

OHDSI Meet & Greet

OHDSI Community Call July 6, 2021 • 11 am ET



Upcoming OHDSI Community Calls

Date	Topic
July 6	Meet & Greet New OHDSI Collaborators
July 13	Focus Topic: PROTEUS (Predicting & Recalibrating Outcomes Toward External Understanding Study)
July 20	Workgroup Updates: Early-Stage Researchers, Women of OHDSI, Latin America, Education
July 27	Visualization Challenge



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July 13 Community Call: PROTEUS Presentation



David Kent

Professor of Medicine, Clinical & Translational Science, Tufts Medical Center



Benjamin Wessler

Director, Valve Center; Assistant Professor, Tufts University School of Medicine



Andrew Williams

Co-Director, Informatics, Tufts Clinical and Translational Science Institute



Three Stages of The Journey

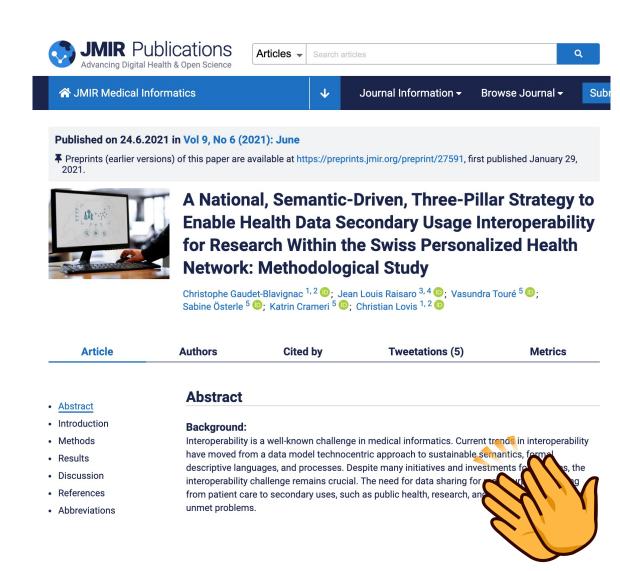
Where Have We Been? Where Are We Now? Where Are We Going?





OHDSI Shoutouts!

Congratulations to Christophe Gaudet-Blavignac, Jean Louis, Vasundra Touré, Sabine Österle, Katrin Crameri, and Christian Lovis for the study "A National, Semantic-Driven, Three-Pillar **Strategy to Enable Health Data Secondary Usage Interoperability for Research Within the Swiss Personalized Health Network: Methodological** Study" that was recently published in JMIR Medical Informatics.





OHDSI Shoutouts!

Congratulations to João Rafael Almeida, João Figueira Silva, Sérgio Matos, and José Luís Oliveira for the study "A Two-Stage Workflow to Extract and **Harmonize Drug Mentions from Clinical Notes into Observational** Databases" that was recently published in the Journal of Biomedical Informatics.



Journal of Biomedical Informatics

Available online 30 June 2021, 103849

In Press, Journal Pre-proof ?



Original Research

A Two-Stage Workflow to Extract and Harmonize Drug Mentions from Clinical Notes into Observational Databases

João Rafael Almeida ^{a, b} ⋈ M. João Figueira Silva ^{b, 1} M. Sérgio Matos ^b M. José Luís Oliveira M. João Figueira Silva M. Sérgio Matos M. José Luís Oliveira M. João Figueira Silva M. João Figueira M. João Fi

Show more V

https://doi.org/10.1016/j.jbi.2021.103849

Get rights and content

Background

The content of the clinical notes that have been continuously collected along patients' health history has the potential to provide relevant information about treatments and diseases, and to increase the value of structured data available in Electronic Health Records (EHR) databases. EHR databases are currently being used in observational studies which lead to important findings in medical biomedical sciences. However, the information present in clinical notes is being used in those studies, since the computational analysis of this unstrucdata is much complex in comparison to structured data.



