Maternal Health Fellowship Research Presentations

OHDSI Community Call
May 13, 2025 • 11 am ET

Upcoming Community Calls

Date	Topic
May 13	Maternal Health Fellowship Review
May 20	Guideline-Driven Evidence Study Review
May 27	Collaborator Showcase Brainstorm (Deadline is July 1)
June 3	The Journey of ATLAS
June 10	ATLAS Deepdive: Data Sources and Vocabularies
June 17	ATLAS Deepdive: Cohorts and Conceptsets
June 24	ATLAS Deepdive: Characterization, Cohort Pathways, Incidence
July 1	ATLAS Deepdive: Technical and Administrative Capabilities
July 8	No Meeting – Europe Symposium

Three Stages of The Journey

Where Have We Been?

Where Are We Now?

Where Are We Going?

OHDSI Shoutouts!

Congratulations to the team of **David Sarrat-González, Xavier Escribà-Montagut, Jared Houghtaling, and Juan González** on the publication of **dsOMOP: Bridging OMOP CDM and DataSHIELD for Secure Federated Analysis of Standardized Clinical Data** in *Bioinformatics*.

Three Stages of The Journey

Where Have We Been?

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Upcoming Workgroup Calls

Date	Time (ET)	Meeting
Tuesday	12 pm	ATLAS
Tuesday	12 pm	Generative AI and Analytics
Tuesday	3 pm	Oncology Outreach/Research Subgroup
Wednesday	7 am	Medical Imaging
Wednesday	9 am	Patient-Level Prediction
Wednesday	2 pm	Natural Language Processing
Thursday	9 am	Oncology Vocabulary/Development Subgroup
Thursday	11 am	Themis
Thursday	12 pm	HADES
Thursday	7 pm	Dentistry
Friday	10 am	GIS-Geographic Information System
Friday	10 am	Transplant
Friday	10:30 am	Open-Source Community
Friday	11:30 am	Steering
Monday	10 am	Healthcare Systems Interest Group
Monday	11 am	Data Bricks User Group
Monday	2 pm	Electronic Animal health Records
Tuesday	9:30 am	Common Data Model

Andromeda 1.0

New release uses DuckDB, replacing the venerable SQLite

Only difference to the end user will be improved performance

Andromeda is a dependency of CohortMethod, FeatureExtraction, PLP, Cyclops, SCCS, and others

VA OHDSI team benchmarked performance in simulation and real study

- 10x improvement in columnar operations and save/load
- 1/50 storage space due to better compression, even with same low-level data types
- Diclofenac vs. celecoxib vignette (T=121k, C=597k) ran in 1.2 hours vs 14.8 hours

Production code implemented by Adam Black

- Not trivial as the R/DuckDB interface uses different object structure
- Big team effort for integration and testing. Thank you everyone!

Europe Symposium Agenda

Symposium Agenda – July 7, 2025

Time	Topic	
8:00 - 9:00	*Registration & Coffee*	
9:00 - 9:10	Welcome to the European OHDSI Journey *(Speakers: Liesbet M. Peeters & Peter Rijnbeek)*	
9:10 - 9:30	Journey of OHDSI: Where have we been and where can we go together? *(Speaker: Patrick Ryan)*	
9:30 - 11:00	Impact of Leveraging OMOP CDM for Scalable and Reliable Evidence Generation Showcased by the National Nodes *(Moderators: Renske Los & Annelies Verbiest)*	
11:00 - 11:30	*Coffee Break*	
11:30 - 12:45	Collaborator Showcase: Rapid Fire Presentations *(Moderator: TBC)*	
12:45 - 13:45	*Lunch*	
13:45 - 16:00	OHDSI Collaborator Showcase	Early Investigator Mentor Meeting (14:00 - 15:00)
16:00 - 17:10	Bridging Policy and Practice: OHDSI's Role in Implementing the European Health Data Space *(Panel debate)* *(Confirmed speakers/moderators: Enrique Bernal-Delgado, Nick Mark, Talita Duarte-Salles, Patrick Ryan, Dipak Kalra)*	
17:10 - 17:30	Closing remarks *(Speakers: Liesbet M. Peeters & Peter Rijnbeek)*	

