April Olympians #4 / CDM & Themis Process Overview

OHDSI Community Call
April 23, 2024 • 11 am ET

Upcoming Community Calls

Date	Topic
April 23	April Olympians Update | Presentation: CDM & Themis Process Overview
April 30	April Olympians Update | Presentation: What We Achieved & How You Can Use It
May 7	DevCon 2024 Review
May 14	10-Minute Tutorials
May 21	Open Studies in the OHDSI Community
May 28	Collaborator Showcase Brainstorm
June 4	NO CALL – EUROPEAN SYMPOSIUM
June 11	European Symposium Review
June 18	Application of LLMs In Evidence Generation Process
June 25	Recent OHDSI Publications

Three Stages of The Journey

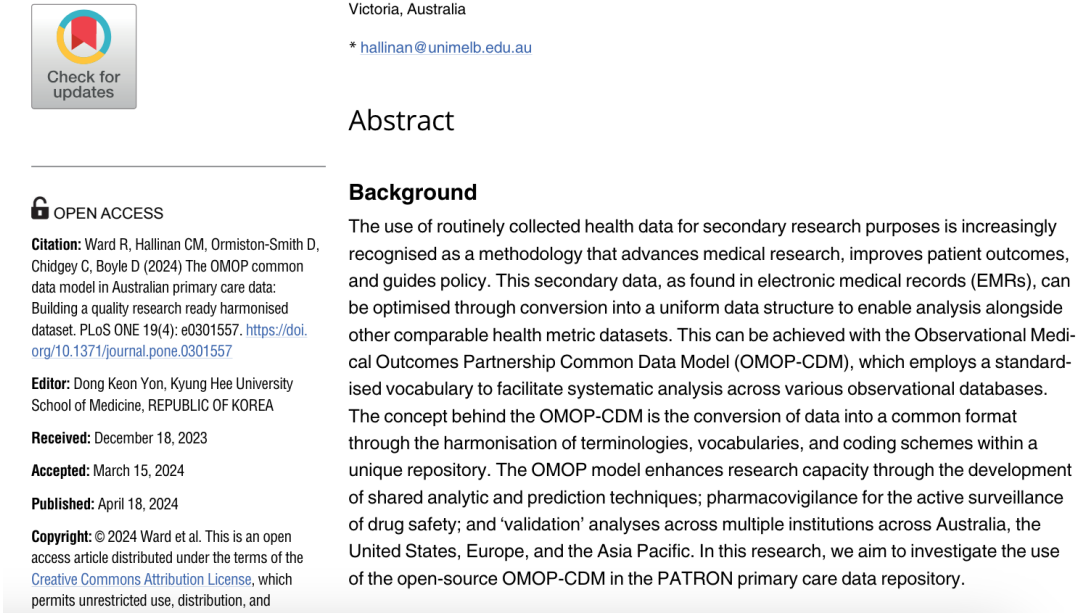
Where Have We Been?

Where Are We Now?

Where Are We Going?

OHDSI Shoutouts!

Congratulations to the team of **Roger Ward, Christine Mary Hallinan, David Ormiston-Smith, Christine Chidgey, and Dougie Boyle** on the publication of **The OMOP common data model in Australian primary care data: Building a quality research ready harmonised dataset** in *PLOS One*.



PLOS ONE

RESEARCH ARTICLE

The OMOP common data model in Australian primary care data: Building a quality research ready harmonised dataset

Roger Ward, Christine Mary Hallinan*, David Ormiston-Smith, Christine Chidgey, Dougie Boyle

Health & Biomedical Research Information Technology Unit (HaBIC R2), Department of General Practice and Primary Care, Faculty of Medicine, Dentistry & Health Sciences, The University of Melbourne, Parkville, Victoria, Australia

* hallinan@unimelb.edu.au

Check for updates

OPEN ACCESS

Citation: Ward R, Hallinan CM, Ormiston-Smith D, Chidgey C, Boyle D (2024) The OMOP common data model in Australian primary care data: Building a quality research ready harmonised dataset. PLoS ONE 19(4): e0301557. https://doi.org/10.1371/journal.pone.0301557

Editor: Dong Keon Yon, Kyung Hee University School of Medicine, REPUBLIC OF KOREA

Received: December 18, 2023

Accepted: March 15, 2024

Published: April 18, 2024

Abstract

Background

The use of routinely collected health data for secondary research purposes is increasingly recognised as a methodology that advances medical research, improves patient outcomes, and guides policy. This secondary data, as found in electronic medical records (EMRs), can be optimised through conversion into a uniform data structure to enable analysis alongside other comparable health metric datasets. This can be achieved with the Observational Medical Outcomes Partnership Common Data Model (OMOP-CDM), which employs a standardised vocabulary to facilitate systematic analysis across various observational databases. The concept behind the OMOP-CDM is the conversion of data into a common format through the harmonisation of terminologies, vocabularies, and coding schemes within a unique repository. The OMOP model enhances research capacity through the development of shared analytic and prediction techniques; pharmacovigilance for the active surveillance of drug safety; and 'validation' analyses across multiple institutions across Australia, the United States, Europe, and the Asia Pacific. In this research, we aim to investigate the use of the open-source OMOP-CDM in the PATRON primary care data repository.

