Phenotype Aphril Week 2: Phenotype Validation Using KEEPER

OHDSI
Observational Health Data Sciences and Informatics

OHDSI Community Call
April 14, 2026 • 11 am ET

Upcoming Community Calls

Date	Topic
Apr. 14	Phenotype Aphril, Week 2: Phenotype Validation Using KEEPER
Apr. 21	NO MEETING / EUROPE SYMPOSIUM
Apr. 28	Phenotype Aphril, Week 4: Final Evaluation and Learnings
May 5	Europe Symposium Review/Phenotype Aphril Finale
May 12	Collaborator Showcase Brainstorm (Submission Deadline is June 5)
May 19	MEDS (Medical Event Data Standard) & Potential Collaborations with OHDSI

Three Stages of The Journey

Where Have We Been?

Where Are We Now?

Where Are We Going?

OHDSI Shoutouts!

Congratulations to the team of **Berta Cuyàs, Edilmar Alvarado-Tapias, Eng Hooi Tan, Asieh Golozar, Talita Duarte-Salles, Antonella Delmestri, Josepmaria Argemi, Wai Yi Man, Edward Burn, Carlos Guarner-Argente, Daniel Prieto Alhambra, and Danielle Newby** on the recent publication of **Trends in incidence, prevalence, and survival of primary liver cancer in the United Kingdom (2000–2021)** in the *European Journal of Public Health*.

European Journal of Public Health, Vol. 36, No. 2, ckaf153

https://doi.org/10.1093/eurpub/ckaf153 Advance Access published on 10 November 2025

Trends in incidence, prevalence, and survival of primary liver cancer in the United Kingdom (2000–2021)

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Abstract
Primary liver cancer (PLC) remains a global health challenge. Understanding trends in the disease burden and survival is crucial to inform decisions regarding screening, prevention, and treatment. Population-based cohort study using UK primary care data from the Clinical Practice Research Datalink (CPRD) GOLD (2000–2021), replicated in CPRD Aurum. Crude and age-standardized incidence rates (IRs), crude period prevalence (PP), and survival at 1, 5, and 10 years were calculated, and stratified by age, sex, and diagnosis year. The crude IR of PLC was 4.56 (95% CI 4.42–4.70) per 100 000 person-years between 2000 and 2021, with an increase over time across age and sex strata. Sex-specific IR for males was higher than females, 6.60 (95% CI 6.36–6.85) vs. 2.58 (95% CI 2.44–2.74) per 100 000 person-years. Age-standardized IR showed identical trends. Crude PP showed a seven-fold increase over the study period, with PP 0.02% (95% CI 0.019%–0.022%) in 2021, and a 2.8-fold higher PP in males. Survival at 1, 5, and 10 years after diagnosis was 41.7%, 13.2%, and 7.1%, respectively, for both sexes. One-year survival increased only in men, from 33.2% in 2005–2009 to 49.3% in 2015–2019. Over the past two decades, there has been a substantial increase in the number of patients diagnosed with PLC. Despite a slight improvement in median and one-year survival in men, prognosis remains poor. To improve the survival of PLC patients, it is necessary to understand the epidemiological changes and address preventable risk factors associated with liver disease and promote early detection and access to care.

Three Stages of The Journey

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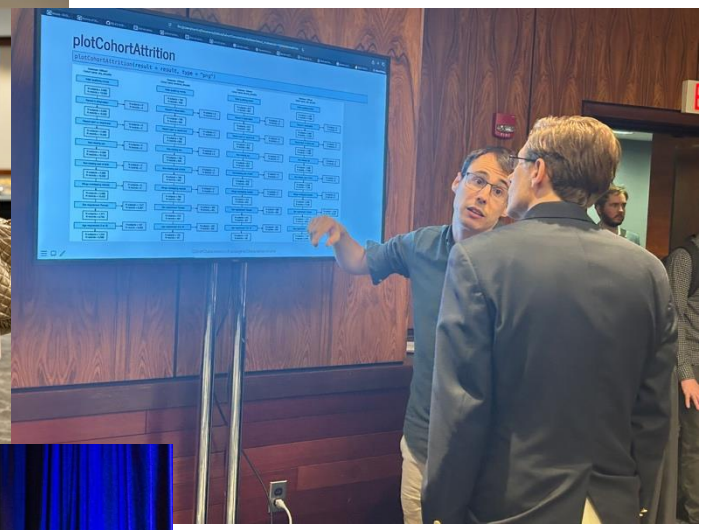
Upcoming Workgroup Calls