Agenda Sunday July 6, 2025

Time	Activity	Track 1A - Newcomers	Track 1B - Newcomers	Track 2 - Advanced	Track 3 - NN/WG
09:30 - 10:00	*Registration + coffee*				
10:00 - 12:30	Morning Session		**OHDSI Standardized Vocabularies for Research – Part 2** Lead: Anna Ostropolets (Janssen R&D), Polina Talapova (Sciforce), Vlad Korsik & Oleg Zhuk (Odysseus) *Final discussion & application of concept sets.*		**NN All Actors Meet Parallel NN meetings**
12:30 - 13:30	***Data Partners Lunch Break***				
13:30 - 15:00	Afternoon Session I	**Whirlwind Introduction to Open-Source Analytic Tools - Part 1** Lead: Martijn Schuemie (J&J), Adam Black (Erasmus MC), Anthony Sena (Janssen R&D) *Overview of HADES and other key OHDSI tools for analysis.*		**Running characterisation studies from beginning to end: a tutorial using DARWIN EU standardised analytics - Part 1** Lead: Daniel Prieto-Alhambra (Oxford University)	**NN All Actors Meet Parallel NN meetings**
15:00 - 15:30	*Coffee Break*				
15:30 - 17:00	Afternoon Session II	**Whirlwind Introduction to Open-Source Analytic Tools - Part 2** Lead: Martijn Schuemie (J&J), Adam Black (Erasmus MC), Anthony Sena (Janssen R&D) *Overview of HADES and other key OHDSI tools for analysis.*		**Running characterisation studies from beginning to end: a tutorial using DARWIN EU standardised analytics - Part 2** Lead: Daniel Prieto-Alhambra (Oxford University)	**OHDSI Europe NN leads meet** Lead: Renske Los (only NN leads/managers)
17:00 - 18:00*	**Optional - networking drink*				

