How Did OHDSI Do In 2021?

OHDSI Community Call
Dec. 7, 2021 • 11 am ET
What was your highlight from OHDSI in 2021?
You have not responded
Enter a response
Submit
New
Top
Waiting for responses...
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>Dec. 14</td>
<td>Holiday-Themed Final Meeting Of 2021</td>
</tr>
<tr>
<td>Dec. 21</td>
<td>Happy Holidays!</td>
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<tr>
<td>Dec. 28</td>
<td>Happy Holidays!</td>
</tr>
<tr>
<td>Jan. 5</td>
<td>Happy Holidays!</td>
</tr>
<tr>
<td>Jan. 12</td>
<td>Welcome Back To The OHDSI Community Call!</td>
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</table>
Three Stages of The Journey

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

Congratulations to Ross Williams, Jenna Reps, the OHDSI/EHDEN Knee Arthroplasty Group, Peter Rijnbeek, Patrick Ryan & Daniel Prieto-Alhambra for the publication of “90-Day all-cause mortality can be predicted following a total knee replacement: an international, network study to develop and validate a prediction model” in Knee Surgery, Sports Traumatology, Arthroscopy.
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Congratulations to Peter Rijnbeek, who was recently appointed Head of the Department of Medical Informatics at Erasmus MC.
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

<table>
<thead>
<tr>
<th>Date</th>
<th>Time (ET)</th>
<th>Meeting</th>
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<tbody>
<tr>
<td>Tuesday</td>
<td>12:30 pm</td>
<td>Phenotype – Long Covid Subgroup Phenotyping Hackathon</td>
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<tr>
<td>Tuesday</td>
<td>1 pm</td>
<td>Common Data Model</td>
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<tr>
<td>Tuesday</td>
<td>3 pm</td>
<td>OMOP CDM Oncology – Outreach/Research Subgroup</td>
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<tr>
<td>Wednesday</td>
<td>10 am</td>
<td>FHIR-OMOP All-Hands Meeting</td>
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<td>Wednesday</td>
<td>2 pm</td>
<td>Natural Language Processing</td>
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<tr>
<td>Thursday</td>
<td>8 am</td>
<td>Psychiatry</td>
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<tr>
<td>Thursday</td>
<td>1 pm</td>
<td>OMOP CDM Oncology – CDM/Vocabulary Subgroup</td>
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<tr>
<td>Friday</td>
<td>10 am</td>
<td>Phenotype Development and Evaluation</td>
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<tr>
<td>Friday</td>
<td>10:30 am</td>
<td>Clinical Trials</td>
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<td>Friday</td>
<td>11 pm</td>
<td>China Chapter</td>
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<tr>
<td>Monday</td>
<td>8 am</td>
<td>Early-Stage Researchers (Europe, Western Hemisphere)</td>
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<td>Monday</td>
<td>9 am</td>
<td>Registry</td>
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<tr>
<td>Monday</td>
<td>10 am</td>
<td>GIS-Geographic Information System</td>
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<tr>
<td>Monday</td>
<td>2 pm</td>
<td>FHIR and OMOP – Terminologies Subgroup (ZOOM)</td>
</tr>
<tr>
<td>Tuesday</td>
<td>9 am</td>
<td>OMOP CDM Oncology – Genomic Subgroup</td>
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Get Access To Different Teams/WGs/Chapters

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 of researchers and observational health

2021 OHDSI Symposium

The 2021 OHDSI Global Symposium featured plenary presentations on OHDSI's Impact on the COVID-19 Pandemic, as well as on the Journey to Reliable Evidence. The main days included the State of the Community Presentation, the Collaborator Showcase, and a memorable Closing Ceremony that focused on OHDSI's work through the perspective of a patient.

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)

- HTA
- 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

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

- Africa
- Australia
- China
- Europe
- Japan
- Korea
- Singapore
- Taiwan

7. Select the studies you want to join

- HERA-Health Equity Research Assessment
- PROmoting Prostate Cancer (study is under ended)
- SORLIA (SARS-Cov-2 Large-scale Longitudinal Analyses)
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Welcome to OHDSI!