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
Tuesday	3 pm	OMOP CDM Oncology – Outreach/Research Subgroup
Thursday	8 am	Psychiatry
Thursday	1 pm	OMOP CDM Oncology – CDM/Vocabulary Subgroup
Friday	10 am	Clinical Trials
Friday	10 am	Electronic Health Record
Friday	1 pm	Phenotype Development and Evaluation
Friday	11 pm	China Chapter
Monday	8 am	Early-Stage Researchers (Europe/East Coast/West Coast)
Monday	10 am	GIS-Geographic Information System
Tuesday	9 am	OMOP CDM Oncology – Genomic Subgroup

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



Get Access To Different Teams/WGs/Chapters

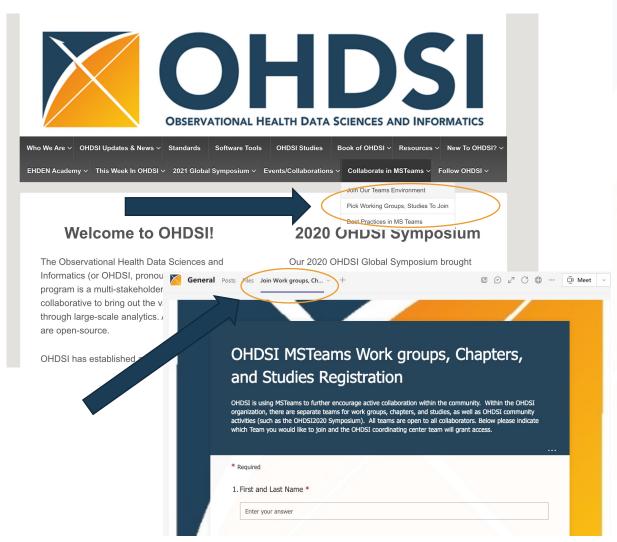


ATLAS	
Clinical Trials	
Common Data Model	Phenotype Development and Evaluation
Data Quality Dashboard Development	Population-Level Effect Estimation / Patient-Level Prediction
Early-stage Researchers	Psychiatry
	Registry (formerly UK Biobank)
Education Work Group	Surgery and Perioperative Medicine
Electronic Health Record (EHR) ETL	☐ Vaccine Safety
Geographic Information System (GIS)	☐ Vaccine Vocabulary
HADES Health Analytics Data-to-Evidence Suite	☐ Women of OHDSI
Health Equity	
Latin America	6. Select the chapter(s) you want to join
Editi America	Australia
Medical Devices	China
Natural Language Processing	☐ Europe
OHDSI APAC	Japan
OHDSI APAC Steering Committee	☐ Korea
	Singapore
OHDSI Steering Committee	☐ Taiwan
Oncology	
Patient-Generated Health Data	7. Select the studies you want to join
Pharmacovigiliance Evidence Investigation	HERA-Health Equity Research Assessment





Get Access To Different Teams/WGs/Chapters



ATLAS	
Clinical Trials	
Common Data Model	
Data Quality Dashboard Development	Phenotype Development and Evaluation
Early-stage Researchers	Population-Level Effect Estimation / Patient-Level Prediction Psychiatry
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Oncology	
Patient-Generated Health Data	7. Select the studies you want to join
Pharmacovigiliance Evidence Investigation	HERA-Health Equity Research Assessment
	☐ PIONEER for Prostate Cancer (study-a-thon ended)

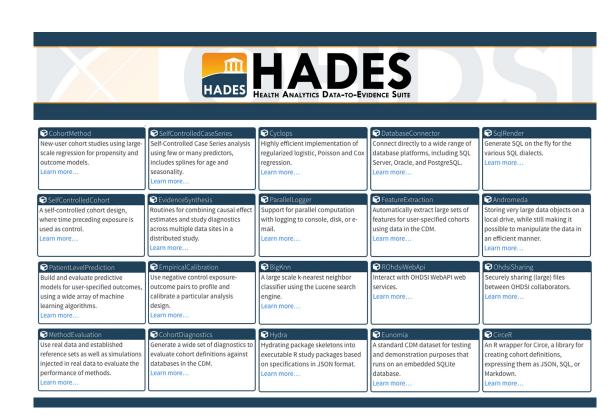




HADES Unit-Test-A-Thon: July 14-16

There will be a HADES Unit-Test-A-Thon held July 14-16, which aims to increase the coverage of all HADES packages to above 80%. If you have R experience, this is a great opportunity for you to:

- improve the reliability of HADES tools (which are critical to our community success)
- learn more about OHDSI software
- have fun with our global collaborators!