OHDSI Shoutouts!

Congratulations to the team of **Christian Gulden, Philipp Macho, Ines Reinecke, Cosima Strantz, Hans-Ulrich Prokosch, and Romina Blasini** on the publication of **recruIT: A cloud-native clinical trial recruitment support system based on Health Level 7 Fast Healthcare Interoperability Resources (HL7 FHIR) and the Observational Medical Outcomes Partnership Common Data Model (OMOP CDM)** in *Computers in Biology and Medicine*.

Computers in Biology and Medicine 174 (2024) 108411

Contents lists available at ScienceDirect

Computers in Biology and Medicine

journal homepage: www.elsevier.com/locate/compbiomed

recruIT: A cloud-native clinical trial recruitment support system based on Health Level 7 Fast Healthcare Interoperability Resources (HL7 FHIR) and the Observational Medical Outcomes Partnership Common Data Model (OMOP CDM)

Christian Gulden [a,*], Philipp Macho [b], Ines Reinecke [c], Cosima Strantz [a], Hans-Ulrich Prokosch [a], Romina Blasini [d]

[a] Friedrich-Alexander-Universität Erlangen-Nürnberg, Department of Medical Informatics, Biometrics and Epidemiology, Medical Informatics, Erlangen, Germany
[b] Medical Informatics, Institute of Medical Biostatistics, Epidemiology and Informatics, University Medical Center of the Johannes Gutenberg-University Mainz, Mainz, Germany
[c] Carl Gustav Carus Faculty of Medicine, Center for Medical Informatics, Institute for Medical Informatics and Biometry, Technische Universität Dresden, Dresden, Germany
[d] Institute of Medical Informatics, Justus Liebig University, Giessen, Germany

ABSTRACT

Background: Clinical trials (CTs) are foundational to the advancement of evidence-based medicine and recruiting a sufficient number of participants is one of the crucial steps to their successful conduct. Yet, poor recruitment remains the most frequent reason for premature discontinuation or costly extension of clinical trials.
Methods: We designed and implemented a novel, open-source software system to support the recruitment process in clinical trials by generating automatic recruitment recommendations. The development is guided by modern, cloud-native design principles and based on Health Level 7 (HL7) Fast Healthcare Interoperability Resources (FHIR) as an interoperability standard with the Observational Medical Outcomes Partnership (OMOP) Common Data Model (CDM) being used as a source of patient data. We evaluated the usability using the system usability scale (SUS) after deploying the application for use by study personnel.
Results: The implementation is based on the OMOP CDM as a repository of patient data that is continuously queried for possible trial candidates based on given clinical trial eligibility criteria. A web-based screening list can be used to display the candidates and email notifications about possible new trial participants can be sent automatically. All interactions between services use HL7 FHIR as the communication standard. The system can be installed using standard container technology and supports more sophisticated deployments on Kubernetes clusters. End-users (n = 19) rated the system with a SUS score of 79.9/100.
Conclusion: We contribute a novel, open-source implementation to support the patient recruitment process in clinical trials that can be deployed using state-of-the art technologies. According to the SUS score, the system provides good usability.

OHDSI Shoutouts!

Congratulations to the team of **Giorgio Gandaglia, Francesco Pellegrino, Asieh Golozar, Bertrand De Meulder, Thomas Abbott, Ariel Achtman, Muhammad Imran Omar, Thamir Alshammari, Carlos Areia, Alex Asiimwe, Katharina Beyer, Anders Bjartell, Riccardo Campi, Philip Cornford, Thomas Falconer, Qi Feng, Mengchun Gong, Ronald Herrera, Nigel Hughes, Tim Hulsen, Adam Kinnaird, Lana Y.H. Lai, Gianluca Maresca, Nicolas Mottet, Marek Oja, Peter Prinsen, Christian Reich, Sebastiaan Remmers, Monique J. Roobol, Vasileios Sakalis, Sarah Seager, Emma J. Smith, Robert Snijder, Carl Steinbeisser, Nicolas H. Thurin, Ayman Hijazy, Kees van Bochove, Roderick C.N. Van den Bergh, Mieke Van Hemelrijck, Peter-Paul Willemse, Andrew E. Williams, Nazanin Zounemat Kermani, Susan Evans-Axelsson, Alberto Briganti, James N'Dow, on behalf of the PIONEER Consortium** on the publication of **Clinical Characterization of Patients Diagnosed with Prostate Cancer and Undergoing Conservative Management: A PIONEER Analysis Based on Big Data** in *European Urology.*

EUROPEAN UROLOGY 85 (2024) 457–465

available at www.sciencedirect.com
journal homepage: www.europeanurology.com

European Association of Urology

Clinical Characterization of Patients Diagnosed with Prostate Cancer and Undergoing Conservative Management: A PIONEER Analysis Based on Big Data

