Workgroup OKRs + Phenotype Phebruary Update #4

OHDSI Community Call
Feb. 27, 2024 • 11 am ET

Workgroups: FHIR + OMOP, Health Equity, the Africa Chapter, CDM Vocabulary, Electronic Animal Health Records, Phenotype Development & Evaluation, Dentistry, Medical Devices, Medical Imaging, GIS – Geographic Information System, and Clinical Trials

Week 4 Phenotype Focus: pulmonary arterial hypertension

Upcoming Community Calls

Date	Topic
Feb. 27	Workgroup OKRs / Phenotype Phebruary Update 4
Mar. 5	New Vocabulary Release Update
Mar. 12	TBA
Mar. 19	NO MEETING
Mar. 26	Recent OHDSI Publications
coming in April	*CDM Month*

Three Stages of The Journey

Where Have We Been?

Where Are We Now?

Where Are We Going?

OHDSI Shoutouts!

Congratulations to the team of **Christine Mary Hallinan, Roger Ward, Graeme K Hart, Clair Sullivan, Nicole Pratt, Ashley Ng, Daniel Capurro, Anton Van Der Vegt, Siaw-Teng Liaw, Oliver Daly, Blanca Gallego Luxan, David Bunker and Douglas Boyle** on the publication of **Seamless EMR data access: Integrated governance, digital health and the OMOP-CDM** in *BMJ Health & Care Informatics.*

Open access Review

BMJ Health & Care Informatics

Seamless EMR data access: Integrated governance, digital health and the OMOP-CDM

Christine Mary Hallinan,[1] Roger Ward,[1] Graeme K Hart,[2] Clair Sullivan,[3] Nicole Pratt,[4] Ashley P Ng,[5,6] Daniel Capurro,[2,7] Anton Van Der Vegt,[8] Siaw-Teng Liaw,[9] Oliver Daly,[2] Blanca Gallego Luxan,[10] David Bunker,[8] Douglas Boyle[1]

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ABSTRACT

Objectives In this overview, we describe theObservational Medical Outcomes Partnership Common Data Model (OMOP-CDM), the established governance processes employed in EMR data repositories, and demonstrate how OMOP transformed data provides a lever for more efficient and secure access to electronic medical record (EMR) data by health service providers and researchers.

Methods Through pseudonymisation and common data quality assessments, the OMOP-CDM provides a robust framework for converting complex EMR data into a standardised format. This allows for the creation of shared end-to-end analysis packages without the need for direct data exchange, thereby enhancing data security and privacy. By securely sharing de-identified and aggregated data and conducting analyses across multiple OMOP-converted databases, patient-level data is securely firewalled within its respective local site.

Results By simplifying data management processes and governance, and through the promotion of interoperability, the OMOP-CDM supports a wide range of clinical, epidemiological, and translational research projects, as well as health service operational reporting.

Discussion Adoption of the OMOP-CDM internationally and locally enables conversion of vast amounts of complex, and heterogeneous EMR data into a standardised structured data model, simplifies governance processes, and facilitates rapid repeatable cross-institution analysis through shared end-to-end analysis packages, without the sharing of data.

Conclusion The adoption of the OMOP-CDM has the potential to transform health data analytics by providing a common platform for analysing EMR data across diverse healthcare settings.

electronic medical record (EMR) data into a standardised structured data model. The conversion of data has the potential to provide hospitals, health departments, auditors, regulators and universities valuable insights tailored to each institution's needs, both for operational and research purposes. This is achievable as long as the secure utilisation of an institution's EMR clinical and administrative data for purposes beyond its initial collection, known as 'secondary use', is effectively managed and employed.

Such data can be transformative, especially if used to monitor, evaluate and audit healthcare to improve clinical practice, reduce inefficiencies, contribute to the evidence base and develop a 'learning healthcare system' for improved patient care.[1–4] However, this potential is often not realised due to the inherent complexity of EMR databases—that comprise thousands of data elements across thousands of proprietary tables—where vast amount of data needs to be transformed, cleaned and restructured to make it 'fit' for 'secondary use'.[5] For highly powered collaborative research, where large volumes of EMR data are combined, use is further constrained by the heterogeneity of each institution's EMR schema[6]; concern over data sharing and privacy breaches and lack of clarity over governance and consent.[7]

Three Stages of The Journey

Where Have We Been?

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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	3 pm	Vulcan/OHDSI Meeting (ZOOM)
Thursday	7 pm	Dentistry
Friday	10 am	GIS – Geographic Information System
Friday	11:30 am	Steering Group
Friday	11:30 am	Clinical Trials
Monday	10 am	Africa Chapter
Tuesday	10 am	Common Data Model

OHDSI Global Symposium

The 2024 OHDSI Global Symposium will be held Oct. 22-24 at the Hyatt Regency Hotel in New Brunswick, NJ.

Tentative symposium format:

Oct. 22 – tutorials/workshops

Oct. 23 – main conference

Oct. 24 – workgroup activities

OHDSI Europe Symposium

Registration is now OPEN for the 2024 OHDSI Europe Symposium, which will be held June 1-3 in Rotterdam, Netherlands.

June 1 – tutorial/workshop
June 2 – tutorial/workshop
June 3 – main conference

ohdsi-Europe-org

#OHDSISocialShowcase This Week

MONDAY

Brazilian administrative data for real-world research: a deterministic linkage procedure and OMOP CDM harmonization

(Jessica Mayumi Maruyama, Julio Cesar Barbour Oliveira)

Brazilian administrative data for real-word research: a deterministic linkage procedure and OMOP CDM harmonization

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16

1. Background

- Brazilian population: nearly **214 millions** of inhabitants
- **75% depends exclusively** on Brazilian National System (SUS)
- **DATASUS**: national administrative database publicly available

Challenges and opportunities for DATASUS databases use in Real-World Evidence (RWE) studies:

- No integration between systems
- Lack of unique key identifier at individual level
- Lack of data standardization
- Missing data
- Technical and methodological difficulties related to linkage procedure

Aim: To describe **methods** and partial results of the minimal viable product (MVP) for parameter setting in creating **a dataset from Brazilian claims data**, assessing **data quality** against an **OMOP CDM**

2. Methods

Ambulatory Information System	Hospital Information System
Outpatient procedures, consultations, ICD-10 codes of a primary and secondary diagnosis, medicines, and personal data	Inpatient personal information, procedures, treatments and separation (hospital discharges, transfers, and deaths)

Record linkage and OMOP CDM harmonization

Pre-processing and cleaning stage → Deterministic linkage algorithm → Transformation into OMOP CDM Model

Exclusions: inconsistencies in basic information (date of birth or gender); Patients with different primary keys but with matching basic information

Key information: zip code, date of birth, and gender
Exclusion: Patients from zip codes with more than 2500 distinct individuals linked to them, patients with more than 3 distinct zip codes, and patient's ID before 2012

Data Quality Dashboard: overall pass rate of 94.5% (out of 960 tests)

3. Results

Standardized dataset encompassing the complete health history of **5.82 million patients**

Table 1. Data Quality Dashboard of our MVP OMOP DATASUS

	% Pass
Plausibility	92.6
Conformance	92.5
Completeness	100.00

4. Conclusions

We showed a data treatment methodology for **DATASUS** that produces a **high-quality dataset**. Moving forward, our objectives include crafting a **manuscript that delineates the methodology**, seeking validation from the scientific community. Furthermore, we anticipate conducting and publishing **Real-World Evidence** studies utilizing this dataset in the upcoming months.