ATLAS Usage & Feedback Survey

Atlas Survey

General

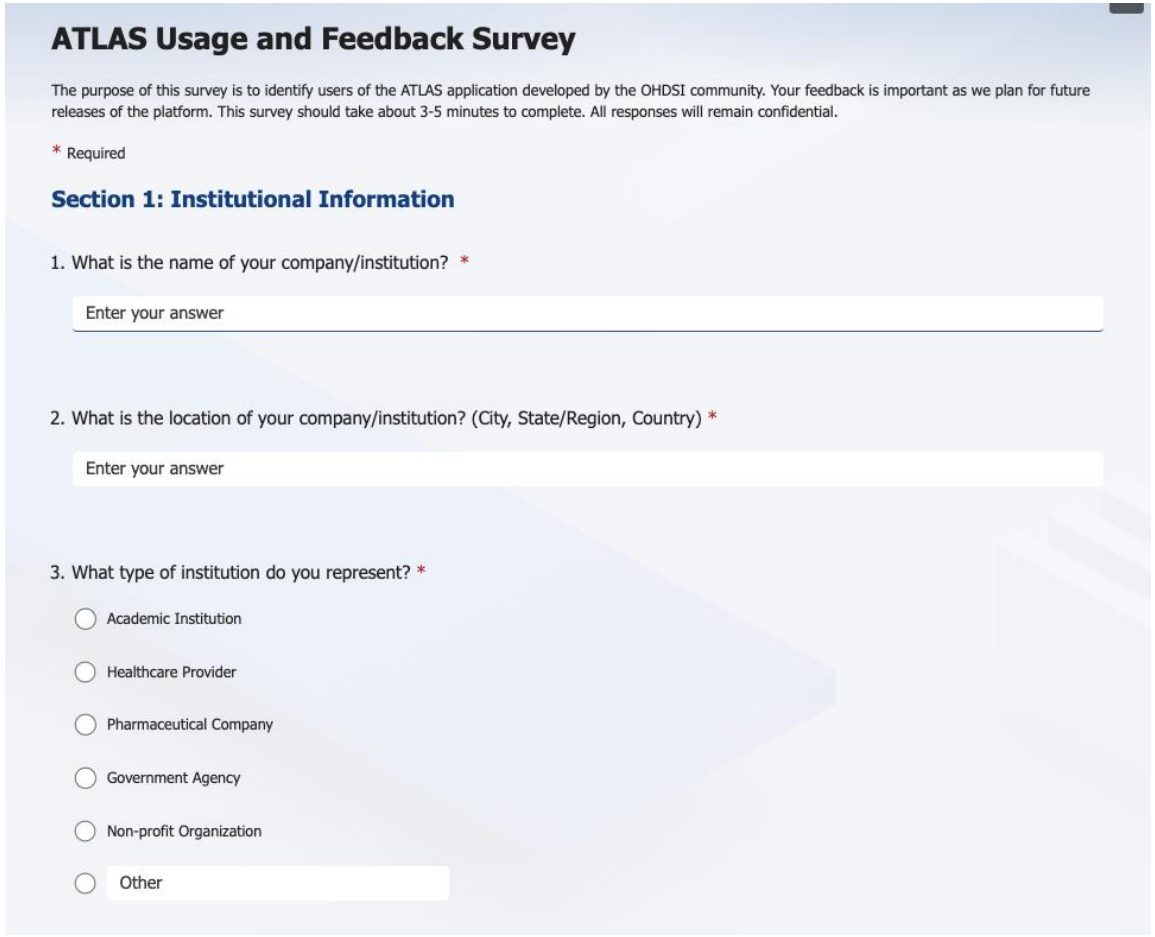
Chris_Knoll 5d

The ATLAS working group has put together a short survey (Microsoft Forms 6) to help us identify who is using ATLAS in our community. If you are not using ATLAS, we'd still ask you to fill in this survey so you can help us to identify any barriers for adoption in your company/institution.

Additionally, this survey will ask if you'd like to be interviewed for feedback on your usage of ATLAS. Data4Life (https://www.data4life.care/ 1) is working closely with our working group to conduct interviews (~1hr) that will help inform the future direction of the application.

We'd appreciate if you could fill out this survey and consider speaking with Data4Life regarding your experiences with ATLAS.

Tagging @anthonysena



ATLAS Usage and Feedback Survey

The purpose of this survey is to identify users of the ATLAS application developed by the OHDSI community. Your feedback is important as we plan for future releases of the platform. This survey should take about 3-5 minutes to complete. All responses will remain confidential.

* Required

Section 1: Institutional Information

1. What is the name of your company/institution? *

Enter your answer

2. What is the location of your company/institution? (City, State/Region, Country) *

Enter your answer

3. What type of institution do you represent? *

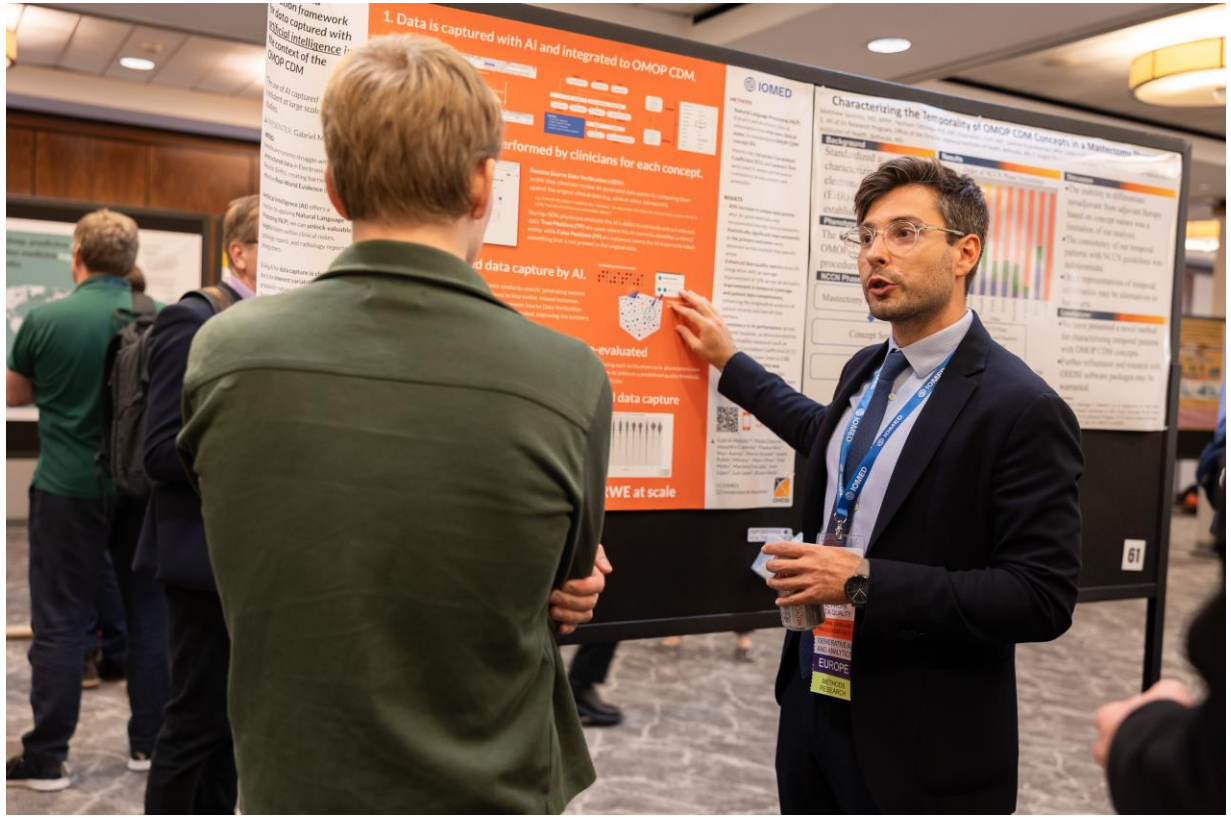
- Academic Institution
- Healthcare Provider
- Pharmaceutical Company
- Government Agency
- Non-profit Organization
- Other