Giorgio Gandaglia[a,b,,†], Francesco Pellegrino[b,†], Asieh Golozar[c,d,†], Bertrand De Meulder[e,†], Thomas Abbott[f], Ariel Achtman[g], Muhammad Imran Omar[a,h], Thamir Alshammari[i], Carlos Areia[j], Alex Asiimwe[k], Katharina Beyer[l], Anders Bjartell[m], Riccardo Campi[a,n,o], Philip Cornford[p], Thomas Falconer[q], Qi Feng[f], Mengchun Gong[r,s], Ronald Herrera[k], Nigel Hughes[t], Tim Hulsen[u], Adam Kinnaird[v], Lana Y.H. Lai[w], Gianluca Maresca[x], Nicolas Mottet[a], Marek Oja[y,z], Peter Prinsen[aa], Christian Reich[bb], Sebastiaan Remmers[cc], Monique J. Roobol[cc], Vasileios Sakalis[dd], Sarah Seager[ee], Emma J. Smith[a], Robert Snijder[f], Carl Steinbeisser[k], Nicolas H. Thurin[ff], Ayman Hijazy[e], Kees van Bochove[gg], Roderick C.N. Van den Bergh[hh], Mieke Van Hemelrijck[l], Peter-Paul Willemse[a,ii], Andrew E. Williams[jj], Nazanin Zounemat Kermani[kk], Susan Evans-Axelsson[k,‡], Alberto Briganti[a,b,‡], James N'Dow[a,h,‡], on behalf of the PIONEER Consortium*

Three Stages of The Journey

Where Have We Been?

Where Are We Now?

Where Are We Going?

Upcoming Workgroup Calls

Date	Time (ET)	Meeting
Wednesday	9 am	OMOP CDM Oncology Outreach/Research Subgroup
Wednesday	10 am	Surgery and Perioperative Medicine
Wednesday	12 pm	Latin America
Wednesday	1 pm	Perinatal and Reproductive Health
Wednesday	3 pm	Joint Vulcan/OHDSI Meeting
Thursday	9:30 am	Network Data Quality
Thursday	12 pm	Medical Devices
Thursday	7 pm	Dentistry
Friday	9 am	Phenotype Development and Evaluation
Friday	10 am	GIS-Geographic Information System
Friday	11:30 am	Clinical Trials
Monday	10 am	Africa Chapter

DevCon 2024: April 26, 9 am-3 pm ET

Morning Agenda

9:00 am – Introduction (Adam Black, Paul Nagy)

9:15 am – Developers Panel and Lightning Talks (Katy Sadowski)

- *OHDSI/OMOP – The hard way is the easy way!* (Vishnu V Chandrabalan)
- *Moving OMOP to the Cloud With DBT and Snowflake* (Roger Carlson)
- *Use cases for ORMs in OMOP* (Georgina Kennnedy)
- *Carrot: code-free OMOP ETL without full data access* (Sam Cox)
- *Rabbit-in-a-blender - an ETL pipeline to transform your EMR data into OMOP* (Pieter-jan Lammertyn)

10:45 am – Darwin EU® Developers Update (Adam Black)

12:00 pm – Break

Afternoon Agenda

12:30 pm – OHDSI Ecosystem Updates

- TAB Update (Frank DeFalco)
- Strategus Update (Anthony Sena)
- Broadsea Update (Lee Evans)
- Kheiron Updates (Paul Nagy)

1:15 pm – JACKALOPE PLUS The Power of ML for Healthcare Data Mapping & Management (Denys Kaduk)

2:00 pm - An Introduction to Knowledge Graphs using PheKnowLator and OMOP2OBO with Example Applications in Drug Surveillance and Computational Phenotyping (Tiffany Callahan)

#OHDSI2024 Registration Is Open!

Registration is now 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

#OHDSI2024 Collaborator Showcase

Submissions are now being accepted for the 2024 Global Symposium Collaborator Showcase.

All submissions are due by 8 pm ET on Friday, June 21.

Notification of acceptance will be made by Tuesday, Aug. 20.

ohdsi.org/OHDSI2024

Maternal Health Data Science Fellowship

This program is designed to empower clinical investigators to leverage emerging technologies for improved maternal and neonatal care while reducing morbidity and mortality.

Three main components of this program:

1) Career Development (create evidence, leverage data models, build skills on network studies)

2) Practice (design effective observational research protocols, master tools, write papers/grants)

3) Networking (build relationships with mentors, learners, coordinate with global OHDSI collaborators)

Application deadline: May 15

Want to build your career?

Generate reproducible evidence by leading multi-institutional studies!

Learn more & apply!

RWE Workshop at AIME24: Call for Submissions!

