



# OHDSI Leadership Summit

11-Feb-2022

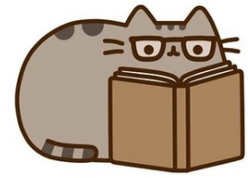


# Today's Agenda

Time (in EST)	Speaker(s)	Topic
8:00AM – 8:20AM	Paul	Introduction and Why We Are Here
	Patrick	How We Think About Aligning Our Efforts
	Kristin	What The Steering Committee Can Do For You
8:20AM – 9:00AM	Moderator: Melanie	<b>90 Second OKR Pitch Competition</b>
	Andrew	Sneak Preview: Workpackage Repository
	Lei Lu	China Chapter
9:00AM – 10:00AM	Moderator: Kristin	<b>WG Hacks</b>
	Clair	The Art of Delegation
	Melanie	How To Make a Meeting Fun and Easy
	Elisse	How To Trick Out Teams
	Craig	How To Get Your WG Promoted
	Adam	MS Teams for WG
	Paul	The Many Hats of a WG Lead
	Ross/Faaizah	How to Support Early Stage Researchers
	Kristin	What Would You Like to Talk About Next?



# Ground Rules



- Please respect time allocations!
- Use the Raise Hand function if you'd like to queue up for discussion. A moderator will facilitate Q&A as we have time.
- If you are comfortable having your cameras on, we'd love to see you!
- Let's have fun!



# Last 5 years of astounding impact (2017-present) vs (2012-2017)



**OHDSI**  
OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS

## Education (YouTube)

478 videos (95%)

308 hrs. of content

122,984 hrs. watched

7,482 most viewers

## Development (GitHub)

164 Projects (50%)

400+ Contributors  
(65%)

13+ Million lines of code

7,000 Code Reviews  
(94%)