#OHDSISocialShowcase This Week

TUESDAY

Estimating model performance on external data sources from their summary statistics: a real-world benchmark

(Tal El-Hay, Jenna M Reps, Chen Yanover)

Title: Estimating model performance on external data sources from their summary statistics
a real-world benchmark

PRESENTER: Tal El-Hay

INTRO:

- External validation is often costly or even infeasible as access to patient-level data is typically limited.
- Here, we test a novel method that estimates model performance in external data sources from their limited statistical characteristics.
- We use data from five US datasets and prediction models for various outcomes in individuals with major depression.

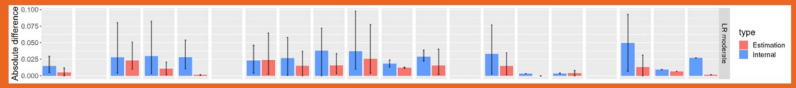
METHODS

1. **Datasets**: CCAE, Medicare, Medicaid, Optum CDM, Optum EHR
2. **Clinical prediction tasks**: risk of developing: fracture, seizure, diarrhea, insomnia, and gastrointestinal bleed in patients within 1 to 365 days after initial diagnosis of major depressive disorder
3. **Estimation method**: (a) find weights that induce internal weighted statistics that are similar to the external ones; (b) compute AUROC and Brier (calibration) score using the weighted sample and internal model predictions.
4. **Evaluation setup**: LASSO logistic-regression; age-sex models and age/sex plus 84 commonly used medical history features (moderate-sized models)

Summary statistics of external datasets may allow **detection of poor model generalization** before patient-level data is accessible

Results

age/sex model



moderate-sized model

Absolute difference between internal and external **AUROC** versus absolute difference between estimated and external ones. Every pairs of bars correspond to analysis of five outcome models in a single internal-external dataset combination.

More info

Estimation method assumptions:

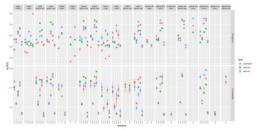
- Shared summary statistics are sufficiently detailed to capture (most of) the shift between the internal and external distributions.
- The internal dataset should have good coverage relative to the external one.

Data characteristics

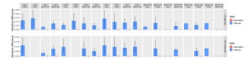
	CCAE	MDCD	MDCR	Optum EHR	Optum CDM
N	2,365,324	660,158	205,789	3,309,284	1,678,579
female	68.6%	72.5%	67.1%	69.4%	67.5%
Age group (years)					
<20	12.4%	29.9%	0.0%	8.3%	8.0%
20-64	86.9%	67.1%	2.8%	71.1%	61.7%
65≤	0.7%	3.0%	97.2%	20.6%	30.3%
Outcome counts					
Seizure	9,058	6,515	1,778	18,597	9,341
Diarrhea	54,302	23,310	7,218	86,972	50,622
Fracture	9,772	4,407	4,281	20,655	16,618
GI bleed	8,172	5,700	3,304	21,291	12,775
Insomnia	77,754	30,201	6,950	114,422	64,778

→ Large age shifts

Detailed AUROC results



Calibration results



Brier score estimation are very accurate for both model types.

Additional notes

- Additional use: Interrogate sources of data-shift that affect performance.
- Ongoing effort: explore cases where AUROC estimation is fair and improve accuracy.

Tal El-Hay[1], Jenna M Reps[2], Chen Yanover[1]

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OHDSI

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WEDNESDAY

Harmonization of OMOP vaccine-related vocabularies through the Vaccine Ontology

(Yuanyi Pan, Warren Manuel, Rashmie Abeysinghe, Xubing Hao, Alexander Davydov, Qi Yang, Asiyah Yu Lin, Licong Cui, Yongqun Oliver He)

Harmonization of OMOP vaccine-related vocabularies through the Vaccine Ontology

Yuanyi Pan [1,*], Warren Manuel [2,*], Rashmie Abeysinghe [3,*], Xubing Hao [2], Alexander Davydov [4], Qi Yang [5], Asiyah Yu Lin [6,#], Licong Cui [2,#], Yongqun Oliver He [1,#]

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* These authors share first authorship; # Co-corresponding authors.

Background

Vaccines have played an important role in fighting against infectious diseases such as COVID-19. OHDSI/OMOP CDM associated vocabularies (e.g., CDC Vaccine Administered CVX, RxNorm, and SNOMED-CT) include a variety of vaccine-related terms. However, these vaccine vocabularies have different coverages and use different design patterns and representation styles. As a result, the vaccine terms in these vocabularies could not be easily mapped and integrated.

To address the above challenge, we have formed an OMOP Vaccine Vocabulary Working Group (Vaccine Vocab WG) to map and integrate different vaccine vocabularies. Our basic strategy is to use the Vaccine Ontology (VO), a community-based biomedical ontology in the vaccine domain, as the platform to systematically represent the mapped results for vaccine terms in individual vocabularies. We started with mapping of CVX vaccine terms to the VO using manual and semi-automatic strategies.

Methods

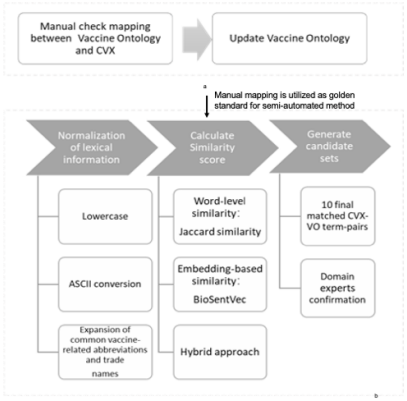

Figure 1. Project workflow. (a) Manual mapping and VO updating. Ontobee was used to query vaccine terms from the Vo and related ontologies. A manual evaluation was performed for VO-CVX term mapping. The Protege OWL editor was used for manual editing. **(b)** Semi-automated mapping approach. BioSentVec is a sentence encoder trained ON PubMed and MIMIC-III documents.

Our method is divided into manual mapping and updating, and semi-automated approach (**Fig. 1**). For Semi-automated mapping approach, all these methods generated a similarity score for a CVX and VO term-pair. A threshold was set by experimentation where all the CVX and VO term-pairs above the threshold were considered as "matched". Furthermore, each method generated up to 10 candidate sets of matching VO terms for a CVX term which could be further reviewed by domain experts for confirmation.

Prior to similarity calculation across all the methods, normalization of lexical information was performed via lowercase and ASCII conversion, and expansion of common vaccine-related abbreviations and trade names sourced from the CDC.

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Results

Figure 2. VO hierarchy and annotation. Protégé-OWL editor was used for the ontology visualization and editing.

CVX-VO mapping and VO updating:

A total of 88 CVX-VO mapping pairs were identified. Additionally, we identified 69 CVX terms that have corresponding terms in VO but have no direct mapping annotation; These mappings were added using "rdfs:seeAlso" annotation property in VO (**Fig. 2**). Our study found 134 CVX terms not initially present in the VO, which were then added to VO accordingly.

Semi-automated mapping approach: The 4,102 vaccine terms under the VO concept 'vaccine' (VO:0000001) and all CVX terms were considered here. The results of the semi-automated method were compared with the manually annotated mappings. With the manual annotation gold standard, we evaluated the performance of the approaches in terms of precision, recall, and F-1 score. The results are given in **Table 1**. Overall, in terms of F-1 score, the hybrid method was found to be the best out of the three methods. **Table 2** shows 5 examples for valid mappings obtained with the hybrid method.

Table 1: Performance of each model considering manual evaluation as a gold standard.

