Welcome to OHDSI

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OHDSI's mission

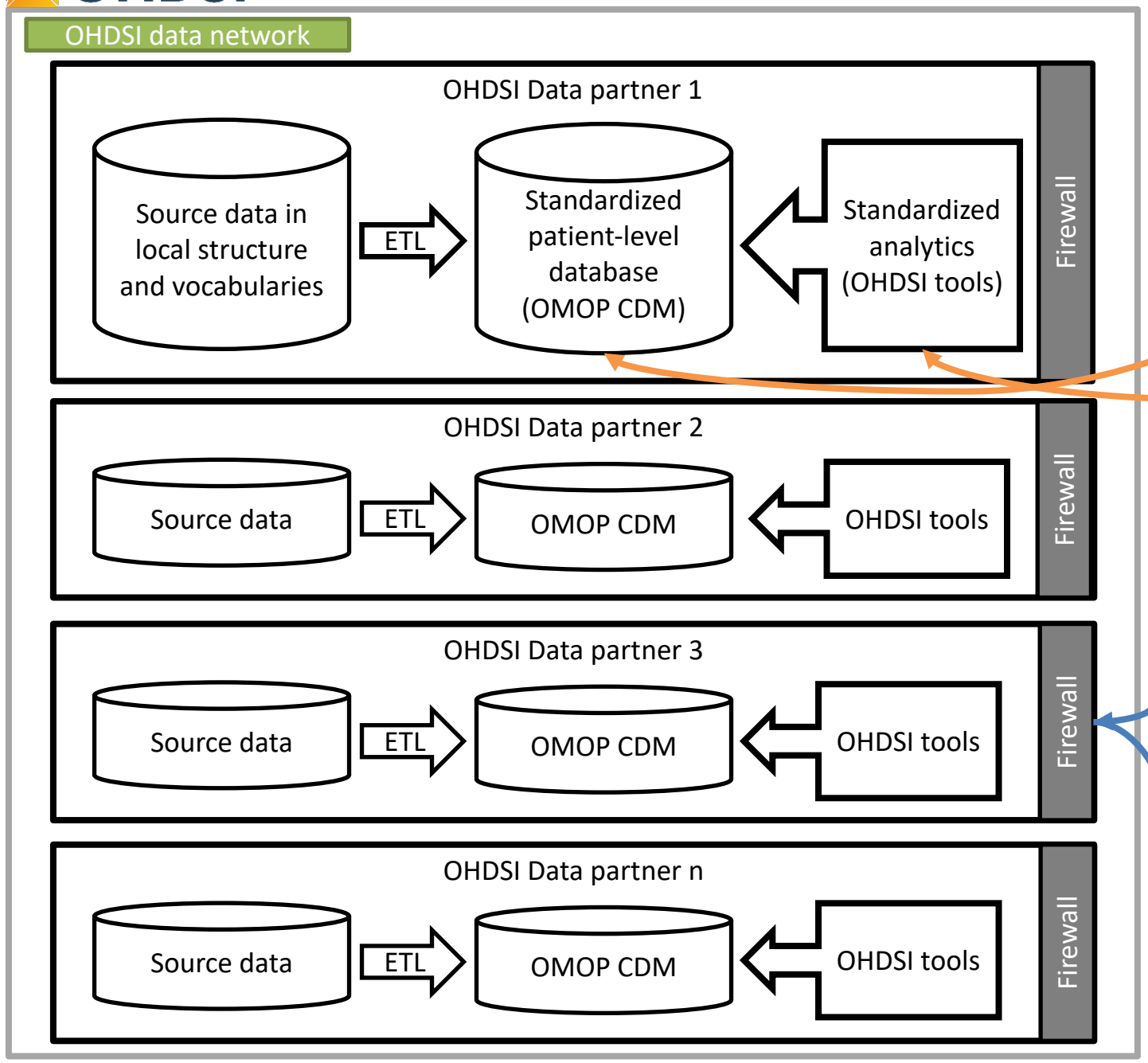
To improve health by empowering a community to collaboratively generate the evidence that promotes better health decisions and better care

