer in the Veteran Population** in Investigative Ophthalmology & Visual Science.

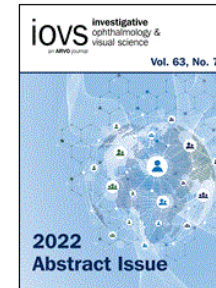
iovs investigative ophthalmology & visual science
an ARVO journal

ISSUES

TOPICS

FOR AUTHORS

ABOUT ▾



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ARVO Annual Meeting Abstract | June 2022

The Impact of COVID-19 on Periocular Non-Melanoma Skin Cancer in the Veteran Population

Emmanuel Uchenna Agu; Arman Mosenia; Jacob A Lifton; Lawrence Chan; Katherine G Ligtenberg; Drew Saylor; Reza Vagefi; Seanna R Grob; Robert Kersten; Melena Ahmad; Bryan Winn

+ Author Affiliations & Notes

Investigative Ophthalmology & Visual Science June 2022, Vol.63, 3148 – A0043. doi:

SHARE ▾

TOOLS ▾

Abstract

Purpose : Despite an increasing incidence of skin cancer over the last decade, studies have reported a decline in the diagnosis and treatment of skin cancer during the COVID-19 pandemic. We performed a retrospective cohort study using a large population-based cohort from the Veterans Health Administration (VHA) to determine how the pandemic has affected tumor size and morbidity in veterans with periocular non-melanoma skin cancer.



OHDSI Shoutouts!



Congratulations to the team of **Yongseok Mun, ChulHyoung Park, Da Yun Lee, Tong Min Kim, Ki Won Jin, Seok Kim, Yoo-Ri Chung, Kihwang Lee, Ji Hun Song, Young-Jung Roh, Donghyun Jee, Jin-Woo Kwon, Se Joon Woo, Kyu Hyung Park, Rae Woong Park, Sooyoung Yoo, Dong-Jin Chang & Sang Jun Park** on the publication of **Real-world treatment intensities and pathways of macular edema following retinal vein occlusion in Korea from Common Data Model in ophthalmology** in Scientific Reports.

scientific reports

OPEN

Real-world treatment intensities and pathways of macular edema following retinal vein occlusion in Korea from Common Data Model in ophthalmology

Yongseok Mun^{1,9}, ChulHyoung Park^{2,9}, Da Yun Lee³, Tong Min Kim⁴, Ki Won Jin³, Seok Kim⁵, Yoo-Ri Chung⁶, Kihwang Lee⁶, Ji Hun Song⁶, Young-Jung Roh⁷, Donghyun Jee⁸, Jin-Woo Kwon⁸, Se Joon Woo³, Kyu Hyung Park³, Rae Woong Park², Sooyoung Yoo⁵, Dong-Jin Chang⁷ & Sang Jun Park³

Despite many studies, optimal treatment sequences or intervals are still questionable in retinal vein occlusion (RVO) macular edema. The aim of this study was to examine the real-world treatment patterns of RVO macular edema. A retrospective analysis of the Observational Medical Outcomes Partnership Common Data Model, a distributed research network, of four large tertiary referral centers (n = 9,202,032) identified 3286 eligible. We visualized treatment pathways (prescription volume and treatment sequence) with sunburst and Sankey diagrams. We calculated the average number of intravitreal injections per patient in the first and second years to evaluate the treatment intensities. Bevacizumab was the most popular first-line drug (80.9%), followed by triamcinolone (15.1%) and dexamethasone (2.28%). Triamcinolone was the most popular drug (8.88%), followed by dexamethasone (6.08%) in patients who began treatment with anti-vascular endothelial growth factor (VEGF) agents. The average number of all intravitreal injections per person decreased in the second year compared with the first year. The average number of injections per person in the first year increased throughout the study. Bevacizumab was the most popular first-line drug and steroids were considered the most common as second-line drugs in patients first treated with anti-VEGF agents. Intensive treatment patterns may cause an increase in intravitreal injections.





OHDSI Shoutouts!



Congratulations to the team of **Sooyoung Yoo, Eunsil Yoon, Dachung Boo, Borham Kim, Seok Kim, Jin Chul Paeng, le Ryung Yoo, In Young Choi, Kwangsoo Kim, Hyun Gee Ryoo, Sun Jung Lee, Eunhye Song, Young-Hwan Joo, Junmo Kim, and Ho-Young Lee** on the publication of **Transforming Thyroid Cancer Diagnosis and Staging Information from Unstructured Reports to the Observational Medical Outcome Partnership Common Data Model** in *Applied Clinical Informatics*.

