

2023 OHDSI Global Symposium Activities Saturday, October 21 and Sunday, October 22



Activities on Saturday, October 21, 8:00am-12:00pm

Common Data Model/Network Data Quality

In this session we will discuss the OHDSI Data Network, including goals, incentives, and plans for the future. We would like to hear from current and potential data partners about the barriers they face to joining and how we as a community can work together to overcome them. We will also highlight potential network studies and grant opportunities. More details to come!

HADES Hackathon, Part 1

During the HADES hackathon, participants will work on the Hades codebase with support from several HADES maintainers. Participants can work in groups, and we welcome both new and experienced contributors to join. Part 1 takes place Saturday morning and Part 2 takes place Sunday afternoon.

<u>Health Equity</u>

1-Data-Driven Innovation for Health Equity: An exclusive session showcasing new health technologies and data-driven innovations aimed at addressing health inequities. We'll explore successful case studies and discuss potential for future applications. 2-Diverse Voices in Health Equity: An expanded panel discussion featuring diverse voices from across the healthcare landscape. Representatives from underrepresented groups in healthcare, including patients, will share their unique perspectives on health inequities and potential solutions. 3-AI-Powered Real-World Evidence: Risk or Reward for Health Equity? This engaging session will convene renowned researchers and AI experts to discuss the emergence of advanced AI tools such as ChatGPT in conducting Real World Evidence (RWE) studies. We'll scrutinize the potential risks and rewards of these tools, addressing their potential to inadvertently propagate structural inequities without proper oversight, and charting the path towards equitable use. 4-OHDSI Health Equity Shark Tank: Participants will have an opportunity to pitch their innovative project proposals to tackle health inequities in our Shark Tank-style session. The most promising ideas will be selected and taken on as a Health Equity WG project.

Industry Special Interest

To kick-off and initiate a new working group whose mission is "To enhance collaboration and engagement between the life science, pharma, and biotech industries, and the OHDSI community to advance healthcare through shared understanding, mutual support, and collective knowledge in observational health data sciences and informatics."

Introduction to OHDSI Tutorial

The journey from data to evidence can be challenging alone but is greatly enabled through community collaboration. In this half-day tutorial, we will introduce newcomers to OHDSI about the tools, practices, and open-science approach to evidence generation that the OHDSI community has developed and evolved over the past decade. Participants will learn about open community data standards- including the OMOP Common Data Model and OHDSI Standardized Vocabularies, open-source analytic tools- including HADES and ATLAS, and the conduct of open network studies for methodological research and clinical applications.

Medical Imaging

Imaging researchers focus on the knowledge they can obtain from medical images. It often leads to a lack of_outcomes for the patient or their disease burden. In contrast, observational researchers focus on the knowledge they can obtain from the electronic health records (EHR) or claims, confining them to access only the **structured and coded** information and needing organ-level observations and measurements that provide an essential feature for the disease's progression and the efficacy of treatment. We are seeing rapid growth in deep learning classification and segmentation models that provide important disease biomarkers. We aim to link image-based measurements into the OMOP data model to harness these deeper phenotypes with the outcome measures tracked in the EHR.

Natural Language Processing

The session will be utilized for discussing the ongoing activities and future directions with special focus on the progress of three projects (oncology, psychiatry and SDoH) utilizing both structured and textual data, the chapter on NLP in the Book of OHDSI and planning for next year.

Oncology

Since inception, the Oncology Workgroup has focused on providing a platform for standardization of cancer data enabling the conduct of observational cancer studies and identifying patient cohorts in a distributed research network. In this session, we will work together to make progress on the main challenges in oncology: 1) representation of genomic data, 2) identification of cancer treatment regimens and 3) extracting information from notes to populate Disease Episode tables. We will begin by providing an overview of the available Oncology Workgroup tools, demonstrating their functionalities and capabilities. Participants will then have the opportunity to apply these tools to their own data, working through a use case. Together, we will explore how the tools effectively support the use case and identify areas where further improvement is required.

Perinatal & Reproductive Health

The session aims to bring together pregnancy & reproductive health researchers to review our work so far and plan specific activities for research projects within the group, including Expanding our anti-hypertensives network study to new sites, Reproducing our work pulling Epic Stork data into the OMOP CDM at additional sites, Developing new studies and forming collaborations between OHDSI community members. It will provide an opportunity for group members to meet in person and discuss the most pressing issues for future collaboration, as well as for new and potential members to learn more about the kind of work we do./ We will make plans to produce a report summarizing PRHeG's consensus about best practices for doing pregnancy and reproductive health research using multisite data in the OMOP CDM and to develop additional obstetric/pregnancy related phenotypes.