Link on community calls page

Spotlight: Gabriel Maeztu

Gabriel Maeztu is a medical doctor and mathematician revolutionizing healthcare with artificial intelligence. As the co-founder of IOMED, he has led the development of cutting-edge AI models, processing over 300 million medical records.

In the latest edition of the collaborator spotlight, Gabriel discusses his career journey, how IOMED is impacting healthcare research, what he learned through his work with EHDEN, the critical value of advanced analytics, and plenty more.



The Center for Advanced Healthcare Research Informatics (CAHRI) at Tufts Medicine welcomes:

Georgie Kennedy, PhD

Senior Research Fellow, University of New South Wales and the Ingham Institute

'Learning from Real-World Cancer Data: Maturing data pipelines to support research that impacts clinical care'

May 29, 2025, 9-10am EDT

Virtually via Zoom

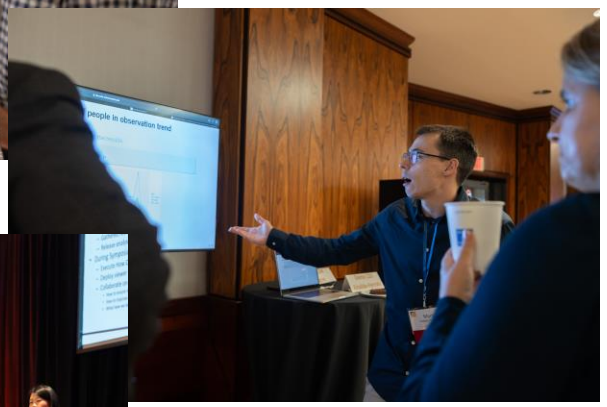
Please contact Marty Alvarez at malvarez2@tuftsmedicalcenter.org for calendar invite or questions.

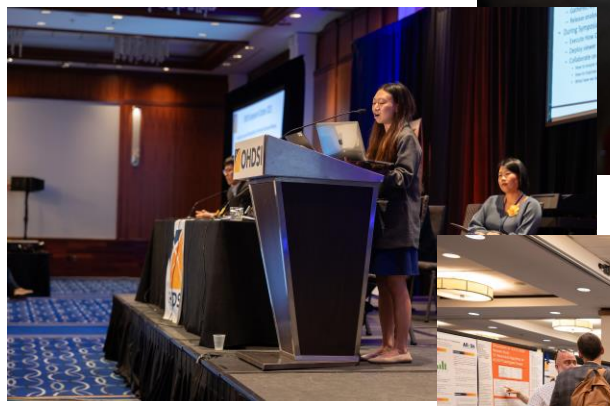
TuftsMedicine
Tufts Medical Center

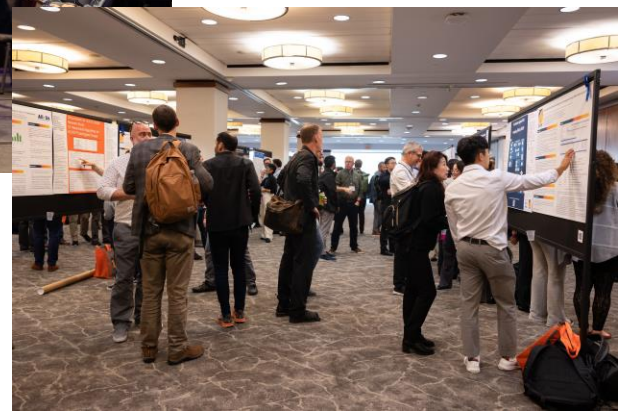
Save The Date!