Transforming Thyroid Cancer Diagnosis and Staging Information from Unstructured Reports to the Observational Medical Outcome Partnership Common Data Model

Sooyoung Yoo¹ Eunsil Yoon¹ Dachung Boo¹ Borham Kim¹ Seok Kim¹ Jin Chul Paeng²
le Ryung Yoo³ In Young Choi^{4,5} Kwangsoo Kim⁶ Hyun Gee Ryoo^{7,8} Sun Jung Lee^{4,5} Eunhye Song⁹
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Appl Clin Inform 2022;13:521–531.

Abstract

Keywords

- ▶ thyroid neoplasms
- ▶ natural language processing
- ▶ clinical documentation and communications
- ▶ electronic health records and systems
- ▶ standards

Background Cancer staging information is an essential component of cancer research. However, the information is primarily stored as either a full or semistructured free-text clinical document which is limiting the data use. By transforming the cancer-specific data to the Observational Medical Outcome Partnership Common Data Model (OMOP CDM), the information can contribute to establish multicenter observational cancer studies. To the best of our knowledge, there have been no studies on OMOP CDM transformation and natural language processing (NLP) for thyroid cancer to date. **Objective** We aimed to demonstrate the applicability of the OMOP CDM oncology extension module for thyroid cancer diagnosis and cancer stage information by processing free-text medical reports.

Methods Thyroid cancer diagnosis and stage-related modifiers were extracted with rule-based NLP from 63,795 thyroid cancer pathology reports and 56,239 Iodine whole-body scan reports from three medical institutions in the Observational Health Data Sciences and Informatics data network. The data were converted into the OMOP CDM



OHDSI Shoutouts!



Congratulations to the team of **Cynthia Yang, Ross Williams, Joel Swerdel, João Rafael Almeida, Emily S. Brouwer, Edward Burn, Loreto Carmona, Katerina Chatzidionysiou, Talita Duarte-Salles, Walid Fakhouri, Antje Hottgenroth, Meghna Jani, Raivo Kolde, Jan A. Kors, Lembe Kullamaa, Jennifer Lane, Karine Marinier, Alexander Michel, Henry Morgan Stewart, Albert Prats-Urbe, Sulev Reisberg, Anthony Sena, Carmen Torre, Katia Verhamme, David Vizcaya, James Weaver, Patrick Ryan, Daniel Prieto-Alhambra, and Peter Rijnbeek** on the publication of **Development and external validation of prediction models for adverse health outcomes in rheumatoid arthritis: A multinational real-world cohort analysis** in *Seminars in Arthritis and Rheumatism*.



Development and external validation of prediction models for adverse health outcomes in rheumatoid arthritis: A multinational real-world cohort analysis

Cynthia Yang^{a,*}, Ross D. Williams^a, Joel N. Swerdel^b, João Rafael Almeida^c, Emily S. Brouwer^b, Edward Burn^{d,e}, Loreto Carmona^f, Katerina Chatzidionysiou^g, Talita Duarte-Salles^e, Walid Fakhouri^h, Antje Hottgenrothⁱ, Meghna Jani^j, Raivo Kolde^k, Jan A. Kors^a, Lembe Kullamaa^{l,m,n}, Jennifer Lane^d, Karine Marinier^o, Alexander Michel^p, Henry Morgan Stewart^q, Albert Prats-Urbe^d, Sulev Reisberg^{k,r,s}, Anthony G. Sena^{a,b}, Carmen O. Torre^q, Katia Verhamme^a, David Vizcaya^t, James Weaver^{b,u}, Patrick Ryan^{b,u}, Daniel Prieto-Alhambra^d, Peter R. Rijnbeek^a

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ARTICLE INFO

Keywords:

Rheumatoid arthritis
Methotrexate
Cardiovascular diseases
Infections
Prediction models

ABSTRACT

Background: Identification of rheumatoid arthritis (RA) patients at high risk of adverse health outcomes remains a major challenge. We aimed to develop and validate prediction models for a variety of adverse health outcomes in RA patients initiating first-line methotrexate (MTX) monotherapy.