	Precision	Recall	F-1 score
Word-level similarity	0.6705	0.4758	0.5566
Embedding similarity	0.4851	**0.5242**	0.5039
Hybrid	**0.6782**	0.4758	**0.5592**

Table 2: Five valid CVX to VO mappings identified by our hybrid method.

CVX term	VO term
CVX_130: DTaP-IPV	VO_0000067: Kinrix
CVX_20: DTaP	VO_0000064: Infanrix
CVX_75: vaccinia (smallpox)	VO_0000003: ACAM2000
CVX_187: zoster recombinant	VO_0003317: Shingrix
CVX_160: Influenza A monovalent (H5N1), ADJUVANTED-2013	VO_0003083: Influenza A (H5N1) Virus Monovalent Vaccine, Adjuvanted by GSK

Conclusions

Overall, we applied both manual and semi-automatic methods to map CVX and VO vaccine terms and updated VO correspondingly. The hybrid method used in this study was shown to outperform the other two methods. The semi-automated methods can be promising as they require significantly less human effort than purely manual approaches. With expanded coverage and interoperability, the updated VO will further be used for systematic and integrative analysis of vaccine-related clinical data available in the OHDSI/OMOP compliant systems.

Acknowledgment

This study is supported by NIH through grants U24AI171008 and R01NS116287.

#OHDSISocialShowcase This Week

THURSDAY

OHDSI on Databricks: A Complete Guide to Implementing OHDSI on Databricks

(John Gresh, Brad Rechkemmer)

OHDSI on Databricks: A Complete Guide to Implementing OHDSI on Databricks

John Gresh[1], Brad Rechkemmer[2]
[1]National Association of Community Health Centers (NACHC), [2]Amgen

Background

Databricks is an increasingly popular tool for managing large datasets including OHDSI CDM data. The results of an OHDSI Community Call poll earlier this year revealed that among the meeting attendees, Databricks (including Spark) was reported as the third most utilized OMOP CDM used for OHDSI research.[1] In 2023, Databricks held the second largest market share in the Big Data Analytics category (second to Apache Hadoop) with 10,098 tracked customers representing 15.67% of the market share.[2] Databricks provides a unified, collaborative environment and tools for data engineers, data scientists, and analysists[3]. Databricks provides ultra-high performance for common tasks for very large data sets as demonstrated by the performance record set in 2021 of 32,941,245 QphDS@100TB (outperforming the previous record by a factor of 2.2x)[4].

There currently is not a complete single solution describing how to implement OHDSI on Databricks. Implementers are currently left relying on individually piecing together a solution based on OHDSI Forum posts[5] and other online resources that can have a mix of best practices and less than ideal suggestions. An end-to-end automated solution for standing up an OHDSI stack on Databricks, using either Broadsea or a standalone Tomcat instance of WebAPI and Atlas, has been created and is described here. The solution presented here provides a complete, automated, testable, and proven method to implement OHDSI on Databricks.

https://www.serveradminz.com/blog/databricks-an-advanced-analytics-solution/

Methods

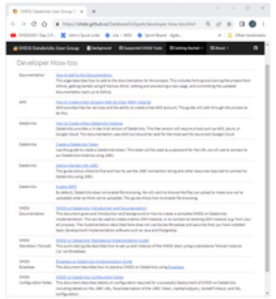
A complete set of implementation guides6 and automation software to install and configure a new OHDSI instance based on Broadsea7 or as a standalone Tomcat application8 have been created. Processes not automated by Broadsea have been automated in the freely available open source Ponos9 project (Apache 2 license10). The Ponos software uses Java, R, and SQL scripts to complete the following tasks:

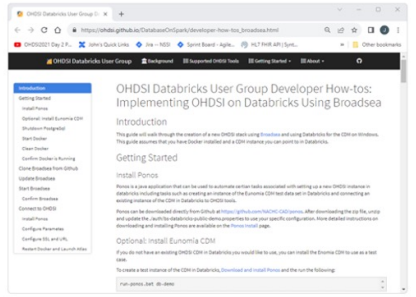
- Optionally create an instance of the Eunomia test data set in Databricks (or use and existing CDM instance in Databricks)
- If the webapi PostgreSql schema doesn't exist
  - Create PostgreSql webapi users
  - Create the webapi schema
  - Create webapi tables
- Create the Achilles results database in Databricks
- Create the Achilles tables in Databricks
- Create the achilles_analysis table from the AchillesAnalysisDetails.csv file
- Run Achilles to populate the Achilles results tables
- Create the appropriate source and source_daimon records in the PostgreSql instance of webapi (included with Broadsea existing records for the key in the properties file will be overwritten).
- Deploy and run Atlas (using either Broadsea or standalone Tomcat)

The implementation guides and other documentation created by the OHDSI Databricks Users Group can be used to guide participants through the simplified and automated process that has been created to stand up an OHDSI stack using Databricks as the underlying database for the CDM and Achilles results tables.

https://ohdsi.github.io/DatabaseOnSpark/developer-how-tos.html

https://ohdsi.github.io/DatabaseOnSpark/developer-how-tos_broadsea.html

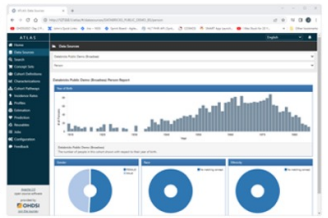




Results

The OHDSI on Databricks implementation guides provide an end-to-end solution for connecting an existing Common Data Model (CDM) to OHDSI. This guide is based on an automated process implemented in the Ponos project. The Ponos tool can be used to perform all the steps required to OHDSI enable a CDM instance in Databricks. The Ponos tool also includes a solution to create an instance of the Broadsea Eunomia test CDM in Databricks. This guide provides the following.

1. *An automated build*
   The Ponos tool is provided to automate the process of getting an OHDSI instance set up in Databricks. This tool can be used to create an instance of the Broadsea Eunomia CDM in Databricks. This tool can be used to connect any instance of the CDM in Databricks to OHDSI including development, test, and production instances.
2. *A reference implementation*
   The information provided here can be used as a reference implementation. There are other ways the work done by the Ponos tool can be implemented. The Ponos tool represents a known working example of how to create an OHDSI instance from a CDM in Databricks.
3. *Testing/Validation*
   The Ponos tool creates a working OHDSI instance in Databricks and thereby provides a successful test and validation of the underlying tools used to do so.
4. *Insight into the process*
   The code used by Ponos is publicly available in GitHub. The code can be run from an IDE such as Eclipse and can be reviewed and stepped through to gain insight into the process and tools used here to create an instance of OHDSI using Databricks.



Through the use of these guides, users will be able to stand up an OHDSI stack in their own environment using Broadsea and Databricks using either their own CDM instance or using the Eunomia demo instance of the CDM created as part of the demonstration.

Conclusions

The existence of a single complete guide for creating an OHDSI instance on Databricks represents an improvement and savings of time and resources by eliminating the need for implementors to search for point solutions for details that can halt deployment such as where and how JDBC drivers need to be installed and configured, how and when SSL needs to be configured, nuances in JDBC connectivity including the modification of the JDBC query string to include a directive to use native queries, etc.

The Databricks Users Group is currently working through the execution of all of the steps described in the Save Our Sisyphus (SOS) series[11]. Next steps include validating, testing, and documenting the execution of each of these steps using Databricks to host the CDM. Future solutions could be created that more completely integrate the work done here with either a Broadsea solution and/or an internal Databricks solution.