The submission deadline for the 2025 Global Symposium Collaborator Showcase is July 1.

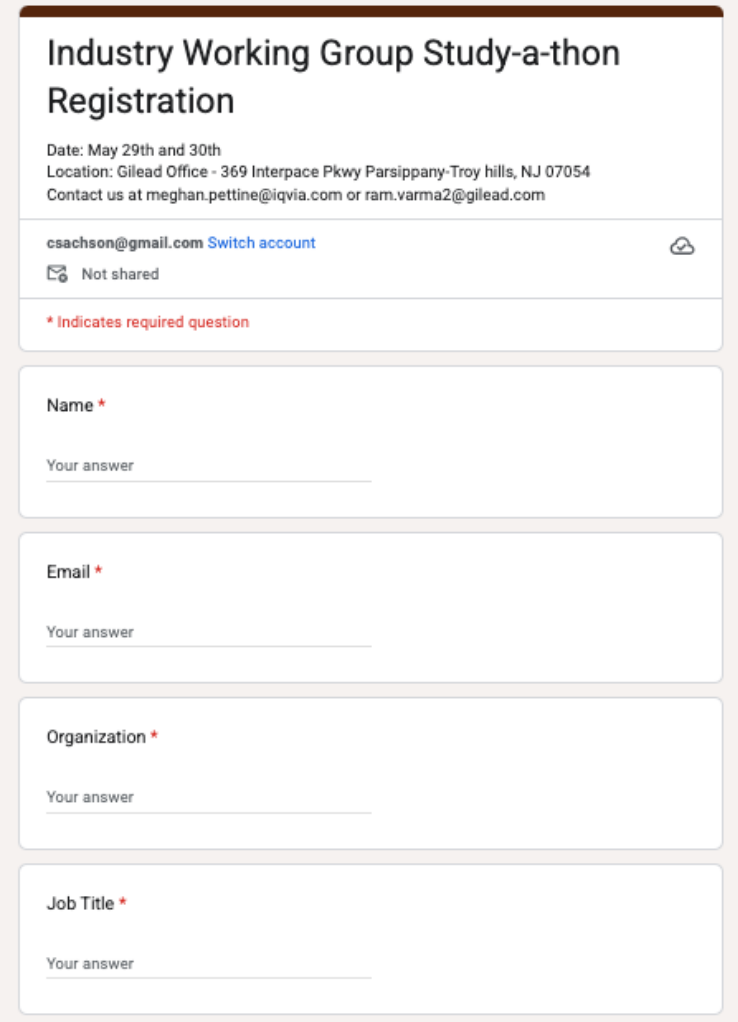
The showcase will be accepting both posters and software demos, as well as interest in hosting lightning talks. More information on the symposium, including abstract submission and registration links, will be available soon.







Industry Workgroup Studyathon



Industry Working Group Study-a-thon Registration

Date: May 29th and 30th
Location: Gilead Office - 369 Interpace Pkwy Parsippany-Troy hills, NJ 07054
Contact us at meghan.pettine@iqvia.com or ram.varma2@gilead.com

csachson@gmail.com Switch account

Not shared

* Indicates required question

Name *

Your answer

Email *

Your answer

Organization *

Your answer

Job Title *

Your answer

Where: Parsippany, New Jersey

Hosted By: Gilead

The OHDSI Industry Working Group is pleased to announce a two day in-person study-a-thon. The primary objective is to provide stakeholders with a tangible example of the advantages of joining the OHDSI network. These benefits include:

- The OMOP Common Data Model (CDM) aligns with institutional goals and highlights the advantages of a standardized data model.
- Accelerated timelines for conducting network studies.
- A high-quality and user-friendly technology stack.
- Established trust in OMOP vocabularies.
- A comprehensive solution for conducting efficient studies.

This demonstration aims to underscore the value and effectiveness of the OHDSI network, encouraging stakeholders to recognize its potential and benefits.

Interested in learning more? Please join the OHDSI Industry Working Group during our monthly meeting. Past meeting recordings and notes are available on Teams.