Forum Post: More Info & Registration Link





July OHDSI Newsletter Available

Community Updates

Where We've Been

- The largest, most extensive international study of the background rates of adverse events of special interest (AESI) being tracked in vaccine surveillance efforts show that adverse event rates vary substantially by age, sex, and method of data capture.
- Our colleagues within the EHDEN Consortium recently announced a total of 41 data partners have been selected in our latest open call for data partners.
 Combined, these new data partners represent over 78 million patient records, originating from various care settings.

Where We Are

- The new Health Equity Workgroup held its first meeting in late June, and it followed a community brainstorm on research challenges and opportunities in this area. If you would like to join this (or any of OHDSI's 27 workgroups), please fill out this form.
- Our EUMAEUS (Evaluating Use of Methods for Adverse Event Under Surveillance) team presented their study design and ongoing work at our most recent community call. This is important and exciting work with several papers in development, so please follow this space to learn more.

Where We're Going

- We were thrilled to have the most collaborator showcase submissions ever this year. If you have been selected to present your work for the 2021 Symposium Collaborators Showcase, you will be notified via email by Monday, August 2, 2021. Registration is OPEN for the 2021 Global Symposium, which will take place Sept. 12-15 in a virtual environment. More details will be shared in the next newsletter.
- The next edition of the CBER BEST Initiative Seminar Series will be this Wednesday, July 28, at 11 am. Jessica Gronsbell (University of Toronto) will present a talk on "Statistical learning with electronic health records data." The seminar series is open to everybody. More information and a registration link is available.



The Journey Newsletter (July 2021)

Vaccine surveillance and health equity were focal topics during an exciting month inside the OHDSI community, which received the most submissions ever for a Collaborator Showcase. #JoinTheJourney

Recent Publications

Kim, G.L., Yi, Y.H.; Hwang, H.R.; Kim, J.; Park, Y.; Kim, Y.J.; Lee, J.G.; Tak, Y.J.; Lee, S.H.; Lee, S.Y.; Cho, Y.H.; Park, E.J.; Lee, Y. The Risk of Osteoporosis and Osteoporotic Fracture Following the Use of Irritable Bowel Syndrome Medical Treatment: An Analysis Using the OMOP CDM Database, J. Clin. Med. 2021, 10, 2044. https://doi.org/10.3390/em100082044

LI X, Ostropolets A, Makadia R, Shoabil A, Rao G, Sena AG, Martinez-Hernandez E, Delmestri A, Verhamme K, Rijnbeek P, Duarte-Salles T, Suchard M, Ryan PB, Hripcsak G, Prieto-Ahlambra D. Characterising the background incidence rates of adverse events of special interest for covid-19 vaccines in eight countries: multinational network cohort study. BMJ 2021;373:n1435; doi: 10.1136/bmj.1435

Lee J, Liu C, Kim J, Butler A, Shang N, Pang C, Natarajan K, Ryan P, Ta C, Weng C. Comparative effectiveness of medical concept embedding for feature engineering in phenotyping, JAMIA Open, Volume 4, Issue 2, April 2021, ooab028, doi.org/10.1093/jamiaopen/ooab028.