Methods: Data from 15 claims and electronic health record databases across 9 countries were used. Models were developed and internally validated on Optum® De-identified Clinformatics® Data Mart Database using L1-regularized logistic regression to estimate the risk of adverse health outcomes within 3 months (leukopenia, pancytopenia, infection), 2 years (myocardial infarction (MI) and stroke), and 5 years (cancers [colorectal, breast, uterine] after treatment initiation. Candidate predictors included demographic variables and past medical history. Models were externally validated on all other databases. Performance was assessed using the area under the receiver operator characteristic curve (AUC) and calibration plots.



OHDSI Shoutouts!





OHDSI Shoutouts!



Congratulations to the team of **Anna Ostropolets, Patrick Ryan, Martijn Schuemie and George Hripcsak** on the publication of **Characterizing Anchoring Bias in Vaccine Comparator Selection Due to Health Care Utilization With COVID-19 and Influenza: Observational Cohort Study** in **JMIR Public Health and Surveillance**.

JMIR PUBLIC HEALTH AND SURVEILLANCE

Ostropolets et al

Original Paper

Characterizing Anchoring Bias in Vaccine Comparator Selection Due to Health Care Utilization With COVID-19 and Influenza: Observational Cohort Study

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Abstract

Background: Observational data enables large-scale vaccine safety surveillance but requires careful evaluation of the potential sources of bias. One potential source of bias is the index date selection procedure for the unvaccinated cohort or unvaccinated comparison time ("anchoring").

Objective: Here, we evaluated the different index date selection procedures for 2 vaccinations: COVID-19 and influenza.

Methods: For each vaccine, we extracted patient baseline characteristics on the index date and up to 450 days prior and then compared them to the characteristics of the unvaccinated patients indexed on (1) an arbitrary date or (2) a date of a visit. Additionally, we compared vaccinated patients indexed on the date of vaccination and the same patients indexed on a prior date or visit.

Results: COVID-19 vaccination and influenza vaccination differ drastically from each other in terms of the populations vaccinated and their status on the day of vaccination. When compared to indexing on a visit in the unvaccinated population, influenza vaccination had markedly higher covariate proportions, and COVID-19 vaccination had lower proportions of most covariates on the index date. In contrast, COVID-19 vaccination had similar covariate proportions when compared to an arbitrary date. These effects attenuated, but were still present, with a longer lookback period. The effect of day 0 was present even when the patients served as their own controls.

Conclusions: Patient baseline characteristics are sensitive to the choice of the index date. In vaccine safety studies, unexposed index event should represent vaccination settings. Study designs previously used to assess influenza vaccination must be reassessed for COVID-19 to account for a potentially healthier population and lack of medical activity on the day of vaccination.



2022 ISPE Fellow: Nicole Pratt

Congratulations to our longtime collaborator and Australia chapter lead **Nicole Pratt**, who was recently announced as one of eight new ISPE Fellows for 2022!



New Fellows 2022

ISPE is pleased to announce the induction of eight new ISPE Fellows this year.

ISPE Fellowship is awarded to only a select few each year: individuals who had or have leadership roles in ISPE; made notable contributions to the growth and advancement of the Society through service; shown evidence of substantial scholarship in pharmacoepidemiology or related fields; presented at ISPE events; or have other achievements or made other contributions that validate them as suitable for ISPE Fellowship.



Edward Bortnichak



Emily Brouwer



Bradley Layton



Nicole Pratt



Donna Rivera



Leah Sansbury



Susan Sinclair



Jonathan Slaughter

Spotlight: Nicole Pratt



The work that has been generated in **LEGEND** and **EUMAEUS** is important clinically. It can help to update clinical guidelines and provides robust evidence for medicine regulators — but for me these landmark studies have also provided critical insights into which methodologies are appropriate under which conditions — especially the value of empirical calibration!





OHDSI Shoutouts!



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

Have a study published? Please send to sachson@ohdsi.org so we can share 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	1 pm	Common Data Model
Wednesday	12 pm	Latin America
Thursday	12 pm	FHIR and OMOP Oncology Subgroup
Thursday	1 pm	OMOP CDM Oncology Vocabulary/Development Subgroup
Thursday	6 pm	FHIR and OMOP Terminologies Subgroup
Friday	9 am	GIS – Geographic Information System Development
Friday	10 am	Phenotype Development and Evaluation
Friday	10:30 am	Clinical Trials
Tuesday	9 am	OMOP CDM Oncology Genomic Subgroup

www.ohdsi.org/upcoming-working-group-calls



2022 European Symposium



EUROPEAN OHDSI SYMPOSIUM

Symposium: June 24th
Workshops: 25-26th

"All aboard!"