The work presented here has only been possible thanks to the contributions and efforts of the OHDSI community and contributions from the Databricks Users Group. The Databricks Users Group welcomes new members of all experience levels. To join, register for the Open-Source Community using the OHDSI workgroups page[12] (the Databricks Users Group is a sub-group of the Open-Source Community).

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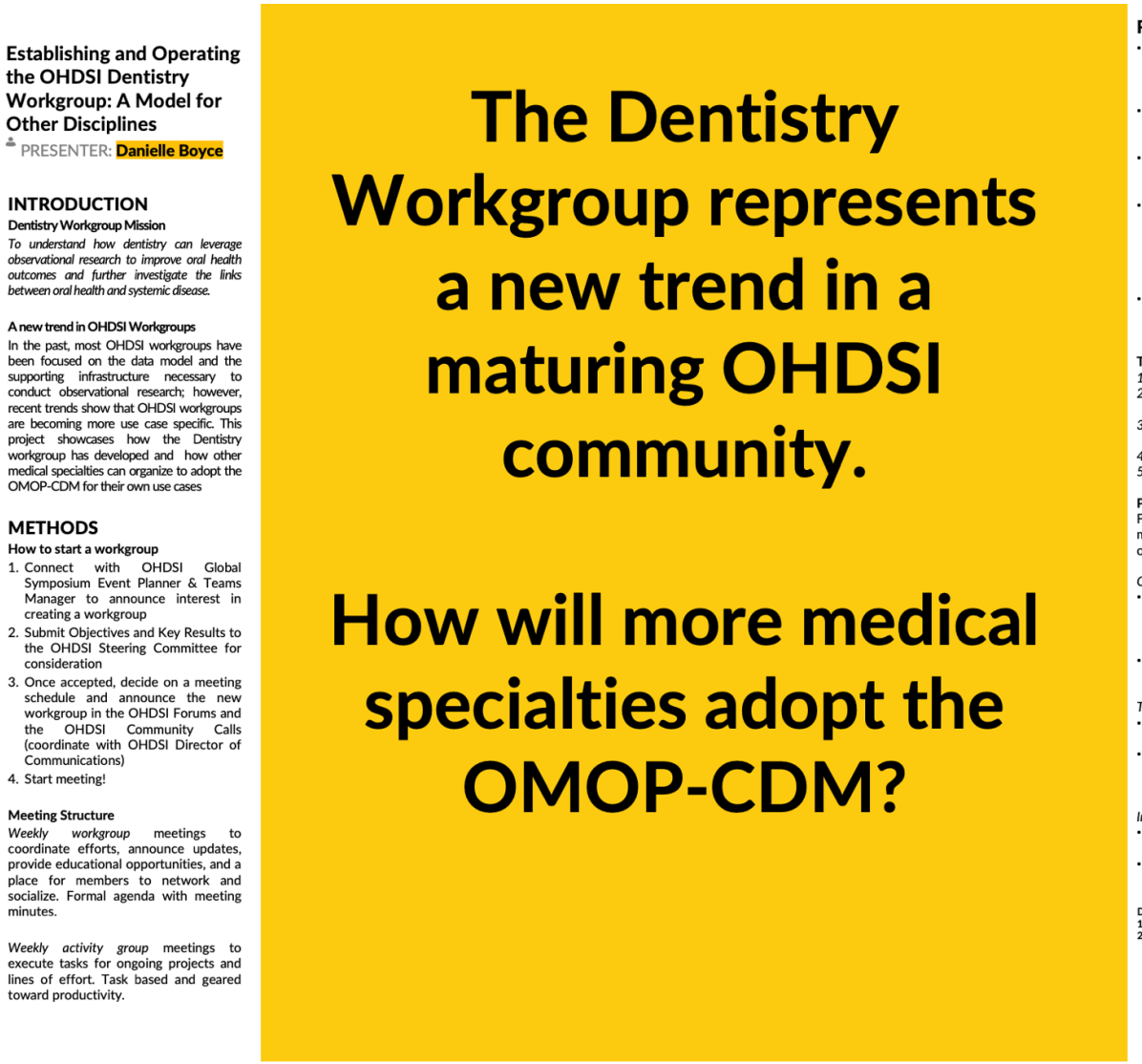
#OHDSISocialShowcase This Week

FRIDAY

Antihypertensive medication use in pregnancy: A pilot OHDSI network analysis in electronic health record data

(Stephanie A. Leonard, Louisa H. Smith, Sara Siadat, Karthik Natarajan, Brian T. Bateman, Thomas Falconer, John DiPalazzo, Alison Callahan)



Establishing and Operating the OHDSI Dentistry Workgroup: A Model for Other Disciplines

PRESENTER: Danielle Boyce

INTRODUCTION

Dentistry Workgroup Mission

To understand how dentistry can leverage observational research to improve oral health outcomes and further investigate the links between oral health and systemic disease.

A new trend in OHDSI Workgroups

In the past, most OHDSI workgroups have been focused on the data model and the supporting infrastructure necessary to conduct observational research; however, recent trends show that OHDSI workgroups are becoming more use case specific. This project showcases how the Dentistry workgroup has developed and how other medical specialties can organize to adopt the OMOP-CDM for their own use cases

METHODS

How to start a workgroup

1. Connect with OHDSI Global Symposium Event Planner & Teams Manager to announce interest in creating a workgroup
2. Submit Objectives and Key Results to the OHDSI Steering Committee for consideration
3. Once accepted, decide on a meeting schedule and announce the new workgroup in the OHDSI Forums and the OHDSI Community Calls (coordinate with OHDSI Director of Communications)
4. Start meeting!

Meeting Structure

Weekly workgroup meetings to coordinate efforts, announce updates, provide educational opportunities, and a place for members to network and socialize. Formal agenda with meeting minutes.

Weekly activity group meetings to execute tasks for ongoing projects and lines of effort. Task based and geared toward productivity.

The Dentistry Workgroup represents a new trend in a maturing OHDSI community.

How will more medical specialties adopt the OMOP-CDM?

RESULTS

- **Accomplishments since inception** 10 regularly attending members, 35 Teams channel members
- Three accepted posters to the 2023 OHDSI Global Symposium
- One hypothetical use case mapped, three more use cases developed
- Ongoing discussions with the American Dental Association Standards Committee on Dental Informatics to begin development of a standard for common data models in dentistry.
- Coordinating with OHDSI Workgroups to further develop observational research capabilities in dentistry

Top 5 Tips for managing a workgroup

1. *Define Clear Goals and Objectives*
2. *Promote communication and collaboration*
3. *Be inclusive and flexible in meeting logistics*
4. *Leverage OHDSI resources*
5. *Invite guests to bring a fresh perspective*

Patterson Model of Influence

Focuses on developing the sources of motivation and abilities for the organization, the team, and the individual.

Organization (OHDSI)

- Does OHDSI have the tools, infrastructure, and community available to facilitate the Dentistry WG's purpose?
- Does OHDSI want to support the Dentistry WG's mission?

Team (Dentistry Workgroup)

- Does the team have the skills necessary to execute the workgroup's mission?
- Can the team be appropriately incentivized to carry out the workgroup's mission?