Date	Time (ET)	Meeting
Tuesday	12 pm	Generative AI and Analytics
Wednesday	7 am	Medical Imaging
Wednesday	8 am	Psychiatry
Thursday	10 am	GIS – Geographic Information System
Thursday	10:30 am	Evidence Network
Thursday	11 am	Themis
Thursday	7 pm	Dentistry
Friday	9 am	Waveform
Friday	11:30 am	Steering Group
Monday	11 am	Data Bricks User Group
Monday	2 pm	Electronic Animal Health Records
Tuesday	9 am	Data2Evidence

Global Symposium Call for Participation

The **call for participation** is now open for the 2026 OHDSI Global Symposium.



The submission deadline is June 5 at 8 pm ET.

52 DAYS LEFT!

ohdsi.org/OHDSI2026

2026 Symposium Tutorials – Session 1

- An Introduction to the Journey from Data to Evidence Using OHDSI
- An Introduction to ATLAS
- Bringing FAIR to Imaging Research with the Medical Imaging OMOP Extension
- Complex Phenotyping at Scale with and without LLMs Using PhenotypeR
- OHDSI Leadership Storytelling Workshop
- Mastering OMOP: Transforming EHR Data with Practical Strategies, Best Practices, and OHDSI Integration

2026 Symposium Tutorials – Session 2

- Building and Using the OHDSI Evidence Network: From Data Partner to Federated Study Execution
- From Multi-Modal Data to Real-World Evidence: Hands-on with the Data2Evidence Platform for OMOP Data Curation and Analytics
- Integrating Geospatial Data Into OMOP CDM
- Introduction to OHDSI Phenotype Development & Evaluation
- OHDSI Standardized Vocabularies on FHIR: A Deep Dive Using the Echidna Terminology Server
- Using OMOP Model in Registry Context & Clinical Trials Standardization Context: Conventions, Past Use Cases, SDTM & Regulatory Consideration, Challenges

Maternal Fellowship Opens

The second **OHDSI Maternal Health Fellowship** is designed to train clinical investigators for improved maternal and neonatal care. This fellowship offers three key components: **Career Development, Practice, and Networking**.

Supported by both the OHDSI community and the NIH IMPROVE initiative, the program focuses on training clinical investigators in observational research methods to enable them to conduct reproducible research and generate real-world evidence.

2026 Europe Symposium

The 2026 OHDSI Europe Symposium returns to Rotterdam next year and will be held **April 18-20.**

Registration is open on the **OHDSI & OHDSI Europe** web sites.

Time	Symposium Agenda - Monday April 20, 2026	Location
8:00	***Registration and Coffee***	Queen's Lounge
9:00	**Welcome to OHDSI Europe** Dr. Renske Los, Department of Medical Informatics, *Erasmus MC* Dr. Aniek Markus, Department of Medical Informatics, *Erasmus MC*	Theatre
9:05	**Journey of OHDSI** Prof. Peter Rijnbeek, Chair Department of Medical Informatics, *Erasmus MC*	Theatre
9:30	**Collaborator Showcase - part 1** Moderated by Dr. Egill Fridgeirsson, Department of Medical Informatics, *Erasmus MC*	Theatre
10:00	**Speed networking**	Theatre
10:15	***Coffee Break & posters National Nodes***	Queen's Lounge
11:15	**Collaborator Showcase - part 2** Moderated by Dr. Egill Fridgeirsson, Department of Medical Informatics, *Erasmus MC*	Theatre
11:45	**Dreaming about the OHDSI journey ahead** Dr. Patrick Ryan, Vice President, Observational Health Data Analytics, *Johnson & Johnson* Dr. Renske Los, Department of Medical Informatics, *Erasmus MC*	Theatre
12:15	***Lunch break & networking & posters/demo's*** *(Early investigator meeting - 13:00-13:45 Queen's Lounge)*	La Fontaine & Odyssee Room
13:45	**From dreams to reality** OHDSI Titan Award winners	Theatre
14:30	**Propositions for collaboration from the National Nodes** National Node leads	Theatre
14:45	***Coffee break & posters/demo's***	La Fontaine & Odyssee Room
16:15	**The OH Factor** To be announced	Theatre
17:00	**Closing**	Theatre
17:15	***Networking reception***	Queen's Lounge

First Latin America Symposium – July 30-31

UK Symposium Call for Abstracts Opens

HDR UK Event

OHDSI UK 2026

We're delighted to announce that OHDSI UK 2026 will be held on the 18th of September at the University of Nottingham. For the first time, there will also be an OMOP training day on the 17th of September.

