



Community Brainstorm: Health Equity

OHDSI Community Call
June 22, 2021 • 11 am ET



Upcoming OHDSI Community Calls

Date	Topic
June 22	Community Brainstorm: Health Equity Research
June 29	Focus Topic: EUMEAUS (Evaluating Use of Methods for Adverse Event Under Surveillance)
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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June 29: EUMAEUS Presentation

Evaluating Use of Methods for Adverse Event Under Surveillance



Literature review

Lana Lai



Combining Methods in a Safety Surveillance System

Faaizah Arshad



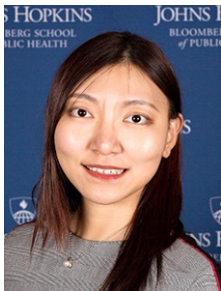
Overview of the EUMAEUS Experiment Design

Marc Suchard



Estimation for Two-Dose Vaccines

Ty Stanford



Bias, precision and timeliness of historical rate comparison methods

Xintong Li



Comparison of performance across methods

Martijn Schuemie



Three Stages of The Journey

Where Have We Been?

Where Are We Now?

Where Are We Going?





OHDSI Shoutouts!

Congratulations to **Junghwan Lee, Cong Liu, Jae Hyun Kim, Alex Butler, Ning Shang, Chao Pang, Karthik Natarajan, Patrick Ryan, Casey Ta, and Chunhua Weng** for the study **“Comparative effectiveness of medical concept embedding for feature engineering in phenotyping”** that was published recently in *JAMIA Open*.



Issues Advance Articles Submit Alerts About

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Volume 4, Issue 2
April 2021

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Abstract

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AUTHOR CONTRIBUTIONS

SUPPLEMENTARY MATERIAL

ACKNOWLEDGEMENTS

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Comparative effectiveness of medical concept embedding for feature engineering in phenotyping



Junghwan Lee, Cong Liu, Jae Hyun Kim, Alex Butler, Ning Shang, Chao Pang, Karthik Natarajan, Patrick Ryan, Casey Ta, Chunhua Weng ✉ [Author Notes](#)

JAMIA Open, Volume 4, Issue 2, April 2021, ooab028,
<https://doi.org/10.1093/jamiaopen/ooab028>

Published: 16 June 2021 [Article history](#)

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Abstract

Objective

Feature engineering is a major bottleneck in phenotyping. Properly learned medical concept embeddings (MCEs) capture the semantics of medical concepts, thus are useful for retrieving relevant medical features in phenotyping tasks. We compared the effectiveness of MCEs learned from knowledge graphs and electronic healthcare records (EHR) data in retrieving relevant medical features for phenotyping tasks.

Materials and Methods

We implemented 5 embedding methods including node2vec, singular value decomposition (SVD), LINE, skip-gram, and GloVe with 2 data sources: knowledge graphs obtained from the observational medical outcomes





OHDSI Shoutouts!

Congratulations to **Tarun Karthik Kumar Mamidi, Thi Tran-Nguyen, Ryan Melvin and Elizabeth Worthey** for the study **“Development of An Individualized Risk Prediction Model for COVID-19 Using Electronic Health Record Data”** that was published recently in *Frontiers in Big Data*.

The screenshot shows the article page on the Frontiers in Big Data website. The header includes the journal logo and navigation links. The article title is prominently displayed, followed by the authors: Tarun Karthik Kumar Mamidi^{1†}, Thi K. Tran-Nguyen^{2†}, Ryan L. Melvin³ and Elizabeth A. Worthey^{1,2*}. The article is categorized as 'ORIGINAL RESEARCH article' and dated 04 June 2021. A 'Check for updates' button is visible. The footnotes provide details about the authors' affiliations with the University of Alabama at Birmingham.

frontiers
in Big Data | Medicine and Public Health

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THIS ARTICLE IS PART OF THE RESEARCH TOPIC
AI-enabled Data Science for COVID-19 View all 6 Articles

ORIGINAL RESEARCH article
Front. Big Data, 04 June 2021 | <https://doi.org/10.3389/fdata.2021.675882>

Development of An Individualized Risk Prediction Model for COVID-19 Using Electronic Health Record Data