#OHDSISocialShowcase This Week

Monday

Bridging the Language Gap: Generative Models for Efficient Medical Concept Discovery

(Alvaro A Alvarez, Priya Desai, Somalee Datta)

Bridging the Language Gap
Generative Models for Efficient Medical Concept Discovery

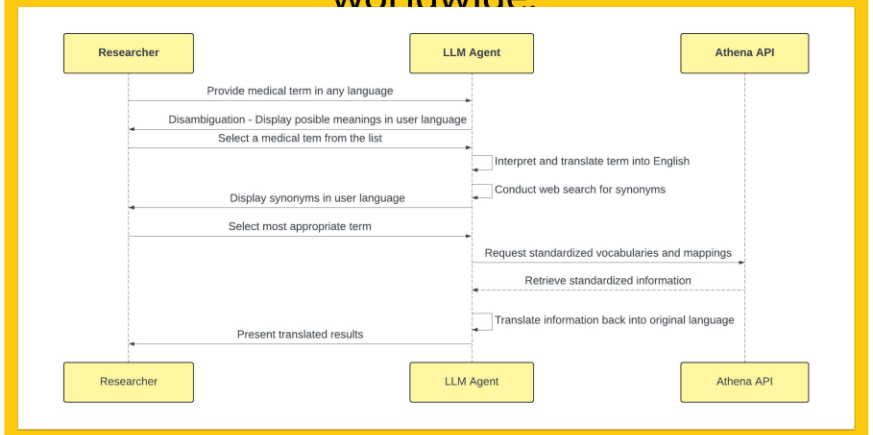
PRESENTER: **Alvaro A. Alvarez**

INTRO:
- Athena is crucial for OHDSI researchers, providing access to medical vocabularies.
- Researchers struggle to find correct medical concepts, especially with language barriers.
- Direct translations of medical terms can be ambiguous. For example, the Polish word "zawał" can mean either myocardial infarction or cerebral infarction, while the Spanish word "constipado" can refer to either a cold or constipation.
- **Lack of multilingual support hinders accessibility for non-English speaking researchers.**

METHODS
1. Developed a modular, AI-powered solution for medical concept discovery.
2. Uses Gpt 4o model (model-agnostic design for future upgrades).
3. Interprets input terms considering context and language-specific nuances.
4. Conducts web search for definitions and synonyms.
5. Communicates with Athena API to retrieve relevant medical concepts.
6. Translates results back to the user's original language.

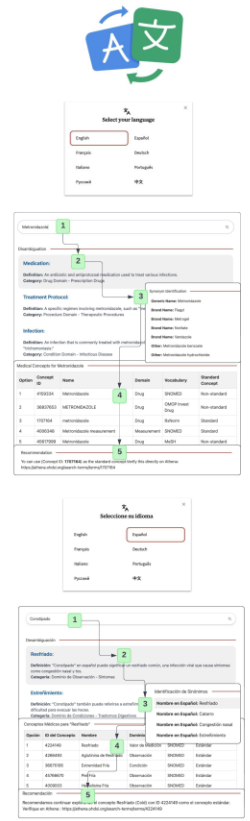
RESULTS
- Enhanced efficiency in locating relevant medical concepts.
- Improved multilingual support and handling of language-specific ambiguities.
- More equitable access for researchers with limited English proficiency.
- Seamless integration with OHDSI's ecosystem.

Generative models can **bridge the language gap** in medical concept discovery, making OHDSI tools more **accessible and efficient** for researchers worldwide.



Try the app here !

Source Code



Alvaro A Alvarez, Priya Desai, Somalee Datta

Stanford MEDICINE Technology & Digital Solutions

OHDSI

Where Are We Going?

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

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May 13: Maternal Health Fellowship Research Findings

Elizabeth Sherwin

Stanford University School of Medicine

Estimating the risk of severe maternal morbidity among pregnant people with congenital heart disease

Elizabeth Howard

Ochsner Xavier Institute for Health Equity & Research

Risk of Neonatal Abstinence Syndrome Following Maternal Exposure to Buprenorphine vs Methadone Opioid Maintenance Therapy

Sarah Murray

Centre for Reproductive Health, Institute for Regeneration and Repair, University of Edinburgh

Does antenatal corticosteroids (ACS) given to twins prior to planned birth (35-39 weeks gestation) reduce the risk of respiratory morbidity in the babies?

Shannon Stevenson

Nell Hodgson Woodruff School of Nursing, Emory University

Healthcare Utilization Within the First 12 Weeks Postpartum

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-2025