Workshop: **AI for Reliable and Equitable Real-World Evidence Generation in Medicine**

https://medicine.utah.edu/dbmi/aime/ai-reliable

Organizing Committee
Linying Zhang
Adam Wilcox
Yves Lussier

Scientific Program Committee
Peter Rijnbeek
Larry Han
Xiaoqian Jiang
Mattia Prosperi
Xia Ning
Yifan Peng

Opening Keynote
George Hripcsak

IMPORTANT DATES

May 31, 2024 | Submission Deadline

June 14, 2024 | Notice of Acceptance

July 12, 2024 | Workshop

CBER BEST Seminar Recording Is Posted

OHDSI
OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS

Who We Are | Updates & News | Standards | Software Tools | Network Studies | Community Forums | Education | New To OHDSI?
Past Events | Workgroups | 2023 'Our Journey' Annual Report | This Week In OHDSI | Support & Sponsorship
CBER Best Seminars | 2024 Europe Symposium | 2024 Global Symposium | Github | YouTube | Twitter | LinkedIn | Newsletters

CBER BEST Seminar Series

The CBER BEST Initiative Seminar Series is designed to share and discuss recent research of relevance to ongoing and future surveillance activities of CBER regulated products, namely biologics. The series focuses on safety and effectiveness of biologics including vaccines, blood components, blood-derived products, tissues and advanced therapies. The seminars will provide information on characteristics of biologics, required infrastructure, study designs, and analytic methods utilized for pharmacovigilance and pharmacoepidemiologic studies of biologics. They will also cover information regarding potential data sources, informatics challenges and requirements, utilization of real-world data and evidence, and risk-benefit analysis for biologic products. The length of each session may vary, and the presenters will be invited from outside FDA.

BES

Below you will find details of upcoming CBER BEST seminars, including virtual links that will be open to anybody who wishes to attend. Speakers who give their consent to be recorded will also have their presentations included on this page; you can find those sessions below the list of upcoming speakers.

— April 17: Yong Chen, University of Pennsylvania

Topic: Real-World Effectiveness of BNT162b2 Against Infection and Severe Diseases in Children and Adolescents: causal inference under misclassification in treatment status

Presenter: Dr. Yong Chen, Professor & Director of the Center for Health AI and Synthesis of Evidence (CHASE) at the University of Pennsylvania

Description: The current understanding of long-term effectiveness of the BNT162b2 vaccine across diverse U.S. pediatric populations is limited. We assessed the effectiveness of BNT162b2 against various strains of the SARS-CoV-2 virus using data from a national collaboration of pediatric health systems (PEDSnet). We emulated three target trials to assess the real-world effectiveness of BNT162b during the Delta and Omicron variant periods. In the U.S., immunization records are often captured and stored across multiple disconnected sources, resulting in incomplete vaccination records in patients' electronic health records (EHR). We implemented a novel trial emulation pipeline accounting for possible misclassification bias in vaccine documentation in EHRs. The effectiveness of the BNT162b2 vaccine was estimated from the Poisson regression model with confounders balanced via propensity score stratification. This study suggests BNT162b2 was effective among children and adolescents in Delta and Omicron periods for a range of COVID-19-related outcomes and is associated with a lower risk for cardiac complications.

Bio: Dr. Yong Chen is tenured Professor of Biostatistics and the Founding Director of the Center for Health AI and Synthesis of Evidence (CHASE) at the University of Pennsylvania. He is an elected fellow of American Statistical Association, International Statistical Institute, Society for Research Synthesis Methodology, American College of Medical Informatics, and American Medical Informatics Association. He founded the Penn Computing, Inference and Learning (PennCIL) lab at the University of Pennsylvania, focusing on clinical evidence generation and evidence synthesis using clinical and real-world data. During pandemic, Dr. Chen is serving as biostatistics core director for a national multi-center study on Post-Acute Sequelae of SARS CoV-2 infection (PASC), involving more than 9 million pediatric patients across 40 health systems.

ohdsi.org/cber-best-seminar-series

#OHDSISocialShowcase This Week

MONDAY

Enhancing Data Quality Management: Introducing Capture and Cleanse Modes to the Data Quality Dashboard

(Frank DeFalco, Clair Blacketer)

Enhancing Data Quality Management

Introducing Capture and Cleanse Modes to the Data Quality Dashboard

PRESENTER: Frank J DeFalco

INTRO

- The DataQualityDashboard package was updated with new features to support capture and cleanse. The implementation of the capture and cleanse feature has demonstrated promising results in improving data quality management.

METHODS

- New run modes named 'capture' and 'cleanse' were added to the Data Quality Dashboard package
- New elements were added to the check description data to codify logic for these new run modes
- All data quality checks are identified as eligible for capture and cleanse through the existing check description functionality.

ENHANCED VISIBILITY

- By capturing all failing data quality data owners can review the data quality failures in a dedicated schema.

PROACTIVE DATA CLEANSING

- Eliminating records that failed data quality checks allows organizations to improve the reliability of downstream analytics

Capture data quality issues and **Cleanse** them from your data to ensure your organization uses **Research Quality Data.**

```
DataQualityDashboard::executeDqChecks(
        runMode = "capture"
)
```

Take a picture to **download** the **full paper**

CAPTURE MODE

- Provides the ability to identify data records that fail specific data quality checks and captures copies of the affected records to a user-specified schema.
- With capture mode, organizations can preserve and characterize the failing records, gaining valuable insights for further analysis and investigation of their data quality issues

CLEANSE MODE

- This mode provides the ability to automatically remove failing records from a data source.
- By leveraging the cleanse mode, organizations can maintain a cleaner and more reliable dataset by eliminating records that fail data quality checks, ensuring data integrity and accuracy.
- A systematic approach to data cleansing provides a reproducible way to eliminate failing records as part of a data operations pipeline.