The Observational Health Data Sciences and Informatics (OHDSI) program is a multi-stakeholder collaborative to bring together researchers and stakeholders through large-scale analytics that are open-source.

OHDSI has created an online platform to facilitate collaboration. You can join various teams and workgroups within the OHDSI community.

5. Select the workgroups you want to join (you can refer to the WIKI for work group objectives).

- [ ] AGTLAS
- [ ] Clinical Trials
- [ ] Common Data Model
- [ ] Data Quality Dashboard Development
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- [ ] Africa
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- [ ] Japan
- [ ] Korea
- [ ] Singapore
- [ ] Taiwan

7. Select the studies you want to join.

- [ ] MESA-Health Equity Research Assessment
- [ ] PIONEER for Prostate Cancer (study no longer active)
- [ ] SYKELA (SARS-CoV-2 Large-scale Longitudinal Analysis)
Register For 2022 OHDSI Europe Symposium

EUROPEAN OHDSI SYMPOSIUM
March 11th 2022 Rotterdam
Tutorials: March 12th and 13th

"All aboard!"

We'll meet again for one journey ahead

www.ohdsi-europe.org/symposium-2022
Latest Edition Of “The Journey” Newsletter

Community Updates

Where Have We Been
- The release of OMOP CD M v5.4 was highlighted in a previous newsletter, but we were thrilled to have Claire Blacketer join a November community call to provide a quick tutorial about this new version.
- The 2021 Asia-Pacific (APAC) Symposium was a great success. There were several collaborative activities that engaged both leaders and newcomers from around the world. We also had several insightful presentations during the morning session, which you can watch here.

Where Are We Now
- Led by Paul Nagy, the Johns Hopkins Open Source Program Office (OSPO) and Stephen Walli, an open-source community advocate and expert at Microsoft, the OHDSI community hosted an open-source governance workshop on Nov. 30. More than 190 community members joined for a session that included both presentations and discussions. Part 1 | Part 2

Vaccine Surveillance Method in Observational Data May Generate High Number of False Positives

Worldwide efforts to promote vaccination require reliable evidence about the safety and effectiveness of vaccines to build trust in their use. Regulators and other public health agencies play a critical role in generating and synthesizing evidence across an array of data sources as part of a collective public health infrastructure.

One desired component of that system is the use of observational data, such as de-identified electronic health records and administrative claims, to conduct analyses that can identify true adverse events of vaccines as quickly as possible, while simultaneously reducing the chance that analyses generate false positive findings that may stimulate unnecessary worry.

In this context, understanding the reliability of study designs in vaccine surveillance systems is important to ensure that evidence is appropriately used by all stakeholders.

@OHDSI www.ohdsi.org #JoinTheJourney

Monthly Podcast

Patrick Ryan and Craig Slatman discuss the first published paper from the EUAEDUS workshop, the open-source governance workshop, and the Asia-Pacific Symposium, during the latest edition of the OHDSI podcast. If videos/images don’t appear, please click “view this email in your browser” link above.

November 16 Community Call: OHDSI Studies

Ongoing Network Studies, Calls For Collaboration, Highlighted During Recent Community Call

Six OHDSI network studies, ranging from those in development to those nearing completion, were presented during the Nov. 16 community call, the second open studies call of 2021. The calls highlighted the breadth of research happening in the community, but also served as calls for collaboration on these important efforts. The individual study presentations are available at the links below.

- Anisah Galazar: Prognostic Significance of Liver Metastasis in Non-Small Cell Lung Cancer
- Lena Elbahnos: Redesigned Psychopharmacology: A Longitudinal Study in Rucaparib Collected Data
- Nirmee Eladai: Health Equity Research Assessment H2P2 Characterization
- Jacob Zeller: Assessing Health Equity in Mental Healthcare Delivery Using a Federated Network Research Model
- Anika Joachim and Kristin Kerst: Long COVID Phenotyping and Vaccine Effectiveness Methods
- Erica Winiarski: Adverse Events of Special Interest within COVID-19 Subjects
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Dec. 2 APAC Community Call

- APAC Symposium Review (Jing Li)
- Characterization of non-communicable diseases (Seng Chan You)
- Comparison of mortality, morbidities & healthcare resources utilization between patients with and without a diagnosis of COVID-19 (by Eric Wan)

www.ohdsi.org/apac
Dear OHDSI Community,

The Education Working Group has drafted an education strategy document, and we want your input into it to ensure it represents the situation and needs in OHDSI today, and to support plans for the future of our community.

