Patient-Level Prediction Updates & Ongoing Projects

OHDSI Community Call
July 30, 2024 • 11 am ET
## Upcoming Community Calls

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>July 30</td>
<td>Advances in Patient-Level Prediction</td>
</tr>
<tr>
<td>Aug. 6</td>
<td>Building The OHDSI Evidence Network Sprint</td>
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<tr>
<td>Aug. 13</td>
<td>Global Symposium Plenary and Tutorial Preview</td>
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<tr>
<td>Aug. 20</td>
<td>Building The OHDSI Evidence Network Sprint</td>
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<tr>
<td>Aug. 27</td>
<td>canceled due to ISPE 2024</td>
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<tr>
<td>Sept. 3</td>
<td>New Standardized Vocabularies Release</td>
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<tr>
<td>Sept. 10</td>
<td>Asia-Pacific Regional Updates</td>
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Three Stages of The Journey

Where Have We Been?
Where Are We Now?
Where Are We Going?
OHDSI Shoutouts!

Congratulations to the team of Louisa Smith and Robert Cavanaugh on the publication of allofus: an R package to facilitate use of the All of Us Researcher Workbench in JAMIA.
Congratulations to the team of Henrik John, Egill Fridgeirsson, Jan Kors, Jenna Reps, Ross Williams, Patrick Ryan and Peter Rijnbeek on the publication of Development and validation of a patient-level model to predict dementia across a network of observational databases in *BMC Medicine*.
OHDSI Shoutouts!

Congratulations to **Linying Zhang**, who won the AMIA 2024 Edward H. Shortliffe Doctoral Dissertation Award Honorable Mention. She will be giving a talk on her dissertation "Causal machine learning for reliable real-world evidence generation in healthcare" at the 2024 AMIA Annual Symposium, held Nov. 9-13 in San Francisco.
Three Stages of The Journey

Where Have We Been?
Where Are We Now?
Where Are We Going?
# Upcoming Workgroup Calls

<table>
<thead>
<tr>
<th>Date</th>
<th>Time (ET)</th>
<th>Meeting</th>
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<tbody>
<tr>
<td>Tuesday</td>
<td>12 pm</td>
<td>CDM Vocabulary Subgroup</td>
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<tr>
<td>Wednesday</td>
<td>10 am</td>
<td>Surgery &amp; Perioperative Medicine</td>
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<td>Wednesday</td>
<td>4 pm</td>
<td>Vulcan/OHDSI</td>
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<tr>
<td>Thursday</td>
<td>9:30 am</td>
<td>Themis</td>
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<tr>
<td>Thursday</td>
<td>11 am</td>
<td>Industry</td>
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<tr>
<td>Thursday</td>
<td>1 pm</td>
<td>OMOP CDM Oncology – Vocabulary/Development Subgroup</td>
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<td>Thursday</td>
<td>7 pm</td>
<td>Dentistry</td>
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<tr>
<td>Friday</td>
<td>10 am</td>
<td>GIS-Geographic Information System</td>
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<tr>
<td>Friday</td>
<td>11:30 am</td>
<td>Steering Group</td>
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<tr>
<td>Friday</td>
<td>11:30 am</td>
<td>Clinical Trials</td>
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<tr>
<td>Tuesday</td>
<td>9 am</td>
<td>Atlas</td>
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<tr>
<td>Tuesday</td>
<td>10 am</td>
<td>Common Data Model</td>
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The team of Niklas Norén, Katherine Donegan, Monica Muñoz, Thamir Alshammari, Nicole Pratt, Gianmario Candore, Daniel Morales, Peter Rijnbeek, Andrew Bate, Rodrigo Postigo, Sengwee Toh, Gianluca Trifiro, Montse Soriano Gabarro, Alison Cave and Patrick Ryan have drafted a manuscript Recommendations to enable broader use of real-world evidence to inform decision-making throughout pharmacovigilance signal management that is now open for public comment from ISPE. Please provide feedback by August 14.
Estimation of risk of NAION and other vision disorders from exposure to semaglutide

- Study Status: Started
- Analytics use case(s): Population-Level Estimation
- Study type: Clinical Application
- Tags: Eye Care & Vision Research, Type 2 Diabetes
- Study lead: Cindy X. Cai
- Study lead forums tag: [Cindy X. Cai]
- Study start date: -
- Study end date: -
- Publications: -
- Results explorer: -