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OHDSI (Observational Health Data Sciences and Informatics, pronounced "Odyssey") is an international community of stakeholders dedicated to unlocking the value of health data through large-scale analytics. OHDSI promotes open science and collaboration in health data research with a key focus on adoption of the OMOP Common Data Model, a global standard for harmonising data and facilitating federated analytics across institutions. **Find out more about OHDSI.**

Call for Abstracts

We invite you to submit an abstract for consideration at OHDSI UK 2026. Whether you wish to present a poster, software demo, or lightning talk, we welcome contributions from across the community. Abstract submission is available via this form, and the deadline is 1st May 2026. Please use this template to prepare your abstract and save it as a PDF, and start your file name with the surname (family name) of the presenting author.

Key dates:

Registration Opens: 20th April 2026

Registration Closes: 4th September 2026

Abstract Submission Opens: 20th March 2026

Abstract Submission Deadline: 1st May 2026

Training day: 17th September 2026

Symposium: 18th September 2026

#OHDSISocialShowcase This Week

Monday

Enhancing Empirical Comparator Recommendations With User Specified Weights: Approach and Assessment

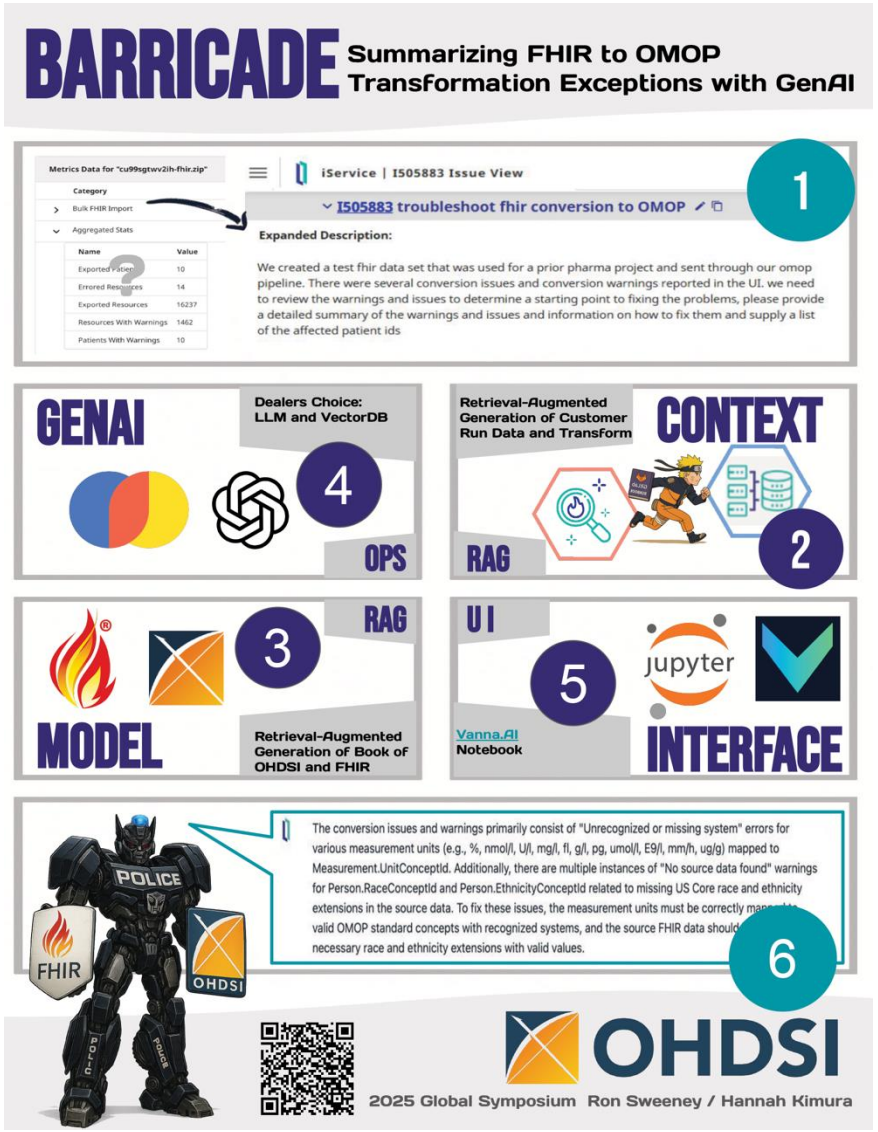
(Cameron R. Atkins, Jamie P. Gilbert, Christopher Knoll, David M. Kern, Patrick B. Ryan, Justin Bohn)