Frank DeFalco, Clair Blacketer

janssen PHARMACEUTICAL COMPANIES OF Johnson & Johnson

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#OHDSISocialShowcase This Week

TUESDAY

Making OMOP Happen: An Implementation Science Approach

(Maya Younoszai, Pam Dasher, Danielle Boyce, Smith Heavner)

Making OMOP Happen
An Implementation Science Approach

PRESENTER: Maya Younoszai

INTRO:

- Multicenter projects bring together sites at all stages of their OHDSI journey
- OHDSI projects are complicated and require the coordination of resources internal and external to the participating sites.
- The EPIS implementation science framework allows us to understand the successes and challenges of the CURE ID project

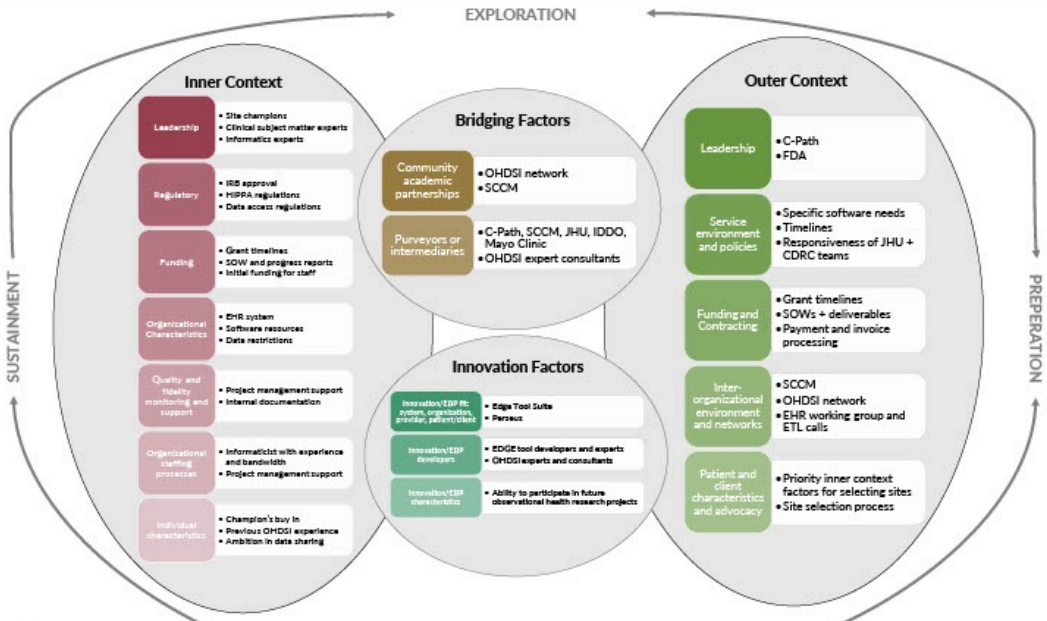
METHODS

1. Reviewed calls and emails from hospital sites to understand major successes and roadblocks
2. Identified recurring themes with multiple
3. Performed member checking to confirm results with a variety of stakeholders involved in many steps of the project

RESULTS

- Inner context (specifically technological and compliance factors) is a major predicter of site success
- Strong bridging factors, including OHDSI community involvement, helped support sites through setbacks
- Highlighting and emphasizing innovation factors led to faster connections and interest to higher-level leadership

Having a **strategic plan for implementation and utilizing tools** like the EPIS framework from the outset of projects can **improve efficiency, reduce redundancy, and expedite problem solving.**