OHDSI network study for population-level effect estimation of risk of NAION and other vision disorders from exposure to semaglutide.
## OHDSI2024 Conference Agenda

### Agenda • Wednesday, Oct. 23

<table>
<thead>
<tr>
<th>Time (ET)</th>
<th>Topic (Presenters)</th>
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<tbody>
<tr>
<td>7:30 - 8:30 am</td>
<td>Registration and Lite Breakfast</td>
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<tr>
<td>8:30 - 9:15 am</td>
<td>State of the OHDSI Community (George Hripcsak, Columbia Univ.)</td>
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<tr>
<td>9:15 - 10:15 am</td>
<td>Plenary: Clinical Insights from LEGEND-T2DM</td>
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<td>Introduction to LEGEND-T2DM (Moderator: Aline Pedrosa, Brazil)</td>
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<td>Comparative Effectiveness of Second-line Antihyperglycemic Agents (Arya Aminorouya, Yale Univ.)</td>
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<tr>
<td></td>
<td>Effectiveness of First-line Antihyperglycemia Agents (Phyllis Thangarat, Yale Univ.)</td>
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<td>Comparative Safety of SGLT2 for Risk of Diabetic Ketoacidosis (Hanyang/Evan Minty, Univ. of Calgary)</td>
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<td>Comparative Safety of GLP1-R and the Risk of Thyroid Tumors (Daniel Morales, Univ. of Dundee)</td>
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<tr>
<td>10:15 - 10:35 am</td>
<td>Networking Break</td>
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<tr>
<td>10:35 - 11:20 am</td>
<td>Plenary: Value Proposition for Participating in OHDSI Network Studies Like LEGEND-T2DM</td>
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<td>Introduction to OHDSI Evidence Network / Marketplace (Moderator: Ciar Blacketer, Johnson &amp; Johnson)</td>
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<td>Reflections from US Department of Veterans Affairs (Scott Duvall, VA)</td>
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<td>Reflections from SIDIAP (Spain) (Tatiana Duarte-Salles, IDIAP)</td>
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<td>Reflections from Taipei Medical University (Thanh-Phuc Phan, Taipei Medical Univ.)</td>
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<td>Reflections from a Global Commercial Data Provider (Sarah Seager, IQVIA)</td>
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<td>11:20 am - 12 pm</td>
<td>Plenary Q&amp;A: Lessons Learned on LEGEND-T2DM Journey</td>
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<td>(Moderator: Fan Bu, Univ. of Michigan; Panelists: LEGEND-T2DM co-authors)</td>
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<tr>
<td>12 - 12:45 pm</td>
<td>Lunch</td>
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**12:45 - 1:30 pm**
Plenary Panel: JACC-OHDSI Partnership  
(Moderators: Nicole Pratt, Univ. of South Australia/Marc Suchard, UCLA; Panelists: Harsh Krumholz, Yale Univ/Seng Chan You, Yonsei Univ./Yuan Lu, Yale Univ.)

**1:30 pm - 2 pm**
Plenary Activity: OHDSI Scavenger Hunt - Form Your Network Study Dream Team

**2 pm - 3 pm**
Collaborator Showcase: Posters and Software Demos

**3 pm - 4 pm**
Collaborator Showcase: Lightning Talks

**4 pm - 5 pm**
Collaborator Showcase: Posters and Software Demos

**5 pm - 6 pm**
Closing Talk & Titan Awards (Patrick Ryan, Johnson & Johnson/Columbia Univ.)

**6 pm - 7 pm**
Network Reception
#OHDSI2024 Registration Is Open!

Registration is OPEN for the 2024 OHDSI Global Symposium, which will be held Oct. 22-24 at the Hyatt Regency Hotel in New Brunswick, N.J., USA.