Individual (Workgroup Member)

- Do the members understand the group's purpose and their role in it?
- Is the workgroup beneficial to the member (career, education, network)

Danielle Boyce (1,2), Robert Koski (1), Brock Johnson (2)
1. Johns Hopkins University School of Medicine
2. Tufts University School of Medicine

OHDSI

Opening: Three Positions at Gilead

Sr. Director, Head of Data Office

Apply

Job Description:
As a Senior Director in our Data Office, you will play a pivotal role in shaping and executing our data strategy. In this leadership position, you will oversee and drive activities related to data sharing, governance, and access across the organization. Working closely with cross-functional teams, you will define and implement data acquisition policies and practices, ensuring the efficient and effective use of data to support our scientific and business objectives.

Director, Data Acquisition - Clinical Data Science

Apply

Director, Data Acquisition - Clinical Data Science

This role reports to the Head of Gilead data office, RWE Generation, Clinical Data Science and is based at different Gilead sites. This individual has responsibility for acquiring all data across clinical, development, medical affairs function and Gilead affiliates. This individual will work in close collaboration with the Development organization, Commercial, Procurement, Medical Affairs, IT, and other functions at Gilead in implementing data acquisition processes and is expected to operate with a "one Gilead" mindset & play a key role in the global Gilead Data Office set up.

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.

(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

Opening: Epidemiology UX/Web Design Intern at J&J

Career Programs

Epidemiology UX/Web Design Intern

JOB TITLE	Epidemiology UX/Web Design Intern
FUNCTION	Career Programs
SUB FUNCTION	Non-LDP Intern/Co-Op
LOCATION	Raritan, New Jersey, United States
DATE POSTED	Jan 19 2024
REQUISITION NUMBER	2406163977W

DESCRIPTION

Janssen Research & Development, L.L.C., a division of Johnson & Johnson's Family of Companies is recruiting for Epidemiology UX/Web Design Intern. This position is a member of the Observational Health Data Analytics (OHDA) team. OHDA's mission is to improve the lives individuals and quality of healthcare by efficiently generating real-world evidence from the world's observational health data, transparently disseminating evidence-based insights to real-world decision-makers, and objectively advancing the science and technology behind reliab

Apply Now

Opening: Research Information Specialist at UNC

THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

- Home
- Search Jobs
- Careers At Carolina Notifications
- Log In /Create Account
- Help
- Working at Carolina

Research Informatics Specialist

Bookmark this Posting | Print Preview | Apply for this Job

Please see Special Instructions for more details.

Working hours are Monday-Friday, 8:00 am – 6:00 pm EST with flexibility available within that window.

Posting Information

Posting Information

Department	TraCS Institute-429801
Career Area	Information Technology
Posting Open Date	12/13/2023
Application Deadline	01/30/2024
Open Until Filled	No
Position Type	Permanent Staff (EHRA NF)
Working Title	Research Informatics Specialist
Appointment Type	EHRA Non-Faculty
Position Number	20060002
Vacancy ID	NF0007640
Full Time/Part Time	Full-Time Permanent
FTE	1

Position Summary

Responsibilities include:
* Perform SQL-based programming against UNC's clinical data warehouse to identify patient cohorts and develop patient datasets.
* Consult with and collaborate with researchers to ensure programming work aligns with project needs.
* Develop ETL (extract, transform, and load) and data integration processes to support common data models (OMOP, PCORnet) using appropriate technologies (SQL, Python, or R).
* Carefully following UNC's regulatory and governance policy to ensure data integrity and security.
* In collaboration with IDSci team, identify potential enhancements in current workflows and data architecture.
* Implement quality assurance strategies, such as data validation and peer code review.
* Write and maintain up-to-date supporting documentation. Ensure code is well-commented and use GitLab/GitHub to manage code changes and track data lineage.
* Provide technical leadership and direction for assigned projects and/or data requests.

Minimum Education and Experience Requirements

Master's and 1-2 years' experience; or Bachelors and 2-4 years' experience; or will accept a combination of related education and experience in substitution.

Required Qualifications, Competencies, and Experience

This position requires two or more years of relevant work experience and:

* Expert-level knowledge of SQL programming, data modeling, and relational database systems such as Oracle, Microsoft SQL Server, MySQL, etc.
* Past experience working with health care data in an analytic capacity, particularly electronic health record and/or claims data.
* Demonstrable past experience in scoping technical projects in terms of length of time, competencies and cost. Individual will be expected to manage multiple projects at once while delivering high-quality work on time.
* Excellent written and oral business communication skills. Public speaking at meetings and conferences may be required. The ability to clearly convey technical concepts to non-technical clients is a must.

Opening: Data Steward at EBMD

Description

Are you looking for a job where you can make a difference and work in a non-profit?
Would you like to be a part of an ambitious and international organisation on the cutting edge of science?
Then this position might be right up your alley.

The EBMT is a non-profit medical and scientific organisation which hosts a unique patient registry providing a pool of data to perform studies and assess new trends.

OUR MISSION
Save and improve the lives of patients with blood-related disorders.

The Registry
Holding the **data of over half a million patients**, the EBMT registry is the **starting point for all studies** carried out through the EBMT working parties. The department focuses on data collection processes, data quality monitoring, and maintenance of the database.

YOUR MISSION
Responsible for collecting, collating, and evaluating issues and problems with data and enforcing data usage policies.

RESPONSIBILITIES AND TASKS

Data Stewardship:
- Design, implementation and testing of new data collection processes including data collection forms (DCFs) development.
- Take care of the mapping of new items from DCFs to the OMOP CDM
- Providing input on data quality reports
- Check and clean data on request and ad hoc.
- Data retrieval including designing data reports and data report running.
- Carry out computerized system validation activities.
- Supporting consolidation/harmonization of data
- Creating standard data definitions, and maintain a consistent use of data assets across the organization
- Documenting data policies and data standards

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?

Learn more about all of the OHDSI workgroups

ohdsi.org/workgroups

OMOP + FHIR Working Group
2024 OKRs

Davera Gabriel
Evidentli, LLC
OMOP + FHIR WG Co-Lead


Walmart Health
Pfizer
AIDBOX
IQVIA
TECHNISCHE UNIVERSITÄT DRESDEN
CuriMeta
APTIVE HEALTHCARE
Epic
Penn
University of Pennsylvania
VT
VANDERBILT UNIVERSITY
IBM
HEALTH SAMURAI
InterSystems
NIH National Eye Institute
School of Medicine and Public Health
UNIVERSITY OF WISCONSIN-MADISON
COLUMBIA UNIVERSITY
IMO
Intelligent Medical Objects
Roche
NCQA
All of Us
Duke UNIVERSITY
University of Colorado Anschutz Medical Campus
ODYSSEUS DATA SERVICES
NORTHEASTERN UNIVERSITY
THE UNIVERSITY OF UTAH
NSW GOVERNMENT
eHealth
A|D Vault
Tufts UNIVERSITY
National Institute for Occupational Safety and Health
NIOSH
aws
accenture
CDC
evidentli
VULCAN
HL7 FHIR
veradigm
JOHNS HOPKINS UNIVERSITY
NIH National Institutes of Health
Turning Discovery Into Health
NIH National Institute of Diabetes and Digestive and Kidney Diseases
HEALTH FLOW
NHS
Great Ormond Street Hospital for Children
NHS Foundation Trust
NATIONAL ASSOCIATION OF Community Health Centers®
Apexon
Minderoo Children's Comprehensive Cancer Centre
CRITICAL PATH INSTITUTE
九州大学
KYUSHU UNIVERSITY
MITRE
HL7 International
DANA-FARBER CANCER INSTITUTE

FHIR+ OMOP WG 2024 Purpose

To facilitate the collaboration between OHDSI and HL7 agreed by both parties in 2021. The work group will develop and validate standard transformation specifications and canonical maps between data conformant to FHIR to OMOP CDM, and from OMOP CDM to FHIR.