New Date!!

We'll meet again for
one journey ahead



Organised by:

Erasmus MC
University Medical Center Rotterdam
Erasmus

Health
Data
Science

www.ohdsi-europe.org/symposium-2022



2022 European Symposium



Symposium Agenda June 24th, 2022

Theatre at the Steam Ship Rotterdam

Time	Description
8:00 – 9:00	Registration and Coffee
9:00 – 9:10	Welcome to the European OHDSI Journey Speaker: Peter Rijnbeek, PhD, Chair, Department of Medical Informatics Erasmus MC
9:10 – 9:40	Journey of OHDSI: Where have we been? Speaker: George Hripcsak, MD, MS, Vivian Beaumont Allen Professor and Chair, Biomedical Informatics, Columbia University Medical Center
9:40 – 11:00	A Cruise around the OHDSI Europe Community Moderator: Nigel Hughes, Janssen Research and Development <ul style="list-style-type: none"> 1. Estonia. Conversion of Estonian health data into the OMOP CDM Speaker: Marek Oja, Institute of Computer Science, University of Tartu 2. Finland. The Finnish OMOP data network (FinOMOP) Speaker: Javier Gracia-Tabuenca, Tampere University of Technology (checken!) 3. Denmark. Transforming Danish Registries to the OMOP Common Data Model: use case on the Danish Colorectal Cancer Group (DCCG) Database Speaker: Adamantia Tsouchnika, Center for Surgical Science, Zealand University Hospital 4. Norway. Norwegian registries onto OMOP Common Data Model: mapping challenges and opportunities for pregnancy studies Speaker: Eimir Hurley, University of Oslo 5. Germany. OHDSI Germany: A recap after one year Speaker: Michele Zoch, Technische Universität Dresden 6. Italy. The Italian national node of OHDSI Europe Speaker: Lucia Sacchi, University of Pavia 7. Greece. An update from the Greek National Node Speaker: Pantelis Natsiavas, Centre for Research & Technology Hellas 8. Ukraine. Integration prospects of the Ukrainian healthcare system with OMOP CDM Speaker: Maria Kolesnyk, SciForce 9. Israel. The journey from isolated EHR's to unified CDM network Speaker: Guy Livne, Israel Ministry of Health 10. France. Semantic harmonization of the French National healthcare database (SNDS) Speaker: Lorient Benda, Health Data Hub <p>Panel discussion.</p>

OHDSI Europe, version 2022-06-10

Collaborator Showcase 2022 Session A (13:00-14:30)