Mamidi T, Tran-Nguyen T, Melvin R, Worthey E. <u>Development of An Individualized Risk Prediction Model for COVID-19 Using Electronic Health Record Data</u>. Front. Big Data, 04 June 2021; doi.org/10.3899/fdata.2021.675882

Community Call Presentations

June 1: OKR Mid-Year Review
OKR Mid-Year Review (Patrick Ryan)

June 8: 10-Minute Tutorials
PHOEBE (Anna Ostropolets)
Cohort Diagnostics (Gowtham Rao)
ATC Hierarchy (Christian Reich)

June 15: Professional Development Breakouts

Clinical Epidemiology (Moderators: Talita Duarte-Salles and Dani Prieto-Alhambra)

Information/Data Management (Moderators: Maxim Moinat and Mui Van Zandt)

Qeen-Source Software Development (Moderators: Greg Klebanov and Kees
van Bochove)

Statistical Methods (Moderators: Yong Chen and Marc Suchard)

July Newsletter

Largest, Most Extensive Measurement Of Adverse Events Background Rates Can Inform Safety Monitoring Efforts For COVID Vaccines

Dani Prieto-Alhambra



We knew regulators would be monitoring a long list of events for the surveillance of COVID vaccines safety. To do this, they need robust estimates of the background rates of these events in historical data. These results can be used as benchmark for the monitoring of these potential safety events and for any upcoming COVID-19 vaccines.



COVID vaccine surveillance efforts are a global priority, but safety monitoring for vaccines should not reflect a single global population. The largest international network study ever completed on the background rates of adverse events of special interest (AESI) being monitored in vaccine surveillance efforts identified that these rates vary substantially by age, sex, and database.

Led by researchers at Oxford University, Columbia University, Erasmus MC, UCLA, and Janssen, an international team of collaborators within the Observational Health Data Sciences and Informatics (OHDSI) network provided a timely reference of the background rates of AESIs in the recent study

"Characterising the background incidence rates of adverse events of special interest for covid-19 vaccines in eight countries: multinational network cohort study" published June 14 by The BMJ.

There were significant differences in the observed rates of AESIs based on the age groups and sex of more than 126 million people across four continents and 13 total databases in this observational study. Furthermore, differences were observed across people in distinct databases.

Full Study

OHDSI Press Release





CBER Seminar Series

The next edition of the CBER BEST Initiative Seminar Series will be July 28 at 11 am ET. Jessica Gronsbell (University of Toronto) will present a talk on "Statistical learning with electronic health records data."

Get more information and register by using the link below.



Webinar Registration



Topic CBER BEST Initiative Seminar Series - Statistical learning with electronic health records

data

The adoption of electronic health records (EHRs) has generated massive amounts of

routinely collected medical data with potential to improve our understanding of healthcare delivery and disease processes. However, the analysis of EHR data remains both practically and methodologically challenging as it is recorded as a byproduct of billing and clinical care, and not for research purposes. In this talk, I will discuss methods that bridge classical statistical theory and modern machine learning tools in an effort to efficiently and reliably extract insight from EHR data. I will focus primarily on (i) the

challenges in obtaining annotated outcome data, such as presence of a disease or clinical condition, from patient records and (ii) how to reduce the annotation burden by leveraging unlabeled data in model estimation and evaluation.

Presented by: Dr. Jessica Gronsbell, University of Toronto

me Jul 28, 2021 11:00 AM in Eastern Time (US and Canada)