FHIR + OMOP 2024 Objectives

- Complete a draft specification transforming FHIR to OMOP v5.4 for core EMR data elements as a joint effort with the Vulcan accelerator FHIR to OMOP project.
- Convene or participate in at least one Hack- / Transform-athon meeting(s) to validate and improve generated specifications.
- Co-develop SDoH section of FHIR to OMOP Implementation Guide with Health Equity WG focused on
    - Gender Harmony
    - Occupational Data for Health: Industry & Occupation

Join Us!

OHDSI OMOP + FHIR WG / Vulcan FHIR-to-OMOP Project Joint Meeting

Weekly on Wednesdays 3p (EASTERN US)

Zoom Link

https://us02web.zoom.us/j/87666493433?pwd=TzMyWncyRVYxSVNsT29WMXVUZEs3QT09

Meeting ID: 876 6649 3433

Passcode: 8675309

Meeting Minutes on Confluence

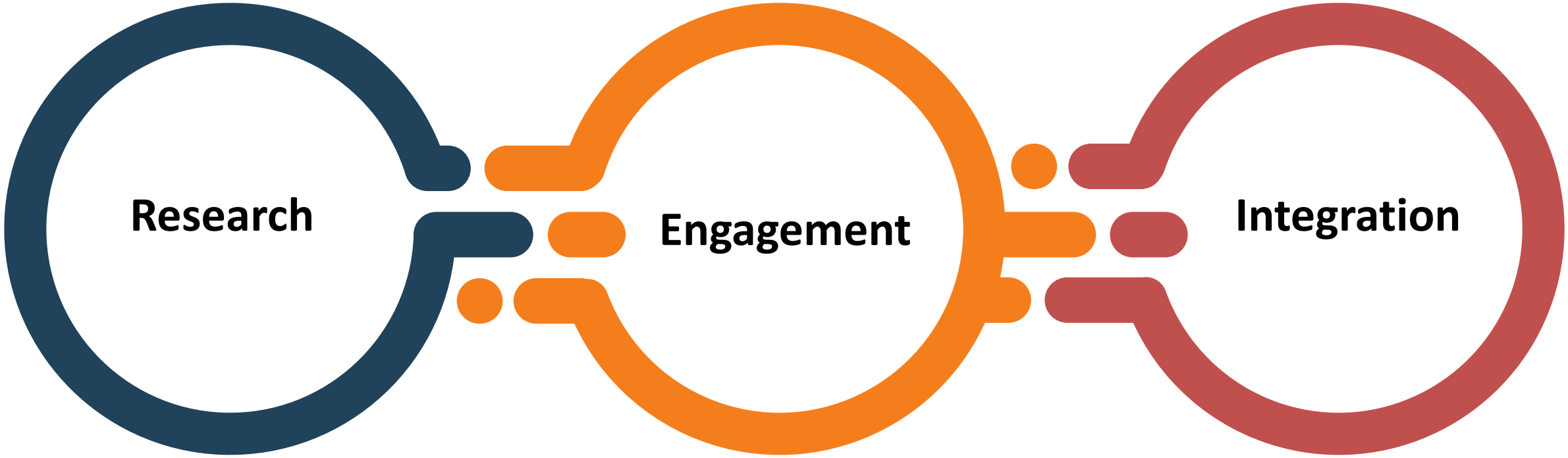
OHDSI Health Equity Working Group OKRs

2024

Objectives

1. ***Generate and disseminate real-world evidence*** *about the substantial public health issue of health inequities*
2. *Operationalize individual-level* ***Social Determinants of health, Risk factors, and Needs (SDRN)****, and other data elements relevant to health equity work in OHDSI network studies*
3. *Operationalize* ***place-based public data sources*** *in OHDSI network studies*
4. ***Extend OHDSI tools*** *to make a health equity perspective the default and/or an option*
5. ***Engage the broader community*** *on issues related to health equity*
6. ***Support the work of the group***

2024 OHDSI Health Equity Working Group Goals



Advance Health Equity Research

Community Engagement and Awareness

OHDSI Community Development and Integration

2024 OHDSI Health Equity Working Group Goals

Research

Milestones

- Conduct at least 2 health equity-oriented studies
- Invite OHDSI and non-OHDSI speakers present their work at part of on-going Journal clubs
- *(STRETCH) Collaborate on at least 1 paper/abstract/ conference submission based on health equity research by the end of the year.*

Engagement

Milestones

- Host at least 2 webinars or workshops on health equity topics throughout the year, inviting experts and community members.
- *(STRETCH) Establish a feedback mechanism to actively involve OHDSI community members in shaping health equity initiatives.*

Integration

Milestones

- Collaborate with **GIS WG** to quantify the impact of social and environmental determinants of health (SEDoH) on healthcare resource allocation
- Co-develop SDoH section of FHIR to OMOP Implementation Guide with **OMOP+FHIR** WG focused on Gender Harmony and Occupational Data for Health: Industry & Occupation

Africa Chapter

Chapter Leads: Cynthia Sung, Agnes Kiragga

Purpose

- To strengthen awareness and capacity for data harmonization and analysis using OHDSI tools to meet the data-driven evidence needs of African researchers, health providers, and governments

Biweekly Meeting – Monday 10 AM ET

next ones: Mar 4, Mar 18, Apr 1 . . .

Africa Chapter 2024 Objectives and Key Results

Objective 1	Key Result	OKR Lead(s)
Create a guideline for African Data Access	Guideline with recommended steps & examples of approved access requests*	Cynthia Sung, Marc Twagirumukiza (Rwanda), *Katherine Johnston (S. Africa)*
Objective 2	**Key Results**	**OKR Lead(s)**
ETL new databases in Africa	• ETL of DBs where Chapter member support exists: target 2 DBs*	Mack Kigada (Kenya), Henry Ogoe (Ghana), Kofi Agyare (Ghana), Aize Cao (US, TN)
	• Use INSPIRE Training dataset to demonstrate ETL steps, apply to identified DBs	Agnes Kiragga (Uganda), APHRC staff (Kenya)
	• Identify Vocabulary needs for prioritized use cases	Andy Kanter, David Amadi (Kenya), Jared Houghtaling

**Leverage 2023 Value Proposition documents*

Africa Chapter 2024 Objectives and Key Results

Objective 3	Key Result	OKR Lead(s)
Collaboration on grant proposals	• Grant opportunities identified & prioritized	Marty Alvarez Andrew Williams (US)
	• Multi-institutional, multi-national collaborative proposal submitted*	Cynthia Sung, Aize Cao
Objective 4	**Key Results**	
Solidify collaboration with the Africa CDC	Action plan developed by Chapter members to strengthen ties among Africa CDC, US CDC and USAID*	Agnes Kiragga (Uganda) Nega Gebreyesus (Ethiopia) Chidi Asuzu (Nigeria)
Objective 5	**Key Results**	**OKR Lead(s)**
Participation of African member in OHDSI network study	Participation can be reviewing literature, contributing to cohort or phenotype definitions, providing statistical support, or running algorithms on African data	Individual choice

**Leverage 2023 Value Proposition documents*

Africa Chapter

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Biweekly Meeting – Monday 10 AM ET

next ones: Mar 4, Mar 18, Apr 1 . . .