Tarun Karthik Kumar Mamidi^{1†}, Thi K. Tran-Nguyen^{2†}, Ryan L. Melvin³ and Elizabeth A. Worthey^{1,2*}

¹Center for Computational Genomics and Data Science, Departments of Pediatrics and Pathology, University of Alabama at Birmingham School of Medicine, Birmingham, AL, United States
²Hugh Kaul Precision Medicine Institute, University of Alabama at Birmingham, Birmingham, AL, United States
³Department of Anesthesiology and Perioperative Medicine, University of Alabama at Birmingham, Birmingham, AL, United States



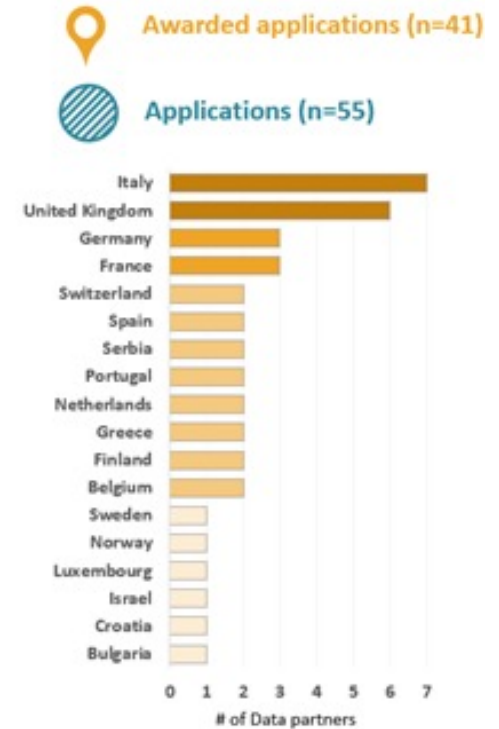


OHDSI Shoutouts!



Congratulations to our **EHDEN colleagues**, which added 41 new data partners in its most recent call, including

- 7 new nations (Greece, Bulgaria, Israel, Norway, Sweden, Switzerland and Luxembourg)
- 12 new data partners which have a focus on oncology



www.ehden.eu



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!





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Upcoming Workgroup Calls




Date	Time (ET)	Meeting
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
Monday	11:30 pm	Pharmacovigilance Evidence Investigation (PEI)
Tuesday	9 am	OMOP CDM Oncology – Genomic Subgroup
Tuesday	3 pm	Health Equity (<i>FIRST MEETING</i>)

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



Get Access To Different Teams/WGs/Chapters



OHDSI

OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS

[Who We Are](#) [OHDSI Updates & News](#) [Standards](#) [Software Tools](#) [OHDSI Studies](#) [Book of OHDSI](#) [Resources](#) [New To OHDSI?](#)

[EHDEN Academy](#) [This Week In OHDSI](#) [2021 Global Symposium](#) [Events/Collaborations](#) [Collaborate in MSTeams](#) [Follow OHDSI](#)

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.

OHDSI has established an international network

2020 OHDSI Symposium

Our 2020 OHDSI Global Symposium brought together a global research community for 18 hours of open science, international collaboration and community fun. The day included research presentations from community members, panels that brought together leaders from major healthcare organizations, as well as network sessions, the annual collaborator

5. Select the workgroups you want to join (you can refer to the WIKI for work group objectives www.ohdsi.org/web/wiki/doku.php?id=projects:overview)

- ☐ ATLAS
- ☐ Clinical Trials
- ☐ Common Data Model
- ☐ Data Quality Dashboard Development
- ☐ Early-stage Researchers
- ☐ Education Work Group
- ☐ Electronic Health Record (EHR) ETL
- ☐ Geographic Information System (GIS)
- ☐ HADES Health Analytics Data-to-Evidence Suite
- ☐ Health Equity
- ☐ Latin America
- ☐ Medical Devices
- ☐ Natural Language Processing
- ☐ OHDSI APAC
- ☐ OHDSI APAC Steering Committee
- ☐ OHDSI Steering Committee
- ☐ Oncology
- ☐ Patient-Generated Health Data
- ☐ Pharmacovigilance Evidence Investigation
- ☐ Phenotype Development and Evaluation
- ☐ Population-Level Effect Estimation / Patient-Level Prediction
- ☐ Psychiatry
- ☐ Registry (formerly UK Biobank)
- ☐ Surgery and Perioperative Medicine
- ☐ Vaccine Safety
- ☐ Vaccine Vocabulary
- ☐ Women of OHDSI