## Publications (PubMed)

230 Papers (80%)

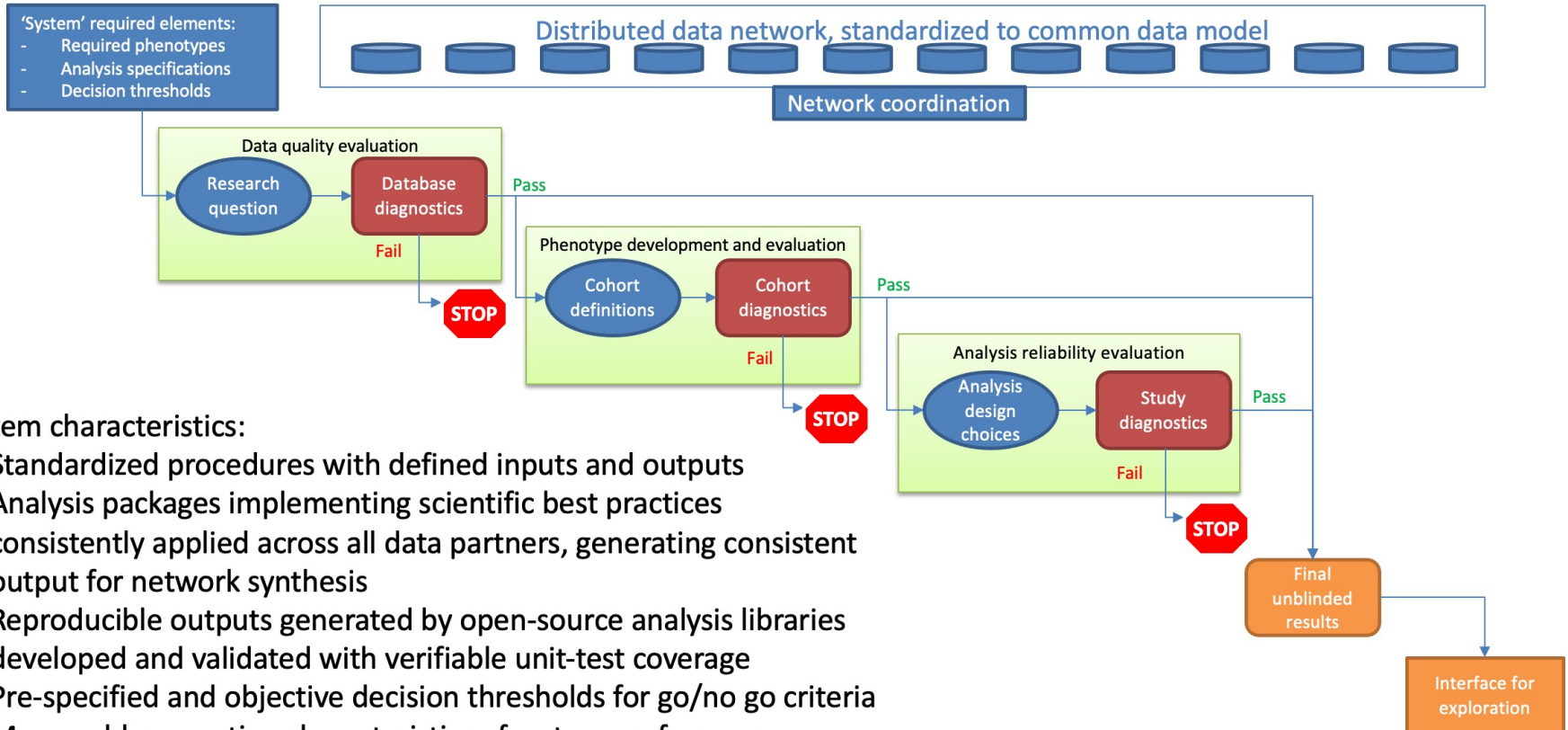
2770 Citations

1108 New Authors  
(83%)

*(% of last 10 years stat occurred in last 5 years)*



# Engineering open science systems that build trust into the real-world evidence generation and dissemination process





# What is the Steering Committee?

- A group of OHDSI collaborators committed to helping provide strategic support to the entire OHDSI Community
- Originally a small huddle of early titans
- Anyone can join (you just have to find the room of requirement! 😊 )



# Steering Committee Function

- Weekly meetings – currently on Fridays from 11:30AM – 12:30PM EST
- Recorded and archived discussions
- Types of topics: OKR reviews, symposium oversight, discussing coordinating activities across the OHDSI community



# OHDSI Workgroup Objectives and Key Results (OKR)





# Workgroup Name:

Workgroup leads:

## 1. Objective 1

1Q2022 Key Results:

1. Key Result 1

2. Key Result 2

3. Key Result 3

## 2. Objective 2

1Q2022 Key Results:

1. Key Result 1

2. Key Result 2

3. Key Result 3

Objectives are the 'Whats'. They:

- Express goals and intents
- Are aggressive yet realistic
- Must be tangible, objective, and unambiguous; should be obvious to a rational observer whether an objective has been achieved
- The successful achievement of an objective must provide clear value to the organization

Key results are the 'Hows'. They:

- Express measurable milestones which, if achieved, will advance objective(s) in a useful manner to their constituents
- Must describe **outcomes**, not activities
- Must include evidence of completion. This evidence must be available, credible and easily discoverable.



# WG Name: OHDSI Steering Workgroup

WG Lead: Patrick Ryan

1. Objective 1 : enable the community to collaboratively generate evidence and the scientific work products necessary to generate evidence

## 1Q2022 Key results:

1. 100% of active workgroups have defined OKRs to transparently communicate activities and encourage contributions
2. Convene one OHDSI Workgroup Leader Summit to ensure appropriate communicate across collaborative activities
3. Release a OHDSI community dashboard to allow for regular monitoring the health and progress of our community
4. Produce a document to communicate connections between OHDSI workgroups and partnerships with other organizations and initiatives



# Workgroup name: HADES

Workgroup lead: Martijn Schuemie

1. Objective 1: Enable the OHDSI community to perform observational research following OHDSI best practices for characterization, population-level estimation, and patient-level prediction by providing a cohesive set of open-source analytic software.

2022 Key Results:

1. Quarterly releases of Hydra
2. Develop R packages for characterization, incidence rates, treatment pathways & drug utilization (KR not finalized, subject to change)
3. Make all skeletons modular: ability to combine different study types into a single package (with single Shiny app) (KR not finalized , subject to change)



# Workgroup name: Methods (PLP / PLE)

Workgroup leads: Martijn Schuemie, Marc Suchard, Jenna Reys, Peter Rijnbeek

1. Objective 1: Perform the methods research required for a system to generate evidence that characterizes disease and treatment utilization, estimates the effects of medical interventions, and predicts outcomes of patients within a network of observational health databases.