Observational data standards and management		
1 A	Conversion of Estonian health data into the OMOP CDM: insurance claims, prescription data and electronic health records	Marek Oja, Sirl Tamm, Sulev Reisberg, Raivo Kolde, Sven Laur, Hendrik Šuvalov, Harry-Anton Talvik, Jaak Vilo
2 A	The European health data & evidence network (ehden)-sharing the ohdsi journey and a vision of evidence today, not in several tomorrows	N. Hughes, D. Prieto-Alhambra, C. Diaz, P. Rijnbeek, on behalf of the EHDS Consortium
3 A	FeederNet (Federated E-Health Big Data for Evidence Renovation Network) platform in Korea	Seongwon Lee, Chungsoo Kim, Junhyuk Chang, Rae Woong Park
4 A	The Finnish OMOP data network (FinOMOP)	Anna Hammis, Persephone Doupi, Sampo Kukkurainen, Perttu Koskenvesa, Javier Gracia-Tabuenca, Oscar Brück, Leena Hakkarainen, Annu Kaila, Gustav Klingstedt, Kalle Kollin, Juha Koski, Jan Magnusson, Toni Mikkola, Pasi Rikala, Simo Rytönen, Max Salmi, Ilona Silander, Pia Tajarinen, Juha-Matti Varjonen, Arto Vesterbacka, Arto Vuori, Arho Virkki, Tarja Laitinen, Kimmo Porkka
5 A	The journey from central operational data-lake to Medica Centers CDM network	Guy Livne, Nadav Rappoport, Nir Makover, Hadas Eshel-Geva, Hadar Kapach, Tomer Hadad, Yarin Alon, Naama Perry-Cohen
6 A	Integration prospects of the Ukrainian healthcare system with OMOP CDM	Tetiana Aleksandrova, Polina Talapova, Denys Kaduk, Maksym Trofymenko, Maria Kolesnyk, Inna Ageeva, Max Ved
7 A	Norwegian registries onto OMOP Common Data Model: mapping challenges and opportunities for pregnancy studies	Nhung Trinh, Jared Houghtaling, Fabian Leonardo Martinez Bernal, Eimir Hurley, Emma Gesquiere, Lars Halvorsen, Hedvig Marie Egeland Nordeng
8 A	Transforming Danish Registries to the OMOP Common Data Model: use case on the Danish Colorectal Cancer Group (DCCG) Database	Adamantia Tsouchnika, Malha Mashkoor, Andreas Weinberger Rosen, Eldar Alakhverdiyev, Jared Houghtaling, Freija Descamps, Mikail Gögner, Viviane Annabelle Lin, Johan Stub Røno Clausen, Karoline Bendix Bräuner, Julie Sparholt Walbech, Soham Ravindra Shinde, Ismail Gögner
9 A	Semantic harmonization of the French National healthcare database (SNDS)	Lorient Benda, Cécile Roseau, Nicolas Thurin, Stéphanie Combes
10 A	OHDSI Germany: A recap after one year	Elisa Henke, Yuan Peng, Najia Ahmadi, Joshua Wiedekopf, Mareike Przysucha, Josef Schepers, Martin Sedlmayr, Ines Reinecke
11 A	OHDSI Italy: the Italian national node of OHDSI Europe	Lucia Sacchi
12 A	PHAROS, Platform for Harmonizing and Accessing Data in Real-time on Infectious Disease Surveillance Based on OMOP-CDM in Korea	Chungsoo Kim, Jimyung Park, Seongwon Lee, Rae Woong Park
13 A	Ensuring Data Quality in a Federated Data Network	Wout Vekemans, Michel Van Speybroeck
14 A	Applying k-anonymity and l-diversity in OMOP CDM databases	João Rafael Almeida, José Luis Oliveira
15 A	OMOP Genomic mapping capacities in conversion of comprehensive genomic profiling results	Maria Rogozhina
16 A	Mapping PROMs data from the Dutch PROFILES registry to the OMOP CDM - experiences and challenges	Peter Prinsen, Chiara Attanasio, Corina van den Hurk, Nicole Horevoorts, Sebastiaan van Sandijk
17 A	OMOP project evolution at Technische Universität Dresden over the past years	Ines Reinecke, Michèle Zoch, Yuan Peng, Elisa Henke, Najia Ahmadi, Martin Sedlmayr
18 A	Performance Improvement on mapping CPRD GOLD to OMOP CDM	Barrack Omendi, Daniel Prieto-Alhambra, Antonella Delmestri
19 A	OMOP CDM for European rare disease registries	Rowdy de Groot, Nirupama Benis, Pablo Alarcon, Rajaram Kaliyaperumal, Marco Roos, Ronald Cornet, Nuria Queralt-Rosinach
20 A	Challenges and solutions in using OMOP CDM to FAIRify a Dutch ICU quality registry	Daniel Puttmann, Nicolette de Keizer, Ronald Cornet, Eric van der Zwan, Ferishta Bakhshi-Raiez
21 A	A standard ETL process from REDCap to OMOP	Francesco Pozzoni, Matteo Gabetta, Mauro Bucalo, Nicola Barbarini
22 A	Current Status of OMOP-CDM in Asia-Pacific regions and Lessons for Data Quality Assessment: Collaborative CDM Inspection Study	Chungsoo Kim, Seongwon Lee, Jing Li, Can Yin, Jiawei Qian, Clair Blacketer, Anthony Molinaro, Dinuja Willigoda Liyanage, Mui Van Zandt, Rae Woong Park
23 A	Mapping UKB to the OMOP CDM: Challenges and Solutions	Sofia Bazakou, Maxim Moinat, Alessia Peviani, Anne van Winzum, Stefan Payralbe, Vaclav Papez, Spiros Denaxas
24 A	Mapping of complex constructs in OMOP CDM	Alexander Davydov, Christian Reich
25 A	Challenges and possible solutions for the maintenance of the OMOP CDM Standardized Vocabularies	Eduard Korchmar, Maria Kolesnyk, Polina Talapova, Denys Kaduk
26 A	Mapping concepts from the Netherlands Cancer Registry to the OMOP-CDM - experiences and challenges	Chiara Attanasio, Floor Klijn, Jennifer Caffarelli, Peter Prinsen
27 A	Common data environment for source vocabularies mapping	Irina Zherko
28 A	Pregnancy extension table in the OMOP CDM	Alicia Abellan, Edward Burn, Nhung Trinh, Sergio Fernández-Bertolin, Eimir Hurley, Daniel R. Morales, Hedvig Marie Egeland Nordeng, Talita Duarte-Salles
29 A	Comparing Data Quality Dashboard results from consecutive ETL iterations: two new visualizations and one utility script	Elena G. Lara, Maxim Moinat, Anne van Winzum
30 A	An EHDS Data Partner Experience: Transforming the Hospital 12b2 data repository into OMOP common data model	Maria Teresa García Morales, Miguel Pedrera Jimenez, Noelia García Barrio, Diego Boscá Tomás, Pablo Serrano Balazote, David Lora Pablos, Agustín Gómez de la Cámara