**Tuesday:** Tutorials  
**Wednesday:** Plenary/Showcase  
**Thursday:** Workgroup Activities

[ohdsi.org/OHDSI2024](http://ohdsi.org/OHDSI2024)
Belgian Healthcare: InAH’s OMOP CDM Approach

(Maryna Borshchivska, A. Kanfoud, T.Helleputte)
TUESDAY

A collaborative EHDEN Neuroscience Research Program on Cluster Headache across a standardized health data network

(Kristine Harrsen, Ingeborg Helbech Hansen, Troels Nielsen, Andreas Rieckmann, Gustavo Luna, Christian Laut Ebbesen)
Implementing value-based oncology care at European cancer hospitals

(Mads Andersen, Juho Lähteenmaa, Johanna Mattson, Ulrik Lassen, Andreas Bjerrum)
Preparatory work for efficient mapping of Hungarian drug codes

(Ágota Mészáros, Tibor Héja, Zsolt Bagyura)

THURSDAY

INTRODUCTION

The secondary use of routinely collected drug and health data is becoming more widespread, especially since there is a growing interest in sharing patient-level and aggregate data in many countries (1). However, interoperability among administrative and health care systems remains a significant issue for many countries, especially for smaller or less economically developed countries in post-socialist transition (2). Preparing the necessary information system infrastructure, unification of coding systems, and harmonization of data collection for efficient data mapping is a key mission of our health care providers' project. Our University previously manually mapped a part of the Hungarian medical prescriptions vocabulary. National drug code vocabularies seem to be mere analogues to each other than previous vocabularies. Using an automated or semi-automated mapping method is a future mission.

AIMS

In this work, we aimed to develop the most efficient way to map Semmelweis University’s drug data to Reforma and Reforma Elixir.

METHODS

Our database contains the patientlevel mediation relevant and prescription drug data from 2019. In this project, we performed data cleaning to determine which drugs are to be included in the data set. Our target is to map these drugs used at our university that were authorized in Hungary or the European Union (EU) (3). See Figure 1.

Relevant stakeholders were contacted in the process to gather information about drug data and ensure the mapping is based on standards of operators. Besides e-medications, other databases, and code systems were also required.

RESULTS

In the mapping process, initially, data on 2,2739 drugs and drug-related items were developed. However, in the end, 2,2703 drugs with drug-related items were found, which were prescribed or administered at Semmelweis University from 1 January 2019 to 1 December 2019.

DATA CLEANING

We cleaned up the code list containing TTF code (public insurance Supported Product Identification), the Formularis terminologia and magor drugs, for Hungarian and Hungarian echis, the bedding formulas in encoded food products, and the medical aids or devices. This made the data more accessible. The ‘Reform’ cleaning the data cleaning can be found in Figure 2.

REFERENCES


www.ohdsi.org
#OHDSISocialShowcase
#JoinTheJourney
Analysis of Lung Cancer Patient Treatment with Immune Checkpoint Inhibitors Using Natural Language Processing for Data Extraction from Electronic Health Records

(Iege Bassez, Laura Deckx, Vincent Geldhof, Annelies Verbiest, Danielle Delombaerde, Shahbaz Pervaiz, Dries Hens, Philip Debruyne, Christof Vulsteke, Clara L. Oeste)
SR AD, Real World Evidence & Analytics

Description

The purpose of this job is to:

- Generate real world evidence (RWE) to support in-line and pipeline products.
- Provide statistical advice on the analysis of real world data (RWD) to various internal and external stakeholders.
- Contribute to the RWD acquisition strategy and tool evaluation.
Openings: Postdoctoral Fellow, Johns Hopkins Univ.

PHARMACOEPIDEMIOLOGY POST-DOCTORAL TRAINING PROGRAM
Co-Directors: Caleb Alexander, MD, MS and Jodi Segal, MD, MPH

The Pharmacoepidemiology Training Program at the Johns Hopkins Bloomberg School of Public Health (BSPH) is currently seeking to support postdoctoral fellows. All supported trainees work with core faculty on existing or newly developed research projects on pharmacoepidemiology, so as to optimize the safe and effective use of medicines to treat heart, lung and blood diseases in the United States.

Deadline for applications: rolling
Where Are We Going?

Any other announcements of upcoming work, events, deadlines, etc?
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July 30: Patient-Level Prediction

Jenna Reps  
Johnson & Johnson

Chen Yanover  
KI Research Institute

Henrik John  
Erasmus MC

Alexander Saelmans  
Erasmus MC

Egill Friðgeirsson  
Erasmus MC

Ross Williams  
Erasmus MC
The weekly OHDSI community call is held every Tuesday at 11 am ET.

Everybody is invited!

Links are sent out weekly and available at: ohdssi.org/community-calls