2022 Key Results:

1. Establish formal database, cohort, and study diagnostics.
2. Design a discovery system having the desired operating characteristics.
3. Develop a benefit-risk framework for observational research.
4. Counterfactual prediction



# Workgroup Name: Data Quality

Workgroup leads: Clair Blacketer

## 1. Design and Implement the Data Quality Evaluation Step of the OHDSI Evidence System

1Q2022 Key Results:

1. Determine how the input to determine if a database has necessary elements to run a study will filter down the DQD to only relevant records.
2. Close at least 50% of issues and pull requests on the DQD github, prioritizing high-need bugs and new features added by Odysseus.
3. Update documentation to reflect the new features in the DQD application.



# Workgroup Name: Common Data Model

Workgroup leads: Clair Blacketer, Christian Reich

## 1. Promote Adoption of CDM v5.4

1Q2022 Key Results:

1. Host at least 3 CDM Workshops designed to support network participants in their movement to CDM v5.4.
2. Design a maturity model for CDM extensions that will clearly describe key elements needed for a set of tables to be considered an 'extension'.
3. Design the skeleton of the OHDSI Resource Library by creating a list of all necessary items, whether already available or to-do.



# Workgroup Name: Clinical Trials

Workgroup leads: Mike Hamidi, Zhen Lin

## 1. To establish mapping methodologies for CDISC SDTM to OMOP CDM

1Q2022 Key Results:

1. Key Result #1: Evaluate mappings using  $\geq 5$  real-world CDISC SDTM studies
2. Key Result #2: Publish draft mapping guidance to support industry application
3. Key Result #3: Increase access to CDISC SDTM as a data source for OMOP



# Workgroup Name: Health Equity

Workgroup leads: Jake Gillberg

*We aim to engage critically and intentionally in all of our work, considering not only the results but the potential interpretation and impact of results, steering clear of work that reinforces health disparities and misinterpretations that generate stigma, and lifting up work which is likely to contribute to health equity.*

- **Project Tracking:**

<https://github.com/OHDSI/HealthEquityWG/projects/1>





# Workgroup Name: Health Equity

Workgroup leads: Jake Gillberg

0: Generate and disseminate actionable real-world evidence about the substantial public health issue of health inequities

- 3 fully-reproducible study packages executed across at least 20 OHDSI data partners
- 5 publications accepted in peer-reviewed journals
- 7 instances of presentations of our work
- 1 concrete use of OHDSI results by internal or external stakeholders that demonstrate influence in policy or clinical decision-making

1: Operationalize individual-level Social Determinants of health, Risk factors, Needs (SDRN), and other data elements relevant to health equity work in OHDSI network studies

- Identify OHDSI sites that are collecting SDRN and gather a report of what exists in those source systems, along with the maturity of collection and standardization. Publish a catalog
- Identify 3 priority research questions with actionable results where individual-level SDRN is needed
- Provide recommendations for mapping and storing relevant SDRN data elements
- Release tools to assess and record data quality, gaps, and biases for SDRN data collection
- Engage with NLP team to release tools/methods for extracting SDRN from clinical narratives
- 1 validation / methods study, evaluating the use of individual-SDRN in the context of a network study.



# Workgroup Name: Health Equity

Workgroup leads: Jake Gillberg

## 2: Operationalize place-based public data sources in OHDSI network studies

- Identify 3 external datasets useful for incorporation in health equity studies
- Identify a priority research question with actionable results that requires linking group-level data sources to OMOP data
- Identify a priority use case for rolling up individual-level OMOP data to describe spatial-population-level properties
- Release a study package using OHDSI GIS tools

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## 3: Extend OHDSI tools to make a health equity perspective the default and/or an option

- Augment Patient Level Prediction (PLP) to expose the differences of predictions, predictive power, and other fairness metrics of the predictive models it creates.
  - Implement fairness metrics as part of phenotype evaluation
  - Develop a framework for best practices in health equity across OHDSI study design / a guide on how to use the developed extensions.
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# Workgroup Name: Health Equity

Workgroup leads: Jake Gillberg

## 4: Engage the broader community on issues related to health equity

- Update directory of accessible educational resources and research relevant to health equity
- Continue health equity reading group / journal club
- Invite 8 presentations from external groups in our meeting (ideas Fairness and Bias group in N3C (N3C SDoH Domain Team, HL7 Gravity, other OHDSI workgroups, RADx-UP, SIREN, Multi-stakeholder engaged groups, community organizations, NACHC / AAPCHO)
- Create a directory of membership and external group affiliations