www.ohdsi-europe.org/symposium-2022



OHDSI EHR Data Survey



MPhilofsky Melanie Philofsky

6h

Hello friends with EHR data,

One of the Healthcare Systems group's objectives this year is "To provide support for transforming source EHR data to the CDM". Currently, we provide support through answering questions on the forums and during our regularly scheduled work group meetings. Another product we would like to provide to the community is a central repository of different OMOP sites, their underlying EHR system, and attributes. This will allow new OHDSI collaborators to find and reach out to sites with similar infrastructure, EHR systems, and/or research goals. Participating in this survey does NOT commit you to being a mentor, providing your ETL script, or even answering your email. However, we hope you embrace the spirit of our open source community and contribute to the cause. We all learn as we OMOP our data. I've been very active in the OHDSI community and digging deep into EHR data for 8 years, and I still learn something new every day. But I think all persons in any field of science continue to learn because science is continually evolving. Here's the [link](#) ¹ to the google form.

    Reply



Job Openings

Odysseus Data Services recently announced two openings, one for an epidemiologist and one for a data scientist.

Check out the links on the community calls page or reach out to a member of the Odysseus team to learn more!

Odysseus Data Services (Odysseus) has an exciting opening for an **Epidemiologist**. This role will be responsible for supporting the development, maintaining, and troubleshooting of the cutting-edge distributed solutions in the Real-World Evidence (RWE) area, utilized by the researchers in Pharmaceutical, Healthcare and Payer industries. Odysseus is looking for a self-driven individual who can hit the ground running, quick learner and wants to be a part of our dynamic global team.

Responsibilities

- Lead and contribute to the design of observational database analysis, including authoring protocol, reviewing and providing relevant epidemiological and project-specific comments to statistical analysis plans and analysis output
- Participate in the design and development of standardized analytic tools to generate reliable and reproducible evidence in a network of observational data
- Contribute to the execution of observational database analyses using standardized analytical tools and writing statistical packages
- Contribute to the dissemination of scientific information through technical reports and publications in peer-reviewed literature.
- Work closely with healthcare and pharmaceutical customers to identify their needs
- Contribute to the development of complex phenotypes using advanced analytic approaches (i.e. machine learning, incorporating unstructured data sources using NLP, etc.)

Qualifications

- Graduate degree (MS, PhD, MD, etc) in epidemiology, biostatistics, pharmacy, public health or related clinical discipline plus two years' experience in observational research. PhD preferred
- Experience in designing and conducting healthcare studies and in development and applications of advanced analytics solutions
- Strong epidemiology and biostatistics background
- Experience using OHDSI tools and analytical methods is a big plus

Odysseus Data Services (Odysseus) has an exciting opening for a **Healthcare/Clinical Data Scientist**. This role will be responsible for supporting the development, maintaining, and troubleshooting of the cutting-edge distributed solutions in the Real-World Evidence (RWE) area, utilized by the researchers in Pharmaceutical, Healthcare and Payer industries. Odysseus is looking for a self-driven individual who can hit the ground running, quick learner and wants to be a part of our dynamic global team.