6. Select the chapter(s) you want to join

☐ Australia

☐ China

☐ Europe

☐ Japan

☐ Korea

☐ Singapore

☐ Taiwan

7. Select the studies you want to join

☐ HERA-Health Equity Research Assessment

☐ PIONEER for Prostate Cancer (study-a-thon ended)

☐ SCYLLA (SARS-Cov-2 Large-scale Longitudinal Analyses)

Get Access To Different Teams/WGs/Chapters



The screenshot shows the OHDSI website with the following elements:

- Header:** OHDSI OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS
- Navigation Bar:** Who We Are, OHDSI Updates & News, Standards, Software Tools, OHDSI Studies, Book of OHDSI, Resources, New To OHDSI?
- Secondary Navigation:** EHDEN Academy, This Week In OHDSI, 2021 Global Symposium, Events/Collaborations, Collaborate in MStTeams, Follow OHDSI
- Main Content:** Welcome to OHDSI! The Observational Health Data Sciences and Informatics (or OHDSI, pronounced "oh-dsee") program is a multi-stakeholder collaborative to bring out the value of health data through large-scale analytics. OHDSI has established...
- Annotations:**
 - A blue arrow points from the "Collaborate in MStTeams" link in the navigation bar to the "Join Work groups, Ch..." dropdown menu.
 - An orange circle highlights the "Join Work groups, Ch..." dropdown menu.
 - A blue arrow points from the "Join Work groups, Ch..." dropdown menu to the "OHDSI MStTeams Work groups, Chapters, and Studies Registration" form.
- Registration Form:** OHDSI MStTeams Work groups, Chapters, and Studies Registration. OHDSI is using MStTeams to further encourage active collaboration within the community. Within the OHDSI organization, there are separate teams for work groups, chapters, and studies, as well as OHDSI community activities (such as the OHDSI2020 Symposium). All teams are open to all collaborators. Below please indicate which Team you would like to join and the OHDSI coordinating center team will grant access.

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- ☐ PIONEER for Prostate Cancer (study-a-thon ended)
- ☐ SCYLLA (SARS-Cov-2 Large-scale Longitudinal Analyses)



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
Description	<p>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.</p> <p>Presented by: Dr. Jessica Gronsbell, University of Toronto</p>
Time	Jul 28, 2021 11:00 AM in Eastern Time (US and Canada)



[Register Here](#)



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!

Contact Craig Sachson (sachson@ohdsi.org) to participate



Collaborator Showcase

We received more than 110 submissions for the Collaborator Showcase!

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.**

[Home](#) > 2021 OHDSI Collaborator Showcase

2021 OHDSI Collaborator Showcase

Thank you for your interest in the 2021 OHDSI Collaborators Showcase! We are delighted that you are considering joining our research community and presenting your work at this year's virtual symposium showcase.

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 600 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. Last year, the OHDSI community produced more than 100 posters/talks/demos for our Collaborator Showcase.

Once again, we are inviting collaborators to participate in the Collaborator Showcase for this year's 2021 Global 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

[Go to top](#)

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 2021 Global Symposium. Please continue to join our community calls (Tuesdays, 11 am ET), check the forums, MSTeams and the OHDSI website, as well as emails from OHDSI Events manager, to learn more details about an informative and productive showcase this year!



Where Are We Going?

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





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Where Are We Now?

Where Are We Going?





June 22: Community Brainstorm on Health Equity

Discussion Moderators



Noémie Elhadad

Associate Professor of Biomedical Informatics; Vice Chair, Research, Columbia University



Jake Gillberg

Health Equity WG Lead; Software Development Analyst, Tufts Clinical and Translational Science Institute



Jody-Ann McLeggon

Program Manager, OHDSI and Columbia University