## 5: Support the work of the group

- Create a boilerplate description of assets of this group to be useful for creating quick responses to grants
- 3 collaborative grant applications
- 1 funded collaborative grant
- 1 Health Equity hackathon, with at least 10 participants



# Workgroup Name: Healthcare Systems

Workgroup leads: Melanie Philofsky

Objective 1: To provide support for transforming source EHR data to the CDM

2022 Key Results:

1. “Office hours” style agendas during our regularly scheduled meetings 10 times a year.
2. Monitor & answer questions on the CDM Builders, Implementers, and Uncategorized forums related to source data or the ETL process.
3. Create a central repository of different OMOP sites and their underlying EHR system. Build survey and make available to the community.



# Workgroup Name: Healthcare Systems

Workgroup leads: Melanie Philofsky

## Objective 2: Support healthcare systems with building the business case to utilize the OMOP CDM

2022 Key Results:

1. Provide documentation, either published papers or written by this group, to support the business case for healthcare institutions to adopt the OMOP CDM
2. Collaborate with the Education WG via WG liaison to support EHR ETLs
3. Identify OHDSI sources of knowledge and put into wiki



# Workgroup Name: Healthcare Systems

Workgroup leads: Melanie Philofsky

## Objective 3: Provide value to healthcare systems beyond participating in OHDSI network studies

2022 Key Results:

1. Cohort Builder with patient level data export capabilities
2. Operational reporting from the CDM
  1. Collaborate with FHIR WG
3. ???



# WG Name: Atlas Working Group

WG Lead: Anthony Sena

## 1. Objective 1 : Improve the deployment of Atlas/WebAPI

### 1Q2022 Key results:

1. Develop a document for the current process for deploying Atlas/WebAPI.
2. Document limitations and opportunities for improvement for this deployment process.

## 2. Objective 2: Improve the documentation of Atlas/WebAPI

### 1Q2022 Key Results:

1. Document 100% of the API endpoints in WebAPI:  
<http://webapidoc.ohdsi.org/index.html>
2. Update the README of WebAPI on GitHub to reference the updated documentation.





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# Early-Stage Researchers Workgroup

WG Leads: Faaizah Arshad, Ross Williams

1. Objective 1 : Perform research within the workgroup  
1Q2022 Key results:
  1. Finalize a study topic and logistics of executing it
  2. Have a study that was designed, led, and performed by the workgroup submitted to a journal by the end of the year
  
2. Objective 2 : Increase number of regular participants  
1Q2022 Key results:
  1. Keep an attendance log or record of attendees per meeting
  2. Have this number increase by 50% by the end of the year



## 1. Objective 3 : Increase ESR group members presence at other OHDSI meetings

### 1Q2022 Key results:

1. Record which members are involved in other workgroups
2. Have at least 10 presentations at other workgroups given by early stage researchers

## 2. Objective 4 : Provide career development opportunities to members

### 1Q2022 Key results:

1. Have 5 posters/presentations at the OHDSI symposium from group members
2. Organize at least 5 tutorials
3. Hold a career event through OHDSI



# WG Name: OHDSI NLP Workgroup

WG Lead: Hua Xu

1. Objective 1 : revise representation of textual data in OMOP CDM (Note\_NLP) and develop user guide
2. Objective 2 : develop multiple NLP tools to extract, transform, and load textual data
3. Objective 3 : conduct at least two multi-site clinical studies that utilize both structured and textual data
4. Objective 4: continuous community engagement



# WG Name: OHDSI NLP Workgroup

Objective 1 : revise representation of textual data in OMOP CDM (Note\_NLP) and develop user guide

## Key results:

Task	Q1 2022	Q2 2022	Q3 2022	Q4 2022
Immediate modification to Note_NLP (Michael/Vipina)	Develop the proposal	Communicate it with CDM WG	Finalize the changes	
Plan on new intermediate tables (Hua)	Modifiers	Note type	Additional NLP features	Summary and proposal
A paper on OHDSI NLP solution: representation, ETL, use cases (Vipina/Hua)	Draft and submit	Revise	Publish	



# WG Name: OHDSI NLP Workgroup

Objective 2 : develop multiple NLP tools to extract, transform, and load textual data

Key results:

Task	Q1 2022	Q2 2022	Q3 2022	Q4 2022
At least four NLP tools that can directly generate Note-NLP outputs (Hongfang, Tim, Paul, Hua)	Tool 1	Tool 2	Tool 3	Tool 4
Sample scripts for transferring data from Note_NLP table to clinical event tables (Vipina)	Publish on NLP github			
Tool to normalize “note_type” (Karthik)	Define representation	Develop program	Publish on NLP github	Feedback and revise
Ananke 2.0 (ontology mapping)	In development	Release		



# WG Name: OHDSI NLP Workgroup

Object 3: conduct at least two multi-site clinical studies that utilize both structured and textual data

## Key results:

Task	Q1 2022	Q2 2022	Q3 2022	Q4 2022
Characterizing Post-Acute Sequelae of SARS-CoV-2 Infection (Hua)	Initial results	Paper submission	Revise	Publish
Another study (e.g., replicating an existing OHDSI study with additional textual data) (Hongfang/Michael)	Protocol development and site recruitment	Initial results	Paper submission	Revision/Publish



# WG Name: OHDSI NLP Workgroup

Objective 4: continuous community engagement

Key results:

- Monthly meetings
- Invited presentations
- Project-specific meetings
- Forum QA on NLP implementation





# Psychiatry Working Group

## KEY OBJECTIVES

1. Conduct and enable research on psychiatric, neuropsychological, and neurologic interventions and outcomes in the OHDSI community
  - Support 2-3 studies that published or presented per year
  - Conduct a survey to identify obstacles and facilitators of psychiatric research.
  - Recruit members that have complementary expertise in the data processing, tools, methods and science
2. Develop new standard OMOP Vocabulary concepts for psychiatric, neuropsychological, and neurologic assessments and promote their adoption by standards development organizations (SNOMED, LOINC, etc.)
  - Collecting feedback on OMOP Extension Psychiatric scales
  - Enrich OMOP Extension Psychiatric scales adding individual items to existing surveys as well as adding new surveys
  - Develop the model allowing to connect questions and surveys to a particular condition and its severity.
  - Help with submitting request to SNOMED or LOINC, up to 75% of concepts requested (if they are valid and non-ambiguous) can be added
  - Promote connections to LOINC, RDoc
3. Promote and support the capture and analysis of standardized data on psychiatric, neuropsychological, and neurologic assessments from structured and unstructured sources by OHDSI community data holders
  - Build standardized NLP pipelines for information extraction of scale scored data from flow sheets and reports.
4. Develop concept relationships in the OMOP Vocabularies for relevant measurements with appropriate hierarchies that reflect the pathophysiology of psychiatric and neurologic conditions
  - adopt RDoc approach on storing the pathophysiology concepts to the OHDSI
5. Collaborate with related initiatives inside and outside the OHDSI community: UK Bio-Bank WG, OHNLP, NIMH
  - Consolidate different approaches in representation of questionnaires
  - Work together with the other OHDSI groups to build wide mapping table (that gives more flexibility in registries and questionnaires mapping)



# MEETING DETAILS

- It usually happened in MTeams every other Thursday, 8:00AM EST
- Now we are looking for a new meeting time as 8:00AM EST is too early for some of you, It will occur monthly, in a last week of a month, 1 meeting for the US time zone, 1 meeting for the Asia Pacific.

Please vote for a time working for you:

[Eastern hemisphere doodle](#)

[Western hemisphere doodle](#)

- Find us on MTeams as the **Psychiatry Working Group**; or email [dymshyts@ohdsi.org](mailto:dymshyts@ohdsi.org)
- **All are welcome!**



# WG Name: APAC Community

WG Lead: Mui Van Zandt

1. Objective 1 : enable the APAC community to collaboratively generate evidence and the scientific work products necessary to generate evidence

## 1Q2022 Key results:

1. Initiate 4 APAC studies
2. Drive a mentor program to train APAC collaborators
3. Publish first quarterly newsletter for APAC
4. Create more aware of APAC community call through bi-weekly email communication



# WG Name: APAC Community

WG Lead: Mui Van Zandt

## 4Q2022 Key results:

1. Complete 4 APAC studies
2. Produce and continue to drive mentorship program to train APAC collaborators
3. Publish 4 quarterly newsletter for APAC
4. Conduct 4 trainings session
5. Host APAC Symposium



# WG Name: Phenotype

WG Lead: Gowtham Rao, Azza Shoaibo

1. Objective 1 : collaboratively develop and evaluate phenotypes to enable OHDSI community to build a system to generate evidence.