We would be very grateful if colleagues would review it and respond with your thoughts to these three questions:

Do you see this as (a) a fair reflection on the current educational needs within OHDSI (b) support proposals and recommendations within the document, and (c) would you have any further suggestions or recommendations of your own?

We would be most grateful for feedback by EOB Wednesday 15th December!

Document [here](#).
Openings!

About the Opportunity:

The Bouvé College of Health Sciences and The Roux Institute at Northeastern University seek candidates for two tenure-track Assistant Professor positions in the emerging area of health/healthcare data science. The successful candidate will have primary responsibility for working with the OHDSI Center at the Roux Institute (https://roux.northeastern.edu/ohdsi/), focusing on education, research and community support of the global Open Source OHDSI initiative (http://ohdsi.org).

Research areas of interest should encompass approaches for maximizing the value of health data for evidence generation through large-scale analytics and may include artificial intelligence (AI), machine learning (ML), computer and data sciences, digital health, life sciences, and medicine. Example: Methods that strengthen the ability to confidently draw causal inferences from comparative effectiveness research on observational healthcare data.

Other examples include real-world evidence data standardization, clinical/medical surveillance, comparative effectiveness research, personalized risk prediction and prevention, learning healthcare systems, big data, and applications of health or bio-informatics.

Aspiring candidates may be developing methods or applications that use computational modeling and large datasets to enhance our understanding of health from diagnosis, therapeutics, prevention, and health outcomes. We are also interested in efforts to understand and reduce health disparities among marginalized populations.

Our tenure and promotion process values collaborative research and teamwork. Hires will be mentored for success, with mentoring teams and group guidance. In addition, a strong and effective faculty development strategy is part of the Northeastern institutional mission. The ADVANCE Office of Faculty Development office works in conjunction with the Office of Research Development (ORD), the Office of Institutional Diversity and Inclusion (OIDII), the Center for Advancing Teaching and Learning Through Research (CATLR), and University Decision Support (UDS) to provide programs and trainings to further develop and support a thriving faculty.

At Northeastern University, we embrace a culture of respect, where each person is valued for their contribution and is treated fairly. We oppose all forms of racism. We support a culture that does not tolerate any form of discrimination and where each person may belong. We strive to have a diverse membership, one where each person is trained and mentored to promote their success.

For more information, please contact Brianne Olivieri-Mui, Assistant Professor, Department of Health Sciences: B.mui@northeastern.edu
Openings!

Job Details

Postdoctoral Data Scientist (2 posts)
Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, Botnar Research Centre, Windmill Road, Oxford

Grade 7: £33,309 – £40,927 p.a.

We have an exciting opportunity for two Postdoctoral Data Scientists to join a Pharmaco- and Device epidemiology research group led by Professor Daniel Pinto-Alhambra at the Botnar Research Centre, NDORMS, University of Oxford. The NDORMS Pharmaco- and Device epidemiology research group is involved in national and international studies to generate insights from routine health (aka ‘real world’) data.

As a Postdoctoral Data Scientist you will support research projects from inception to reporting and dissemination/publication under the supervision of Professor Alhambra (pharmaco-device epidemiology) and Dr Sara Khalid (planetary health informatics). You will develop analysis plans, protocols, ethical (and similar panel) submissions, standard operating procedures, as required for ongoing and future studies. You will analyse OMDP-mapped real world health data assets and contribute to the programming of R packages and programmes for these analyses. You will also contribute ideas for new research projects, present papers at conferences or public meetings, and you will be involved in teaching and supervision of students.