Vocabulary WG OKRs 2024

Statement of purpose

Support OHDSI community by:

- *answering questions* related to Vocabularies content, development process, community contribution and use

- engaging community in *discussions around* *Vocabularies* changes and improvements with such discussions being the required step to introduce any changes

- helping community to address their Vocabularies-related *needs*

What we achieved in 2023

Had sessions on: SNOMED overhaul, MedDRA overhaul, race and ethnicity, impact of vocabulary changes on concept sets, LOINC-SNOMED hierarchy

Published and talked about (7+ sessions) community contribution, currently 20+ contributions

SSSOM (meta-data) implemented in community contribution and pending in Usagi

Beyond WG:

- Performed landscape assessment

- Established committee, roadmap, vocabulary cadence https://github.com/OHDSI/Vocabulary-v5.0/wiki

- Published The Vocabulary Paper https://doi.org/10.1093/jamia/ocad247

- Regular maintenance and improvement by the Vocab Team + 100+ hours on forums/GitHub/individual calls

Objective 1: Support vocabulary-related activities of workgroups and contributors

- Hold and document landscape assessment of **needs** across the workgroups

- Hold regular **office hours** to address any questions of vocabulary users and contributors

Objective 2: Increase Vocabularies content and process transparency

- Run sessions for all **proposed changes** and improvements, both for community contributions and roadmap

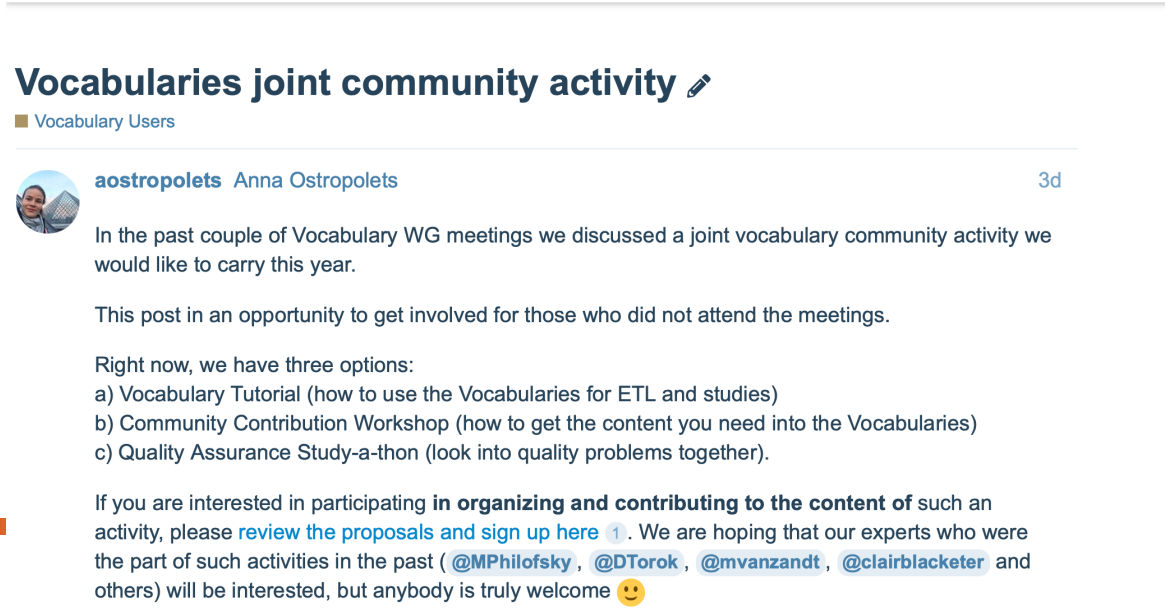
- Increase **visibility** of Vocabularies' documentation (release, development process and content of individual vocabularies)

- Have at least two sessions with **external speakers** highlighting their experience with Vocabularies

Objective 3: Enable vocabulary-related collaboration in the community

- Hold a joint community activity:

1. OHDSI Europe Symposium [planning in progress]
2. OHDSI Global Symposium Advanced Tutorial



Vocabularies joint community activity

Vocabulary Users

aostropolets Anna Ostropolets 3d

In the past couple of Vocabulary WG meetings we discussed a joint vocabulary community activity we would like to carry this year.

This post in an opportunity to get involved for those who did not attend the meetings.

Right now, we have three options:
a) Vocabulary Tutorial (how to use the Vocabularies for ETL and studies)
b) Community Contribution Workshop (how to get the content you need into the Vocabularies)
c) Quality Assurance Study-a-thon (look into quality problems together).

If you are interested in participating **in organizing and contributing to the content of** such an activity, please review the proposals and sign up here 1. We are hoping that our experts who were the part of such activities in the past (@MPhilofsky , @DTorok , @mvanzandt , @clairblacketer and others) will be interested, but anybody is truly welcome

Electronic Animal Health Records Workgroup

2024 Objectives and Key Results

Purpose

The Electronic Animal Record Workgroup exists to adopt the OMOP Common Data Model for electronic animal records to facilitate:

- Improved decision-making and care for animals and people through evidence generation
- Support comparative medicine, zoonotic and environmental disease analysis s
- Analysis of human-animal bond on health and quality of life

2024 Annual Objectives

Objective #1: Facilitate Communication

- Hold monthly meetings to facilitate the exchange of ideas to use the OMOP CDM for animal records

2024 Annual Objectives

Objective #2: Propose solutions to support use of animal health data for research in veterinary and human medicine

- Analyze OHDSI components (CDM/Vocabulary/software tools) as they relate to animal health data
- Document modifications necessary for successful ETL of animal data including methods, guidelines, experiences, and other artifacts that support successful ETL of animal data

2024 Key Results – First Quarter

- Identify current veterinary users of OMOP/CDM
- Support update of the veterinary extension to SNOMED CT in Athena
- Begin the review of current usage of the OMOP CDM at veterinary teaching hospitals especially looking at the data dictionaries at each institution

2024 Key Results – Second Quarter

- Continue the review of existing work on the data dictionary and current usage of the CDM at veterinary teaching hospitals with the goal of identifying difficulties encountered and ongoing needs
- Begin consensus development of a prototype for modifications /extension to OMOP CDM for animal records with guidance from the OHDSI CDM Workgroup

2024 Key Results – Third Quarter

- Develop formal documentation of the recommended modifications /extension of the OMOP CDM needed to incorporate animal and veterinary data for presentation to OHDSI CDM Workgroup for review and guidance

2024 Key Results – Fourth Quarter

- Finalize documentation for presentation to the OHDSI CDM Workgroup
- Initiate the development of a list of software potentially useful for ETL, cohort identification, and data quality assessment of animal records
- Identify any modifications needed to use software

Phenotype Development and Evaluation Workgroup

2024 OKR

- **Objective: Enhance the Science of Phenotyping and Best Practices.**
  - Publish a paper/communication on OHDSI Phenotype Library by Q2 2024
  - Conduct a network study to support methods on incorporating measurement error into background incidence rate estimates by Q4 2024

- **Objective: Community Engagement and Educational Outreach.**
  - Complete Phenotype Phebruary 2024 thru a collaborative set of activities on the theme of heterogenity in phenotype algorithm in published literature Q1 2024.
  - Conduct 3 Atlas demo training/demonstration, open to the community Q1 2024.
  - Role in the new submission flow to the library to elicit contributions by Q3 2024.

- **Maintenance and development of tools**
  - Complete 3 refreshments of the Phenotype library with major releases by Q4 2024
  - Create a submission tool for community contributions to OHDSI Phenotype Library Q2 2024.
  - Develop objective failure criteria for cohort definitions by Q4 2024.