Phenotype Evaluation

The OHDSI Phenotype Development and Evaluation has the Objective Key Result (OKR) to a) harden phenotype development and evaluation, b) Improve collaboration by enabling community wide participation on Phenotype Development and Evaluation, c) Promote the usage of OHDSI Phenotype library. In line with these objectives, we will select a subset of cohort definitions submitted by the community to the OHDSI Phenotype library. Preference will be given to those submitted by other OHDSI workgroups. We will use half of our time together to collaboratively understand, perform peer review and document insights about these definitions. In the second half, you will have the opportunity to lead writing an applied paper regarding the insights we have about those phenotypes using computed output from OHDSI characterization methods such as incidence rate, treatment pathway, population level characterization.

Activities on Saturday, October 21, 1:00pm-5:00pm

HowOften Large-Scale Characterization Workshop

We will run a full-day (two half days) workshop on large-scale incidence generation known as HowOften. The workshop is intended for the entire OHDSI community, and the effort will include phenotyping, study execution, diagnostics, clinical review, and a design for dissemination. There will be preconference phenotyping activity, a broad introduction to the effort, real-time study package execution and debugging, data review, and subgroups on future phenotyping, formal diagnostics, clinical review and impact, and visual design and communication. **Part 1; sign-up not required.**

Activities on Sunday, October 22, 8:00am-12:00pm

HowOften Large-Scale Characterization Workshop

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Activities on Sunday, October 22, 1:00pm-5:00pm

Education

Are you passionate about shaping the future of observational health data analytics education? Join the Education Workgroup for an interactive workshop to inventory our current state of educational programs and map out the future. Together, we will delve into the pedagogy needs of the OHDSI community and explore innovative approaches to train the next generation of professionals advancing our scientific community. We'll hold collaborative brainstorming around assessing the maturity of our community across geographies and stakeholder groups. By the end of this session, we will develop concrete strategies to empower educators and students alike. Don't miss this unique opportunity to make a lasting impact!!

Eye Care & Vision Research

Topics for the session will include SOS Challenge Debriefing, Visual acuity mapping details and how to incorporate into the OMOP CDM, Coordinating ETL activities at pilot sites, Coordinating grant proposals, and Roadmap planning for a distributed ophthalmology data network (and helping with integration into the overall OHDSI network).

HADES Hackathon, Part 2

During the HADES hackathon, participants will work on the Hades codebase with support from several HADES maintainers. Participants can work in groups, and we welcome both new and experienced contributors to join. Part 1 takes place Saturday morning and Part 2 takes place Sunday afternoon.

Healthcare Systems Interest Group

EHR data and the OMOP CDM: The Healthcare System Interest Group will hold a 4-hour interactive lecture at the OHDSI symposium this fall. We will discuss the business case for adoption along with properly defining the use case before OMOPing source data. We will dive into data analysis, custom semantic mapping, source data "gotchas", documentation, and special considerations OMOPing EHR data. The target audience consists of the decision makers, data analysts, and ETL developers working with EHR data. We will focus on content, not the technical aspects of the ETL.

HL7 FHIR-OMOP Connectathon, 8:00am-5:00pm

The OMOP + FHIR Working Group will be hosting a day long Connectathon at the symposium. The purpose of this session is to bring together diverse stakeholders in the OHDSI community to do hands-on testing, work directly with the WG members and provide feedback on the emerging OMOP + FHIR transformation specification under development. Participants will execute data exchange scenarios that leverage components of each standard and reflect Real World requirements for interoperability with both FHIR and OMOP. Participants will have access to relevant open-source tools from OHDSI and HL7. To nominate additional tools that can be made available to participants you can contact the leads as we get closer to October to arrange access and scenarios. All tools must be free to Connectathon participants at least for the duration of the Connectathon.

ISPE-RWE for Pharmacovigilance

The International Society of Pharmacoepidemiology (ISPE) is sponsoring the development of a manuscript about the role of real-world evidence in pharmacovigilance, which is being co-led by various OHDSI collaborators. As part of the project, we seek input from all stakeholders interested in drug safety to capture the experiences, perspectives, and opportunities for using observational data analyses to improve the identification and evaluation of adverse drug reactions.

Medical Devices

The Medical Device WG aims to grow the OHDSI community for Medical Device related research. The goals for the WG activity at the symposium are: 1. Generate & evaluate a device table as an extension to OMOP. 2. Identify the priority & areas of growth for the next year.

Psychiatry

To collaborate on development of vocabulary for neuropsychiatric scale scores in HPO and OMOP Standard vocabularies (SNOMED-CT and LOINC).

Vocabularies

1.Community contribution and needs. Please come with your use cases: adding vocabularies, mappings, concepts or modifying existing ones. We will discuss them together and will complete the initial steps of initiating a request or will guide you on how to proceed. This session will be an opportunity to ask questions and brainstorm together. 2. Quality assurance and control. Please come if you have encountered errors that you want to fix or have ideas about what should be checked in the vocabularies or expertise in quality assurance/control (not necessarily ontology-related). 3. Mappings We know mapping data to OHDSI Vocabularies can be a tedious and time-consuming process. We are here to share our approaches and test other solutions (mapping with ChatGPT – here we come!), You can bring your data to map or come with your ideas/tools/approaches to share.