You will hold a Doctoral (or be near completion) or MSc degree in applied/medical statistics, biostatistics, or health data sciences with BA degree in statistics, mathematics, 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 within multi-disciplinary teams and independently are essential. Experience in pharmacoepidemiology or real-world evidence methods (e.g. propensity scores) and experience designing and conducting cohort, case-control, and similar studies are desirable.

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

The closing date for this position is 12 noon on 17 December 2021. You will be required to upload a CV and supporting statement as part of your online application.

Interviews will take place in January 2022.

Contact Person: Dr Sara Khalid
Contact Phone: 01865 287741
Contact Email: hr@ndorms.ox.ac.uk

Vacancy ID: 154325
Closing Date & Time: 17-Dec-2021 12:00
#OHDSISocialShowcase This Week

Pragmatic OMOP CDM

**Presenters:** Melanie Philofsky, Gregory Klebanov

**Introduction:**
One of the richest data sources for creation of OMOP databases is Hospital data. However, not only the data is complex but are often spread across many systems. Converting all data presents a challenge due to the sheer amount of effort required.

**Why is it important?**
By initially implementing a pragmatic OMOP CDM based on use cases and continuously enhancing the data elements as research needs arise – cost, time and resource consumption will be more efficient while research needs will be met with better precision.

**Study Centric Approach and Maturity**
- Build a portfolio of studies
- Add new data elements, vocabularies and mappings as required for a specific study based on study protocol and research needs
- Build a mature and complete database over time through pragmatic study focused approach

**OMOP Data Lifecycle Maturity Methodology**
1. MVP
   - Initial OMOP CDM ETL
   - Scope is driven by current research needs
2. Evolving
   - First 1-2 years of on-going refreshes
   - Create a roadmap for future research participation based on study protocols
   - Update patient records as needed
   - Incorporates ETL code changes during refresh cycles
3. Mature
   - After approx. 1-2 years
   - As the CDM is continuously enhanced, fewer data elements will need to be harmonized

**Examples**
- Custom mapping data elements when needed
- Flowsheet elements of interest, vital signs, drugs, lab results
- ETTLing a new domain
- Devices for oxygenation n COVID studies

**Authors:** Melanie Philofsky, RN, MS; Gregory Klebanov

**Monday**

Pragmatic OMOP CDM

Authors: Melanie Philofsky, Gregory Klebanov
Assessing the impact of race on glomerular filtration rate prediction

Authors: Linying Zhang (presenter), Lauren R. Richter, George Hripcsak
#OHDSISocialShowcase This Week

**WEDNESDAY**

Cohort Diagnostics

**Authors:** Gowtham Rao, Azza Shoaibi, Jamie Gilbert, Martijn Schuemie
Characterization of Antiepileptic Drug Treatment Pathways with the Common Data Model: Pilot Results from Columbia University Irving Medical Center

Authors: Matthew Spotnitz, Anna Ostropolets, Karthik Natarajan, Victor G. Castano, Genna J. Waldman, Michael Argenziano, Ruth Ottman, George Hripcsak, Hyunmi Choi, Brett E. Youngherman
The downstream consequences of OMOP CDM vocabulary updates are unintentional yet can be palpable. Both OMOP implementers and OHDSI should be aware, and solutions should be sought.

Figure 1. CONCEPT_NAME change for medication route breaks existing source-to-target mapping in VA

<table>
<thead>
<tr>
<th>Source</th>
<th>Target</th>
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<tbody>
<tr>
<td>VA</td>
<td>EHR</td>
</tr>
</tbody>
</table>

Solutions:
1. Download → make changes → validate OMOP
2. Use field advices with each change
3. Less frequent updates (e.g., annual)

How vocabulary updates can affect individual OMOP instances

Authors: Daniel Park, Elise Gatsby, Benjamin Viernes, Kushan Hewa, Scott L. DuVall, Kristine E. Lynch
Where Are We Going?

Any other announcements of upcoming work, events, deadlines, etc?
Three Stages of The Journey

Where Have We Been?
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What Gifts Did The Community Give In 2021?

As part of our final call of the year, we want to challenge the community to spread the love for our efforts in 2021.

We would like at least (but hopefully more) 21 people to join next week and thank 21 other people for contributions to OHDSI in 2021.