OHDSI Dentistry Workgroup Objectives and Key Results (OKR)

Leads: Robert Koski and Danielle Boyce

Work Group Mission

To understand how dentistry can leverage observational research to improve oral health outcomes and further investigate the links between oral health and systemic disease.

Objectives and Key Results

1. **Increase the workgroup's involvement with the broader OHDSI community**
    a. Publicize Dentistry WG efforts in the OHDSI community and dental profession
    b. Host guest speakers both from within OHDSI and from external organizations

2. **Increase our understanding of observational research in dentistry**
    a. Complete scoping review on observational research in dentistry and submit for publication (nearing completion)
    b. Further explore the challenges and opportunities for oral health observational research

3. **Further develop the capabilities of the dental community to conduct observational research and identify opportunities and challenges for observational research in dentistry**
    a. Phenotype Phebruary submission
    b. Save our Sisyphus Challenge submission
    c. Obtain a dental dataset and map to the OMOP-CDM
    d. Test use case on the acquired dataset

OHDSI Dentistry Workgroup

WG Meetings
Thursdays at 7PM ET on MS Teams

WG Name: OHDSI Medical Device WG

WG Lead: Asiyah Lin & subgroup leaders

Objective 1 : Expand the leadership team and establish collaborations across OHDSI and beyond

Key results:

1. 1Q2023 : Establish **subgroups** (device generated data, device data and device adverse events) and leadership teams.
2. 1Q2023 : Respond to FDA medical device active surveillance **RFI** by Mar. 30, 2023.
3. 2-3Q2023: Develop activities to establish **collaborations** with other related WG or efforts: Surgery WG and EHDEN
4. 3Q2023: Plan Think-a-thon or Hackathon at the OHDSI annual **symposium**

What We Achieved in 2023:

1. Michael Matheny leads device adverse events subgroup.
2. Done and more:
3. Responded two NESTcc RFP
4. Had presentations by Surgery and Perioperative Medicine WG
5. **2024 ORK**: continue building partnership, including NESTcc, and cross function OHDSI WGs, hold one WG F2F meeting at the 2024 OHDSI annual symposium.

OHDSI Medical Device WG
Device ID Data subgroup

Subgroup Lead: Carrie Bosela

Objective 2 : Enable the device standardization efforts to be interoperable with OMOP to support large scale device data analysis

Key results:

1.1-2Q 2023: Explore current OHDSI datasets for device data coverage.
2.1-2Q 2023 Explore and evaluate by extending OMOP by adding a device table
3.2-3Q2023: Explore tools and method to include device data in OMOP vocabulary

What We Achieved:

1. OHDSI device vocab and procedure vocab explore (Asiyah)
2. Carrie shared the Symmetric device attributes.
3. Seng Chan You provided UDI-EDI-SNOMED Mapping

OHDSI Medical Device WG - Device ID Data subgroup

Subgroup Leads: Asiyah Lin & Carrie Bosela

- **Year 2024 OKR: Deep dive into OHDSI vocab – device & procedure**
  - Establish the medical device branch in OHDSI device vocab, establish UDI as standard concept, FDA ProCode as Classification. Add Seng Chan You's EDI as non-standard. (decide a particular device to focus)
  - Compare the OHDSI vocab relationships with Asiyah's medical device semantic model.
  - Map to FHIR

Collaboration with Vocab WG, and Tufts

WG Name: OHDSI Medical Device WG Device-Generated Data subgroup

Subgroup Leads: Andrew Williams, Manlik Kwong

Objective 3: Develop standard strategy for managing and representing features waveform and other device-generated data:

1. Clarify OMOP Standard concept coverage gaps for features from 12-lead ECG Data and ICU monitor data
2. Develop strategy for addressing concept gaps
3. Test previously developed strategy for mapping covered concepts using MIMIC-4 Waveform Database waveform and "numerics" data

What We Achieved:

1. Reviewed prior efforts to cover concepts waveform acquisition and features
2. Developed strategy for addressing concept gaps
3. Began assessing gaps and developing candidate concepts to fill them
4. Began testing MIMIC IV waveform and numerics integration EHR strategy

OHDSI Medical Device WG
Device-Generated Data subgroup

Subgroup Leads: Andrew Williams & Manlik Kwong

Year 2024 OKR:

- Contribute extensions to the OMOP vocabulary to cover standard concepts for waveform and numerics acquisition and features
- Demonstrate the strategy for supporting OHDSI standardized analytics across integrated EHR and waveform/"numerics" data

Collaboration with CHoRUS and PhysioNet

WG Name: OHDSI Medical Device WG
Device Adverse Event subgroup

Subgroup Lead: Michael Matheny

Objective 4: Establish the subgroup, identify leaders, and develop OKR

Key results:

1. 1Q2023 : Identify leader for this group.
2. 2Q2023: develop OKR

What We Achieved:

1. Michael Matheny joined as lead

Year 2024 OKR:

1. OHDSI members' capacity for medical device RWE research.
2. OHDSI network study led by VA/Vanderbilt

Imaging OHDSI WG

From pixels to Phenotypes

WG co-leads Paul Nagy and Seng Chan You

Imaging WG Goals

1. The ability to bring features derived from medical images into the OMOP data model while maintaining provenance.
2. Ability to perform cohort definitions in OHDSI for medical imaging research studies
3. Supporting deep learning research on medical images as part of the prediction modeling in Atlas.
4. Develop infrastructure for reproducible research on medical images.
5. Evaluate federated learning as part of a network study.

2024 OKRs

- Objectives: Identification of heterogeneity of DICOM metadata across institutions
- Key Results
  - Harvesting DICOM standards
    - Vocabulary
    - Data Quality tests
  - Evaluating real-world DICOM compared with the DICOM standards
    - Alzheimers
    - Covid
    - Lung cancer

OHDSI GIS

2024 OKRs

https://ohdsi.github.io/GIS/

Purpose

The goal of the OHDSI GIS WG is to enable **studies of place-related data** in conjunction with longitudinal patient-level data.

https://ohdsi.github.io/GIS/

Accomplishments

- Developed **OMOP Vocabularies for GIS, SDoH, and Environmental Toxins** concepts
- Created an **end-to-end example** use case that demonstrated integration of place-related data
- Developed and tested a **CDM extension table** for integrating environmental toxin and Social Determinants of Health (SDoH) data in OMOP
- Expanded metadata **catalog functionality** (local datasets) and corpus (ADI, Census BGs)
- Conducted a survey of offline (secure) **geocoding tools** fit for patient data

https://ohdsi.github.io/GIS/

Objective 1:

Create a cohesive and comprehensive body of documentation

Key Results:

- Complete vignette-style documentation to **orient and on-ramp** new users
- **Improve transparency** with development **roadmaps** and readiness-for-adoption **metrics**

https://ohdsi.github.io/GIS/

Objective **2**:

Complete the workgroup's transition to <u>new organization and use case leadership structure</u>

Key Results:

- Acquire three "guiding" use cases and work with collaborators to meet their project's goals while advancing the OHDSI GIS mission
- Foster collaboration with other OHDSI workgroups

https://ohdsi.github.io/GIS/

Objective 3:

Continue to develop and mature Gaia functionality and extensions

Key Results:

- Secure a sustainable platform for the Gaia data catalog
- Propose and integrate a CDM extension table into the OHDSI ecosystem
- Expand metadata related functionality to enable automated retrieval from APIs
- Develop a HADES package that does appropriately adjusted analytics with spatiotemporal data

https://ohdsi.github.io/GIS/

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