Take a picture to download the full paper

Maya Younoszai, Pam Dasher, Danielle Boyce, Smith Heavner

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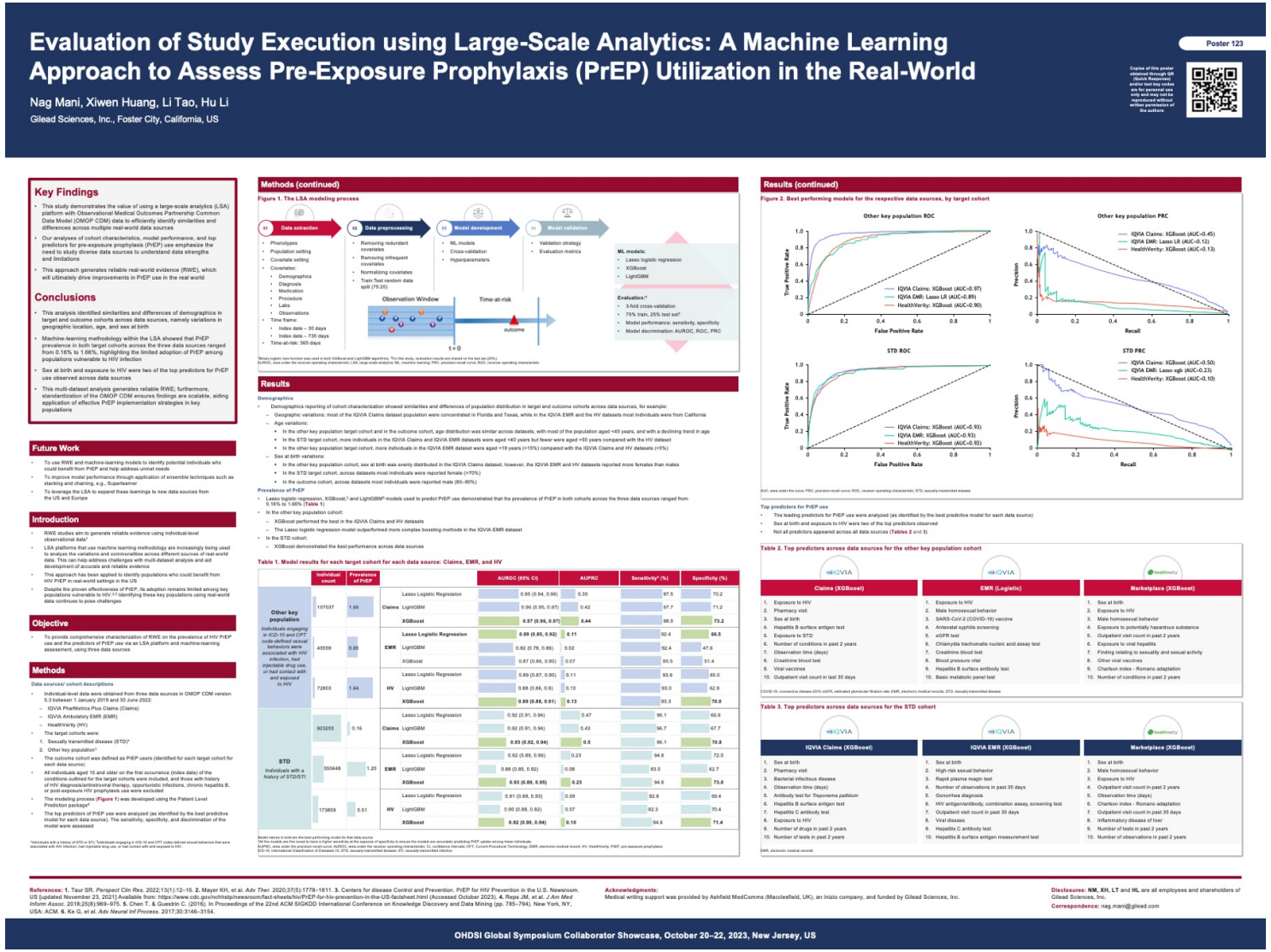
#OHDSISocialShowcase This Week

WEDNESDAY

Evaluation of Study Execution using Large-Scale Analytics: A Machine Learning Approach to Assess Pre-Exposure Prophylaxis (PrEP) Utilization in the Real-World

(Nag Mani, Xiwen Huang, Li Tao, Hu Li)



Evaluation of Study Execution using Large-Scale Analytics: A Machine Learning Approach to Assess Pre-Exposure Prophylaxis (PrEP) Utilization in the Real-World

Poster 123

Nag Mani, Xiwen Huang, Li Tao, Hu Li

Gilead Sciences, Inc., Foster City, California, US

Key Findings

Conclusions

Future Work

Introduction

Objective

Methods

Methods (continued)

Figure 1. The LSA modeling process

Results

Demographics

Prevalence of PrEP

Table 1. Model results for each target cohort for each data source: Claims, EMR, and HV

Results (continued)

Figure 2. Best performing models for the respective data sources, by target cohort

Other key population ROC

Other key population PRC

STD ROC

STD PRC

Top predictors for PrEP use

Table 2. Top predictors across data sources for the other key population cohort

Table 3. Top predictors across data sources for the STD cohort

References

Acknowledgments

Disclosures

Correspondence

OHDSI Global Symposium Collaborator Showcase, October 20–22, 2023, New Jersey, US

#OHDSISocialShowcase This Week

THURSDAY

Validation and Comparison of Frailty Indexes: An OHDSI Network Study

(Chen Yanover, Louisa Smith, Tal El-Hay, Brianne Olivieri-Mui, Maytal Bivas-Benita, Robert Cavanaugh, Pinchas Akiva, Chelsea N. Wong, Ariela Orkaby)

Title: *Validation and Comparison of Frailty Indexes: An OHDSI Network Study*

Intro

A frailty index (FI) is a marker of overall health status and vulnerability, used to identify those at increased risk for adverse health outcomes; typically, a sum of health indicators ("deficits") across diverse health domains. We aimed to validate and compare electronic health record (EHR)-based FIs across multiple health care settings and geographies.