Responsibilities

- Lead and contribute to the design, development and documentation of standardized analytic tools that will be executed against a network of observational data
- Lead the execution of observational database analyses using standardized analytical tools and writing statistical packages
- Provide technical support for the data and analysis infrastructure and scientific support
- Contribute to writing of protocols and statistical analysis plans, methods development, conduct of simulation studies and statistical/mathematical modeling studies
- Lead and contribute to the development of complex phenotypes using advanced analytic approaches (i.e. machine learning, incorporating unstructured data sources using NLP, etc)
- Contribute to the dissemination of scientific information through technical reports and publications in peer-reviewed literature.
- Lead and contribute to the development of novel analytic tools and techniques to leverage the EHR data for rapid, reliable and reproducible evidence generation



Job Openings

There is a new opening for a Postdoctoral Data Scientist within Dani Prieto-Alhambra's team at the University of Oxford.

This person would be involved with the work happening around both DARWIN EU and EHDEN.

The application deadline is June 27, and more information and the application link will be posted on the community calls page.



Postdoctoral Data Scientist

Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, Botnar Research Centre, Windmill Road, Oxford

We have an exciting opportunity for Postdoctoral Data Scientist to join a Pharmaco- and Device epidemiology research group led by Professor Daniel Prieto-Alhambra at the Botnar Research Centre, NDORMS, University of Oxford. The NDORMS Pharmaco- and Device epidemiology research group is involved in a number of national and international studies exploring the conditions of use (adherence, compliance, off and on-label use) of a number of licensed drugs, devices, and vaccines for the prevention and treatment of human disease in 'real world' (routine practice) conditions.

As a Postdoctoral Data Scientist you will develop analysis plans, protocols, ethical (and similar panel) submissions, governance and regulatory submissions as required for ongoing and future studies. You will generate and analyse OMOP-mapped real world health data assets, adapt existing and develop new research methodologies and materials. You will carry out collaborative research projects with colleagues in partner institutions and report research findings in the form of conference abstracts at national and international conferences.

You will hold a Doctoral (or be near completion) degree in informatics/information technology, engineering, statistics, biostatistics, mathematics, health data sciences or a related field. Demonstrable advanced skills and expertise in R programming, advanced skills in programming in Python, SQL, or similar languages and ability to work well within multi-disciplinary teams and independently are essential. Experience in propensity score/s, instrumental variable/s, and/or other methods to adjust for confounding for indication in pharmaco-epidemiological studies, experience in prediction modelling and good track record of peer reviewed scientific publications are desirable.

This is a full-time fixed-term appointment for 2 years.

The closing date for this position is 12 noon on 27 June 2022. You will be required to upload a CV and supporting statement as part of your online application

Contact Person : HR Team, NDORMS

Vacancy ID : 158193

Contact Phone :

Closing Date & Time : 27-Jun-2022 12:00

Pay Scale : STANDARD GRADE 7

Contact Email : hr@ndorms.ox.ac.uk

Salary (£) : Grade 7: £33,309 - £40,927 p.a.



Job Openings

Professor **Peter Rijnbeek** announced an opening for an epidemiologist to work with his team at Erasmus MC.

This position will be responsible for all aspects of observational research including protocol writing, input in the statistical analysis plan, study execution, interpretation of results and report/manuscript writing.

The application deadline is July 8, 2022.



Epidemiologist

Published	Deadline	Location
9 Jun	7 Jul	Rotterdam



JOB DESCRIPTION

This research will be performed in close collaboration with the [Observational Health Data Sciences and Informatics \(OHDSI\)](#) initiative, which is a global, multi-stakeholder, interdisciplinary collaborative to bring out the value of health data through large-scale analytics, and the EU-sponsored [European Health Data and Evidence Network \(EHDEN\)](#) which develop frameworks to generate reliable real-world evidence.

In your function as Epidemiologist you will be responsible for all aspects of observational research including protocol writing, input in the statistical analysis plan, study execution, interpretation of results and report/manuscript writing.



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?





June 21: 10-Minute Tutorials

PheValuator

Presenter: Joel Swerdel • Associate Director, Johnson & Johnson



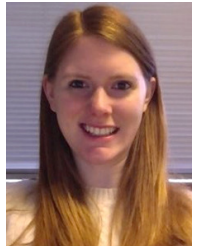
PheKnowLater

Presenter: Tiffany Callahan • Postdoctoral Research Fellow, Columbia Univ.



Patient-Level Prediction

Presenter: Jenna Reys • Associate Director, Johnson & Johnson



CAPR

Presenter: Martin Lavalley • Data Scientist, Odysseus Data Services