## 1Q2022 Key results:

1. 30 Phenotype developed and evaluated
2. Enable 10 new OHDSI collaborators to develop and evaluate phenotype using OHDSI phenotype best practices.
3. Release an initial operational framework on how individual contributors may collaborate and use the OHDSI Phenotype Library resource



# WG Name: CDM Vocabulary Subgroup

WG Lead: Michael Kallfelz, Clair Blacketer, Kristin Kostka

Objective 1: Support a process for adding new OMOP Standardized Vocabularies with community participation.

## 1Q2022 Key results:

1. Establish roll-in process
  - quarterly recurring workshop for collecting community needs
  - collect requirements from WG / chapter leads about their needs for vocabulary content and process once a year
2. Publish instructions for community contribution to the selection and prioritization process of adding new vocabularies to the OMOP standardized vocabularies.
3. Demonstrate the new selection and prioritization process by adding at least 1 new vocabulary using this process.



# WG Name: CDM Vocabulary Subgroup

WG Lead: Michael Kallfelz, Clair Blacketer, Kristin Kostka

Objective 2: Increase transparency / documentation about the vocabulary maintenance and release process.

## 1Q2022 Key results:

1. Publish Vocabulary Roadmap with quarterly refreshes.
2. Create github pages for documentation of the Vocabulary section.
3. Establish github discussions with a voting feature for community driven prioritization to address backlog of new features / enhancements



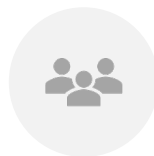
# Objectives



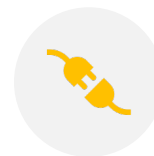
## Open Source Community



EDUCATIONAL  
MATERIALS  
FOR  
DEVELOPERS



HOST  
DEVELOPER  
COMMUNITY  
EVENTS



PROMOTE STANDARD  
INTERFACES,  
PROCESSES, AND  
ABSTRACTIONS  
ACROSS  
SOFTWARE PROJECTS



MEASURE THE  
HEALTH AND  
MATURITY OF  
OHDSI  
SOFTWARE  
PROJECTS

### Q1 Key Results

- Create a series of screencasts on participating in OHDSI software development
- Host a virtual OHDSI developer conference in April
- Create 3 key metrics measuring the health and maturity of OHDSI software projects





# 2022 Vaccine Vocabulary OKR

Objective: Develop a standard vocabulary for vaccines that supports the study of vaccine uptake, vaccine effectiveness, and safety outcomes within a global network of observational health databases.

Q1 Key Result (accomplishable deliverables):

- Clearly define workgroup outputs (the artifacts required by the vocabulary team), required effort and specialized skills required to produce the outputs.



# WG Name: Perioperative and Surgery Workgroup

WG Lead: Evan Minty

1. Prelim Objective: Determine if there should indeed, be a Perioperative and Surgery WG.



# WG Name: Perioperative and Surgery Workgroup

WG Lead: Evan Minty

1. Objective 1 : Complete the cohort definition for ‘major non cardiac surgery’ (MNCS) and disseminate the results in a publication.

2022 Key results:

1. Q1-2: Execute CohortDiagnostics run inclusive of v4 of MNCS, and inclusive of specified cohorts-as-features; iterate further if required.
2. Q2-3: Execute an Aphrodite run to develop anML model for MNCS
3. Q2-3: Use PheValuator for validation.
4. Q3-4: Produce and publish a descriptive manuscript.



# WG Name: Perioperative and Surgery Workgroup

WG Lead: Evan Minty

1. Objective 2 : Complete 1 prediction study using MNCS as the target cohort, to predict outcomes of perioperative interest.