#OHDSISocialShowcase This Week

Tuesday

Summarizing FHIR® to OMOP Transformation Exceptions using Generative AI

(Ron Sweeney, Hannah Kimura, Qi Li)



#OHDSISocialShowcase This Week

Wednesday

Athena-Client: A Community Python SDK for Programmatic Access to the OHDSI Athena Vocabulary Repository

(Alvaro A. Alvarez, Farnoosh Sheikhi, Priya Desai)

Athena-Client:

A Community Python SDK for Programmatic Access to the OHDSI Athena

Vocabulary Repository

INTRO

- OHDSI's Athena website distributes standardized vocabularies but lacks a public API.
- *athena-client* provides a resilient Python SDK that wraps Athena's hidden JSON endpoints, handling authentication which enable rapid, automated, and reproducible vocabulary exploration within analytic pipelines.

METHODS

- The athena-client library is built with a layered architecture to support robust and flexible interactions with OHDSI's Athena vocabulary service
- **Layered architecture** combines secure transport, a flexible client interface, and standardized data models, with higher-level modules (CLI, ConceptExplorer, ConceptSetGenerator) that streamline concept search
- The library automatically adapts to changes in Athena's backend through endpoint discovery, response validation, and smart retries, ensuring reliable performance in research pipelines.

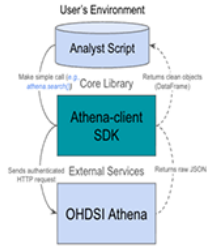


Figure 1: Depicts how the SDK mediates between the user and Athena endpoint

How to Run Athena-Client:

The `athena-client` Python package (version 1.0.27) is a software development kit (SDK) designed for interacting with OHDSI Athena. It facilitates searching, exploring, and analyzing medical concepts with minimal setup.

Step1: Install the package
pip install athena-client

Step 2: Initialize the client
from athena_client import Athena
athena = Athena()

Step 3: Search for concepts
athena.search("aspirin", size=3)

Step 4: Explore details & relationships
d = athena.details(1112807)

Step 5: Build concept sets with ConceptSetGenerator (Advanced Queries)

```
# Install the athena-client package
import subprocess
import sys

install('athena-client[pandas]')
from athena_client import Athena

# Initialize Athena client (uses public Athena  by default)
athena = Athena()
# For custom servers, specify the base_url:
Athena(base_url="https://your-athena-server.com/api/v1")

# Search for concepts
results = athena.search("aspirin")
concept_list = results.all()
basic_serach = results.to_df()

# Detailed information for a specific concept
details = athena.details(concept_id=1127433)
```

```
# Building a query by searching the terms and exact match
from athena_client.query import Q

# Basic query types
q1 = Q.term("diabetes")          # Term search
q2 = Q.phrase("heart attack")    # Phrase search
q3 = Q.exact("Myocardial Infarction")  # Exact match
q4 = Q.wildcard("aspir*")        # Wildcard search

# Complex combinations
complex_query = (Q.term("diabetes") & Q.term("type 2") |
Q.term("T2DM")
fuzzy_query = Q.term("aspirin").fuzzy(0.8)  # Fuzzy
matching

# Use in search
results = athena.search(complex_query)
results.all()
query_results=results.to_df()
```