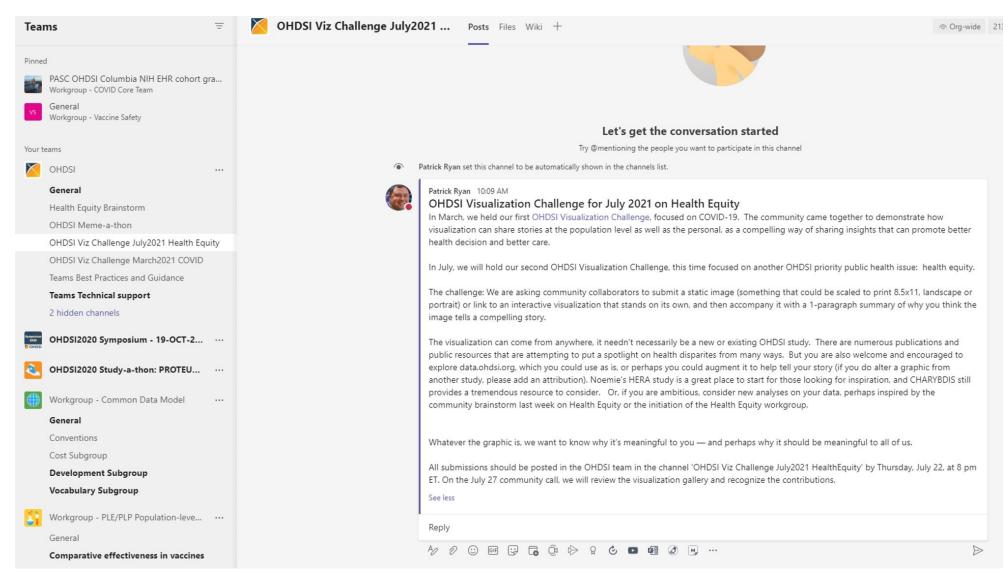
Register Here







July 27 Visualization Challenge







2021 Global Symposium: Sept. 12-15

2021 Global OHDSI Symposium

We are excited to announce that general registration for the 2021 Global OHDSI Symposium, which will be held virtually in Microsoft Teams, Sept. 12-15, is now open! This will be our seventh annual OHDSI Symposium, and it will provide another opportunity for our community to come together, share ideas, learn from each other and network with our fellow collaborators.

We are working on many details for the four-day event, which will feature plenary talks, a state of the community presentation and our collaborator showcase. One detail has not changed — the symposium remains free to attend and is open to anybody, whether you are a community veteran or a newcomer looking to learn more about how we generate real-world evidence that promotes better health decisions and better care.

Please continue to check the OHDSI website (www.ohdsi.org) and the OHDSI social platforms periodically for updates as we plan for a rewarding, online event!

What Can You Expect At #OHDSI2021?

The 2021 Global OHDSI Symposium will be held virtually for the second straight year. This allows both veteran collaborators and those new to OHDSI from around the world to come together and share ideas, learn from each other and enjoy the spirit of our community. If you missed our 2020 Global Symposium, check out the link below to get a sense of what takes place during our biggest event of the year.

The 2020 Global Symposium

While we are excited to again create an opportunity for everyone to participate in the Symposium for free if they choose, there are costs associated with coordinating all OHDSI community activities. To help offset these costs, we provide the additional optional opportunity for participants to support the OHDSI community through 'registration contribution' and 'optional registration fee' tickets. Thank you in advance for your generous support! Should you require a tax receipt for your contribution, please email symposium@ohdsi.org BEFORE you make the contribution through the Eventbrite registration site.

In addition, as all OHDSI activities depend largely on government grants and organization sponsorships, please email symposium@ohdsi.org if you would like to consider sponsorship opportunities for this year's symposium.

Should you wish to change or cancel your registration ticket, kindly log into your Eventbrite account where you may edit or cancel your free registration ticket at any time. Registration contribution tickets/optional registration fee tickets are non-refundable; however, if you need to make changes to this ticket, kindly email us at symposium@ohdsi.org. Also, if you make any changes to your registration ticket such as a name change or update an email address, please email us at symposium@ohdsi.org. Also, if you make any changes to your registration ticket such as a name change or update an email address, please email us at symposium@ohdsi.org. Also, if you make any changes to your registration ticket such as a name

To Register for the 2021 Global OHDSI Symposium, please click the button below:

Register For #OHDSI2021 Here!

Symposium Information and Registration







Where Are We Going?

Any other announcements of upcoming work, events, deadlines, etc?





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July 6 Community Call: Meet & Greet

During the July 6 call, we want to give members of the community a chance to let us know a bit more about them.

- Introduce yourself
- What is your background?
- How do you hope to contribute?
- How can OHDSI support you?



Help us continue to build this community!