## 2022 Key results:

1. Develop outcome cohorts of interest
  2. Configure a study using the PLP skeleton
  3. Execute as a network study
  4. Disseminate results as a publication
-



# WG Name: OHDSI Steering Workgroup

WG Lead: Evan Minty

1. Objective 3 : Complete 1 population level estimation study using MNCS as the target cohort, to predict.

## 2022-2023 Key results:

1. Jointly discuss the problem area within the WG, and develop outcome cohorts of interest
2. Configure a study using the PLE skeleton
3. Execute as a network study
4. Disseminate results as a publication



# OHDSI GIS OKR

2022



# Overall Objective

- We support the use of place-related data in combination with clinical data to understand the impact of various geographic attributes on exposures, care-delivery, and health. To do this we create or identify the data, schemas, vocabularies, and software required to store, visualize, and analyze data on patient locations and on health-relevant social and environmental geographic attributes so that they can be used by the OHDSI tool stack an equivalent way to healthcare data. Products will minimize risks to patient privacy.
- Place-related data domains of interest include: social determinants of health, pollutants and other toxins, the built environment, political and corporate policies, distance from care. These products will be consistent with OHDSI principles for data modeling and will minimize the modification required to extend its tooling that implement best practices for analytics. We will also support the development of new HADES analytic packages that employ domain-specific features such as spatial autocorrelation.
- Finally, we will convene and support the use of these data and tools in the generation of OHDSI studies that focus on or account for geographic as well as person-level attributes.



# Key Results

- Develop an **optional OMOP CDM module** that consists of a universal schema for storing geospatial data. This module supports standardized query execution on a combination of place-related and person-level data using spatiotemporal joins between tables.
- Develop a privacy-preserving **geocoding mechanism** that runs locally to relate geographic and person-level data. This process attaches longitude and latitude to patient residence data from electronic health records or others sources. With proper metadata, this can be used on arbitrarily defined sources of data on geographic attributes.
- For every place-related dataset to be ingested into the module, we will **develop metadata** that includes: basic file information needed to identify, describe, and cite the dataset, link to its documentation and license information, specifies methods of data capture and statistical transformations.
- **Drive development through use cases** to retrieve, ingest and standardize place-related datasets from multiple geographic data categories. Build frameworks and develop code to automate and standardize this ingestion process.
- **Execute analyses** with the ingested and standardized place-related data to correlate them with health outcomes when they themselves are of interest or to use them as covariates in analyses involving exposure to drugs or medical procedures.
- **Develop documentation** and tutorials that enable community members to use these resources.





# OHDSI LATAM Workgroup Objectives and Key Results (OKR)



# OHDSI LATAM WG:

Workgroup leads: Jose Posada, David Vizcaya, Juan Banda, Maria Tereza Fernandes, Kristin Kostka, Gerardo Machnicki

## 1. Increase the number of new participants in monthly calls.

2022 Key Results:

1. Email reminders and calendar invites every month.  
This is in addition to the centralized communication by the OHDSI communications team
2. Invite one new person every Monthly call



# OHDSI LATAM WG:

Workgroup leads: Jose Posada, David Vizcaya, Juan Banda, Maria Tereza Fernandes, Kristin Kostka, Gerardo Machnicki

## 2. Increase the number of new invited talks in Spanish and Portuguese monthly calls.

2022 Key Results:

1. Invite two new speakers to our monthly calls during 2022



# OHDSI LATAM WG:

Workgroup leads: Jose Posada, David Vizcaya, Juan Banda, Maria Tereza Fernandes, Kristin Kostka, Gerardo Machnicki

3. Facilitate conversions by working with the Vocabulary WG to ensure full support of Spanish and Portuguese for SNOMED and other relevant vocabularies. If local vocabularies are absent and are needed, ensure they are included in the OHDSI vocabulary.

2022 Key Results:

1. Include the Spanish version of SNOMED in the OHDSI vocabulary distribution through ATHENA
2. Include the Portuguese version of SNOMED in the OHDSI vocabulary distribution through ATHENA
3. Report the usage of SNOMED additions by two institutions. One institution should report on the use of the Spanish SNOMED version and the other should report on the use of the Portuguese SNOMED version



## OHDSI LATAM WG:

Workgroup leads: Jose Posada, David Vizcaya, Juan Banda, Maria Tereza Fernandes, Kristin Kostka, Gerardo Machnicki

4. Work alongside the education WG to co-lead the generation of education resources in Spanish and Portuguese.

2022 Key Results:

1. A representative of the LATAM WG will assist to an Education WG calls every 2 months
2. Produce one educational resource jointly with the Education WG
3. Produce Spanish Subtitles for OHDSI ATLAS Youtube tutorials 1 to 4



## OHDSI LATAM WG:

Workgroup leads: Jose Posada, David Vizcaya, Juan Banda, Maria Tereza Fernandes, Kristin Kostka, Gerardo Machnicki

5. Increase the number of “OHDSI talks” in conferences organized by different scientific organizations in LATAM.

2022 Key Results:

1. Two submissions during 2022 by members of the OHDSI LATAM WG on different scientific organizations events focused or taking place in LATAM.