Check out results

id	name	domain	vocabulary_id	standard_concept	concept_code
201826	Type 2 diabetes mellitus	Condition	SNOMED	Standard	44054006
44791270	Diabetes type 2 review	Observation	SNOMED	Procedure	2703210000000104
4063043	Pre-existing type 2 diabetes mellitus	Condition	SNOMED	Standard	199230006
4126519	Pregnancy and type 2 diabetes mellitus	Condition	SNOMED	Standard	237627000
1076826	Type 2 Diabetes in the Young review	Observation	SNOMED	Procedure	2222141000000103
44811991	Diabetes Distress Scale 2 item	Measurement	SNOMED	Staging / Scales	909401000000106
43531016	Diabetes mellitus, transient neonatal 2	Condition	SNOMED	Disorder	609568007
45757474	Diabetes mellitus type 2 without retinopathy	Condition	SNOMED	Disorder	1481000119100
1074568	Type 2 Diabetes in the Young review offered	Observation	SNOMED	Context-dependent	2.2221E+15
37174265	Diabetes mellitus type 1 stage 2	Condition	SNOMED	Disorder	721210001124104

NEXT STEPS: In case of interest for the community, R version of this package will be developed

Alvaro A Alvarez, Farnoosh Sheikhi, Priya Desai
Technology & Digital Solutions
Stanford Health Care
Stanford School of Medicine

Use the package **directly from the terminal (shell)** instead of writing Python scripts. Checkout the website for examples:

https://pypi.org/project/athena-client/1.0.27/

CONCLUSION

- *athena-client* enables fast, reproducible, and programmatic access to OHDSI vocabularies, simplifying concept lookup, relationship navigation, and cohort definition.
- Simplifies concept lookup, relationship navigation, and validation against local OMOP databases.

REFERENCES

1. Hripcsak G, Duke JD, Shah NH, *et al.* Observational Health Data Sciences and Informatics (OHDSI): opportunities for observational researchers. *Stud Health Technol Inform.* 2015;216:574-578.
2. Overhage JM, Ryan PB, Reich CG, Hartzema AG, Stang PE. Validation of a common data model for active safety surveillance research. *J Am Med Inform Assoc.* 2012;19(1):54-60.
3. Alvarez AA. *Bridging the language gap: Generative models for efficient medical concept discovery* [video]. YouTube; 2024. Available from: https://www.youtube.com/watch?v=vv2y48bL0Jo
4. Alvarez AA. *concept-discovery* [software]. GitHub; 2024. Available from: https://github.com/aaandresalvarez/concept-discovery