Methods

- **Study design**: A multinational cohort study using routinely collected healthcare data from 5 OMOPed DBs
- **Study population**: Individuals ≥40 years old, with ≥1 year of observation prior to an index date – a random visit for UK data sources and PharMetrics+; and 1 year following recruitment date in the AoU data.
- **EHR-based FIs**: UK electronic Frailty Index (eFI) and US Veterans Affairs Frailty Index (VA-FI), computed on 1Y lookback period.

OHDSI

Frailty Status Shows **Similar Trends** across Healthcare Systems, but **Different Prevalence**

- **Data sources**

IQVIA™ Adjudicated Health Plan Claims	PharMetrics+
All of Us Research Program	AoU
IQVIA™ Medical Research Data – EMIS	IMRD-EMIS
IQVIA™ Medical Research Data – UK	IMRD-UK
The UK Biobank	UKBB

Geography USA; UK

Data type Admin claims; EHRs; EHRs + Questionnaires

Included visits Outpatient; Inpatient

Poster, abstract

Code

Conclusions

✓Expected FI and deficit trends (e.g., ↑age, osteoporosis F > M)

✓Substantial differences in frailty prevalence between USA, UK

Limitations

- FI code lists (originally, Read, ICD) may be incomplete
- Potential differences in coding, reporting within the various healthcare systems

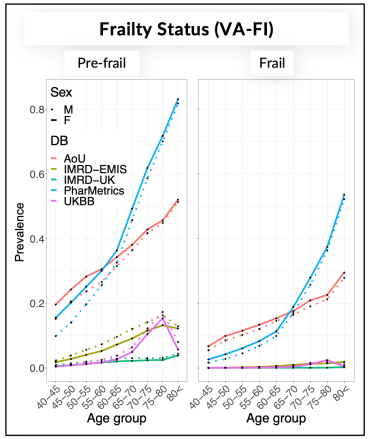
Chen Yanover[1], Louisa Smith[2,3], Tal El-Hay[1], Brianne Olivieri-Mui[2,3,4], Maytal Bivas-Benita[1], Robert Cavanaugh[3], Pinchas Akiva[1], Chelsea N. Wong[3,4], Ariela Orkaby[5,6,7]

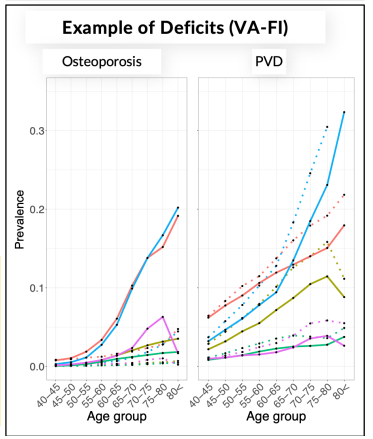
[1]KI Research Institute, Kfar Malal, Israel; [2]The Roux Institute, Northeastern University; [3]Department of Health Sciences, Northeastern University; [4]The Marcus Institute for Aging Research, Hebrew SeniorLife, Harvard Medical School; [5]Veteran Affairs Boston Healthcare System, Boston, Mass;[6]Department of Medicine/Division of Aging, Brigham and Women's Hospital, Boston, Mass; [7]Harvard Medical School, Boston, Mass.

Results

Characteristics of the study populations

	N	% Female	40-75y	>75y
PharMetrics+	5,292,854	53.6%	64.7%	35.3%
AoU	189,746	60.6%	87.5%	12.2%
IMRD-EMIS	1,103,278	50%	73.3%	26.7%
IMRD-UK	3,051,179	50.7%	75.9%	24.1%
UKBB	470,226	53.8%	98.0%	2.0%





#OHDSISocialShowcase This Week

FRIDAY

Broadsea 3.0: "BROADening the ohdSEA"

(Ajit Londhe, Lee Evans, Sanjay Udoshi)

OHDSI Broadsea Evolution

"Broadsea is the easiest way to install (& upgrade) the OHDSI tools"

10k+ Downloads

docker hub

v1.0 — Atlas/WebAPI & RStudio Docker images on Mac/Linux/Windows

v2.0 — Pre-populated demo postgres database image & Traefik reverse proxy

v3.0 — Docker profiles for a-la-carte services, more Traefik networking, environment variable driven deployment, new OHDSI apps, build from Git

```
docker-compose --profile default up -d
```

https://github.com/OHDSI/Broadsea

Opening: Research Assistant, University of Oxford

UNIVERSITY OF OXFORD

UK date and time: 23-April-2024 15:25

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Job Details

Research Assistant in Health Data Sciences

Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, Botnar Research Centre, Windmill Road, Oxford, OX3 7LD

We have an exciting opportunity for a Research Assistant in Health Data Sciences to join the Pharmaco- and Device epidemiology research group led by Professor Daniel Prieto-Alhambra at the Botnar Research Centre, NDORMS, University of Oxford. The NDORMS Pharmaco- and Device epidemiology research group is involved in a number of national and international studies exploring the conditions of use (adherence, compliance, off and on-label use) of a number of licensed drugs, devices, and vaccines for the prevention and treatment of human disease in 'real world' (routine practice) conditions.