## OHDSI LATAM WG:

Workgroup leads: Jose Posada, David Vizcaya, Juan Banda, Maria Tereza Fernandes, Kristin Kostka, Gerardo Machnicki

### 6. Lead the proposal of a PLP study focused on COVID-19 with LATAM data

1. Create one protocol and study package lead by Albert Einstein Hospital focused on Length of stay, ICU mortality and/or need for mechanical ventilation in patients with COVID-19



# OHDSI Workgroup Objectives and Key Results (OKR)

Registry Working Group

2022-02-11





# Workgroup Name: Registry WG

Workgroup leads: Maxim Moinat

## 1. How to get registry data into OMOP?

2022 Key Results:

1. Create an overview of the challenges in mapping registry data to OMOP, through presentations by teams having mapped registry data to OMOP.
2. Draft document of registry mapping conventions that address the challenges.

## 2. Why to get registry data in to OMOP?

2022 Key Results:

1. Create an overview of use cases of using OMOP for registries



# HL7 FHIR - OHDSI OMOP Workgroup Objectives and Key Results (OKR) Subgroups:

- Data Model Harmonization
- Digital Quality Measurements
- Oncology
- Terminologies



# WG Name: FHIR-OMOP Working Group

WG Lead: Dana Stephenson

Objective 1 : drive community engagement, support and awareness of FHIR-OMOP activities

1Q/2Q 2022 Key results:

1. Subgroup leads to meet once a month to review FHIR-OMOP activities and leverage opportunities to join forces to accomplish goals and avoid duplication of efforts
2. Leverage community events to demo at least two (2) uses cases to gather, assess and implement feedback to help with the development and testing of integrated CDM
3. Present one (1) of the pilot use cases for the Vocabulary editorial request process that has been identified as a Key deliverable to provide visibility and encourage community input and support
4. Document and make visible WG objectives, goals and uses cases through HL7's and OHDSI's WG resources to improve community awareness and support



# WG Name: FHIR-OMOP Working Group

WG Lead: Dana Stephenson

Objective 2 : prototype implementation for at least two (2) uses cases/projects to support the integration of FHIR and OMOP

2Q/3Q/4Q 2022 Key results:

1. Identify two (2) cohorts to help with the development and testing of HL7 FHIR/CQL digital quality measurements (dQMs) using OMOP CDM
2. Demo prototype implementation for at least the following use cases to highlight progress and promote awareness to a wider audience of subgroup activities: 1) oncology 2) digital quality measurements (dQM) at HL7's May Connectathon and AMIA
3. Alpha prototype implementation for at least two (2) FHIR implementations to OMOP 5.4 to ensure alignment and support of actively used CDM versions

# Imaging OHDSI WG

From pixels to Phenotypes

WG co-leads Seng Chan You and Paul Nagy

# 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.

# 2022 OKRs (Objective and key results)

- Objectives: Defining feasible medical imaging data model for OMOP-CDM
- Key Results
  - Get an Imaging Data Model proposed to and accepted by the CDM WG
  - Publish a paper on the Imaging Data Model
  - Get a reference implementation of the Imaging Data Model

# Use cases

- Lung Cancer and Tracking pulmonary nodules in CT.
  - Looking at the doubling rate of nodules volume is a key predictor of malignancy. For patients having serial Chest CT imaging Studies(CPT). Where the analysis looks at the morphology of nodules and their locations and tracks to see how they change over time.
  - Outcomes defined by pathology biopsy and lung cancer DX. OMOP model has the diagnosis and the biopsy results. The goal is to bring automated measurements of the morphology of nodules into OMOP with direct provenance to the algorithm and the original images that created that feature. We can then validate algorithms as well as use these measurements to study progression of disease.
- Breast Cancer and Mammogram
  - Retrospective analysis looking at Cancer DX identified for cohort discovery. Using supervised training techniques to evaluate prediction models based on pixel data. Mammogram analysis extracting new phenotypes on breast density, calcifications into the OMOP database and see how they are predictive of disease for patients.
- Brain tumor and brain MR
  - Pre and post operative imaging analysis. Neuro fixed body registration between pre and post surgery to look at change in tumor size. This requires identification of both imaging studies as well as an able to fix the reference orientation between.