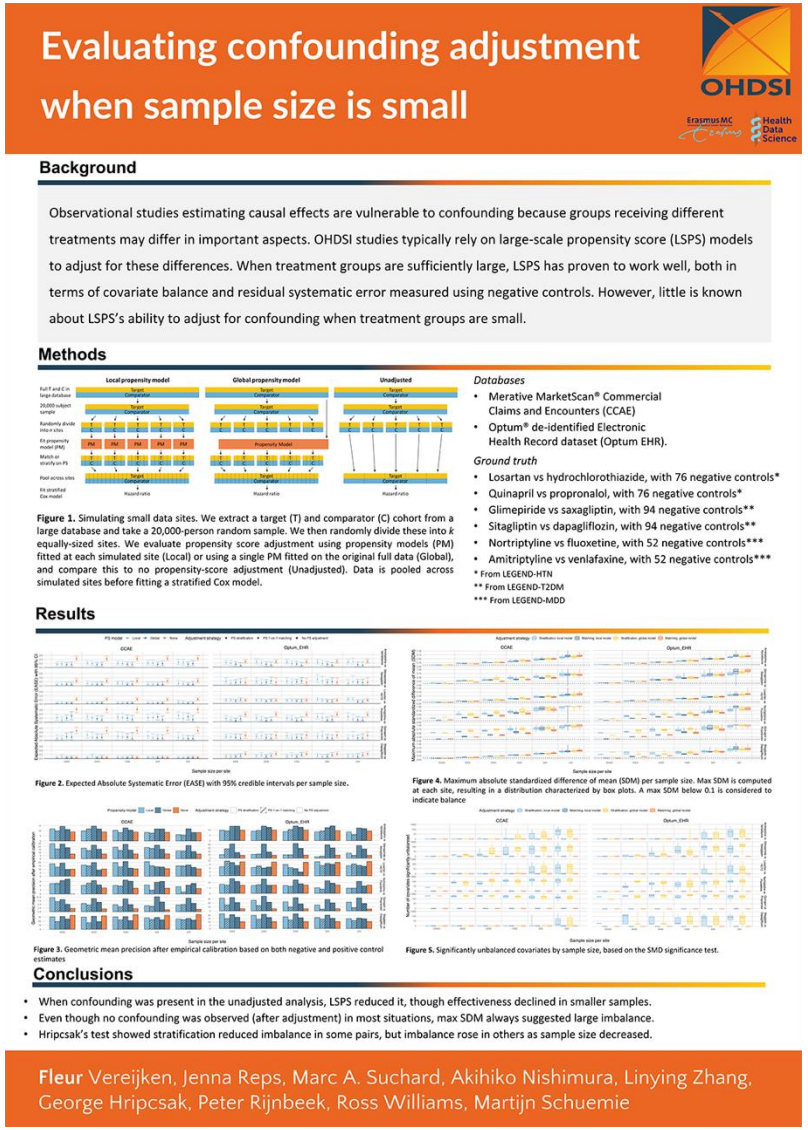
Source Code

#OHDSISocialShowcase This Week

Thursday

Evaluating confounding adjustment when sample size is small

(Fleur Vereijken, Jenna Reps, Marc A. Suchard, Akihiko Nishimura, Linying Zhang, George Hripcsak, Peter Rijnbeek, Ross D. Williams, Martijn Schuemie)

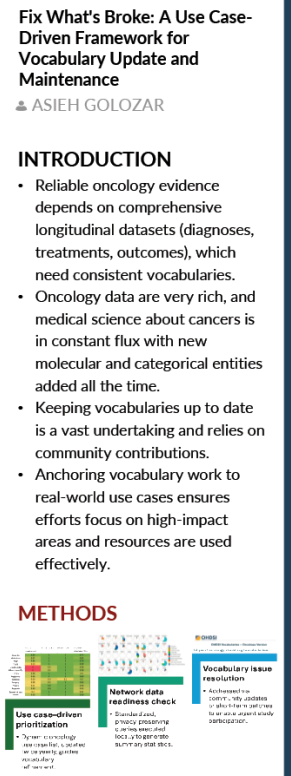


#OHDSISocialShowcase This Week

Friday

Fix What's Broke: A Use Case-Driven Framework for Vocabulary Update and Maintenance

(Asieh Golozar, Dan Smith, Patrick Alba, Andrew Nute, John Methot, Vlad Korsik, Polina Talapova, Stelios Theophanous, Espen Enerly, Georgina Kennedy, Henry Morgan Stewart, Kimmo Porkka, Qi Yang, Annelies Verbiest, Christian Reich)



Fix What's Broke: A Use Case-Driven Framework for Vocabulary Update and Maintenance

ASIEH GOLOZAR

INTRODUCTION

- Reliable oncology evidence depends on comprehensive longitudinal datasets (diagnoses, treatments, outcomes), which need consistent vocabularies.
- Oncology data are very rich, and medical science about cancers is in constant flux with new molecular and categorical entities added all the time.
- Keeping vocabularies up to date is a vast undertaking and relies on community contributions.
- Anchoring vocabulary work to real-world use cases ensures efforts focus on high-impact areas and resources are used effectively.

METHODS

RESULTS

- The approach is successfully implemented:
  - Oncology use case repo
  - Oncology Vocabulary update

Strictly use case–driven vocabulary development for oncology data readiness and rapid and reliable evidence generation.

Take a picture to download the full paper

- This process was first applied to the iCAN NSCLC studyathon and proved successful, where readiness improved significantly and sites were able to consistently implement phenotype and treatment line logic.
- The FALCON-Bladder guidelineathon requirements inform the next Oncology Vocabulary update

Asieh Golozar, Dan Smith, Patrick Alba, Andrew Nute, John Methot, Vlad Korsik, Polina Talapova, Stelios Theophanous, Espen Enerly, Georgina Kennedy, Henry Morgan Stewart, Kimmo Porkka, Qi Yang, Annelies Verbiest, Christian Reich

OHDSI

Where Are We Going?

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

Three Stages of The Journey

Where Have We Been?

Where Are We Now?

Where Are We Going?

The weekly OHDSI community call is held every Tuesday at 11 am ET.

Everybody is invited!

Links are sent out weekly and available at:

ohdsi.org/community-calls-2026

Find your workgroup.

Fuel our mission.

ohdsi.org/workgroups