As a Research Assistant in Health Data Sciences you will contribute to the programming of analytical pipelines for the analysis of routinely collected data mapped to the OMOP Common Data Model. You will analyse real world data to address regulatory questions related to the prevalence/incidence of disease, use of medicines/vaccines, and the risks or benefits of medicines/vaccines or devices. You will prepare analytical packages to run a number of pre-specified analyses, contribute to wider project planning, including ideas for new research projects and gather, analyse, and present scientific data from a variety of sources.

You will hold a relevant BA or MSc degree in Mathematics, Engineering, or a related field. Knowledge of medical statistics and experience analysing large datasets, experience in biostatistics and/or health data sciences and experience in the programming of R packages are essential. Experience in propensity scores, overlap weighting, inverse probability weighting and/or similar methods, expertise in pharmaco or vaccine epidemiology and experience of working with electronic medical records/routinely collected data are desirable.

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

The closing date for this position is 12 noon on 10 May 2024. You will be required to upload a CV and supporting statement as part of your online application.

Contact Person :	HR Team, NDORMS	**Vacancy ID :**	172348
Contact Phone :		**Closing Date & Time :**	10-May-2024 12:00
Pay Scale :	STANDARD GRADE 6	**Contact Email :**	hr@ndorms.ox.ac.uk
Salary (£) :	£32,332 - £38,205 p.a		

Opening: Biomedical Informatics Data Scientist at Stanford

Stanford MEDICINE Health Care

Who We Are | What We Offer | How We Hire | Career Areas | Search

Biomedical Informatics Data Scientist

1.0 FTE • Full time • Day - 08 Hour • R2335119 • Hybrid • 84866 IT RESEARCH • Technology & Digital Solutions • 455 Broadway,REDWOOD CITY,California •

1.0 FTE Full time Day - 08 Hour R2335119 Hybrid 84866 IT RESEARCH Technology & Digital Solutions 455 Broadway,REDWOOD CITY,California

If you're ready to be part of our legacy of hope and innovation, we encourage you to take the first step and explore our current job openings. Your best is waiting to be discovered.

Day - 08 Hour (United States of America)

This is a Stanford Health Care job.

A Brief Overview

The Biomedical Informatics Data Scientist will partner with researchers and clinicians to enable effective and efficient use of data and resources available via Stanford's research clinical data repository (STARR) including the Electronic Health Records in the OMOP Common Data Model, radiology and cardiology imaging data and associated metadata, and new data types as they get integrated along with their databases and respective cohort query tools and interfaces e.g., OHDSI ATLAS. This individual will enable researchers to maximize their understanding, interpretation and use of these clinical and research tools for more informed and productive research, clinical trials, patient care and quality outcome projects.

Clean, extract, transform and analyze various kinds of clinical data to create analysis-ready datasets that follow the FAIR (Findable, Accessible, Interoperable and Re-usable) principles. Partner with researchers and clinicians to enable effective and efficient use of Stanford Clinical data and resources for the advancement of research and the educational mission.

(I²DB)

Postdoc/Senior Data Analyst Opening at WashU

The Zhang Lab at Washington University School of Medicine in St. Louis has **one postdoct/senior data analyst position** to work on **causal machine learning** and **responsible AI** for reliable real-world evidence generation.

PI: Linying Zhang, PhD

- More details at https://linyingzhang.com
  - Postdoc: https://linyingzhang.com/files/Postdoc.pdf
  - Data analyst: https://linyingzhang.com/files/Analyst.pdf
- If interested, please send CV and cover letter to linyingz@wustl.edu

Washington University School of Medicine in St. Louis

Director, RWE at Gilead

Director, RWE - Data Science - OHDSI

Apply

Responsibilities:

Collaborate with researchers and data scientists to understand project requirements and translate them into OHDSI-compatible solutions. Work with databases, ensuring data integrity and optimization for OHDSI-related queries and analyses. Perform data analyses in OHDSI-related tools like ATLAS. Customize and extend OHDSI tools and applications to meet specific project needs. Collaborate with cross-functional teams to troubleshoot and resolve technical issues related to OHDSI implementations. Stay informed about OHDSI community updates, best practices, and emerging trends in observational health data research. Contribute to the development and documentation of data standards and conventions within the OHDSI community.

About Us

GILEAD

Gilead Sciences, Inc. is a biopharmaceutical company that has pursued and achieved breakthroughs in medicine for more than three decades, with the goal of creating a healthier world for all people. The company is committed to advancing innovative medicines to prevent and treat life-threatening diseases, including HIV, viral hepatitis and cancer. Gilead operates in more than 35 countries worldwide, with headquarters in Foster City, California.

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?

April 23: CDM & Themis Process Overview

Clair Blacketer

Director, Observational Health Data Analytics
Janssen Research & Development

Melanie Philofsky

Senior Business Analyst and Project Manager
Odysseus Data Services, Inc.

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