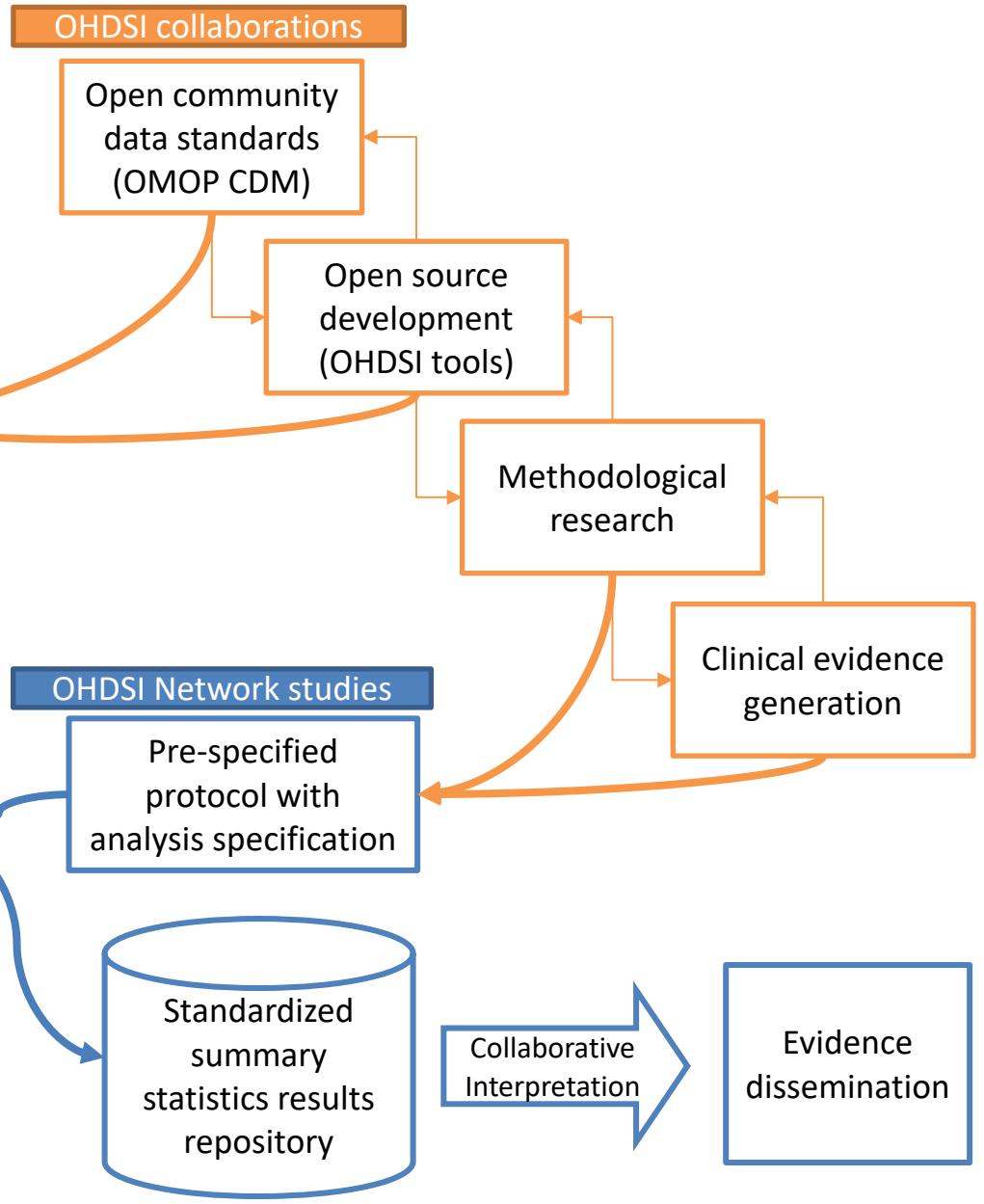
OHDSI's values

- **Innovation**: Observational research is a field which will benefit greatly from disruptive thinking. We actively seek and encourage fresh methodological approaches in our work.
- **Reproducibility**: Accurate, reproducible, and well-calibrated evidence is necessary for health improvement.
- **Community**: Everyone is welcome to actively participate in OHDSI, whether you are a patient, a health professional, a researcher, or someone who simply believes in our cause.
- **Collaboration**: We work collectively to prioritize and address the real world needs of our community's participants.
- **Openness**: We strive to make all our community's proceeds open and publicly accessible, including the methods, tools and the evidence that we generate.
- **Beneficence**: We seek to protect the rights of individuals and organizations within our community at all times.

OHDSI

To improve health by empowering a community to collaboratively generate the evidence that promotes better health decisions and better care





Map of collaborators

OHDSI By The Numbers

- 3,758 collaborators
- 83 countries
- 21 time zones
- 6 continents
- 1 community

Regional Chapters and National Nodes

An OHDSI regional chapter represents a group of OHDSI collaborators located in a geographic area who wish to hold local networking events and meetings to address problems specific to their geographic location.

The OHDSI Europe Chapter, in collaboration with the EHDEN project, recently created National Nodes to facilitate national and international collaborations.

An OHDSI Europe National Node is a collection of research institutes within a member country. The Node builds on the strengths of the stakeholders and scientific communities of that country.

Each Node has a lead institute that oversees the work of that Node and assigns a lead and co-lead.

Regional Chapters

Africa
Leads: Ahmed El Sayed, Cynthia Sung

Australia
Lead: Nicole Pratt

China
Lead: Hua Xu

Europe
Lead: Peter Rijnbeek

India
Lead: Lakshmi Kubendran

Japan
Lead: Tatsuo Hiramatsu

Republic of Korea
Lead: Seng Chan You

Singapore
Lead: Mengling 'Mornin' Feng

Taiwan
Lead: Jason Hsu

European National Nodes

Belgium
Lead Institutions: Hasselt University, University Hospital Antwerp

Germany
Lead Institution: Technische Universität Dresden

Greece
Lead Institution: The Institute of Applied Biosciences, Centre for Research and Technology Hellas

Italy
Lead Institution: University of Pavia

Luxembourg
Lead Institutions: Luxembourg Institute of Health, Information Technology for Translational Medicine S.A.

The Netherlands
Lead Institution: Erasmus MC University Medical Center

Portugal
Lead Institution: Centro Hospitalar E Universitario De Coimbra Epe

Spain
Lead Institutions: Consorci Parc de Salut Mar Barcelona, IDIAPJGol

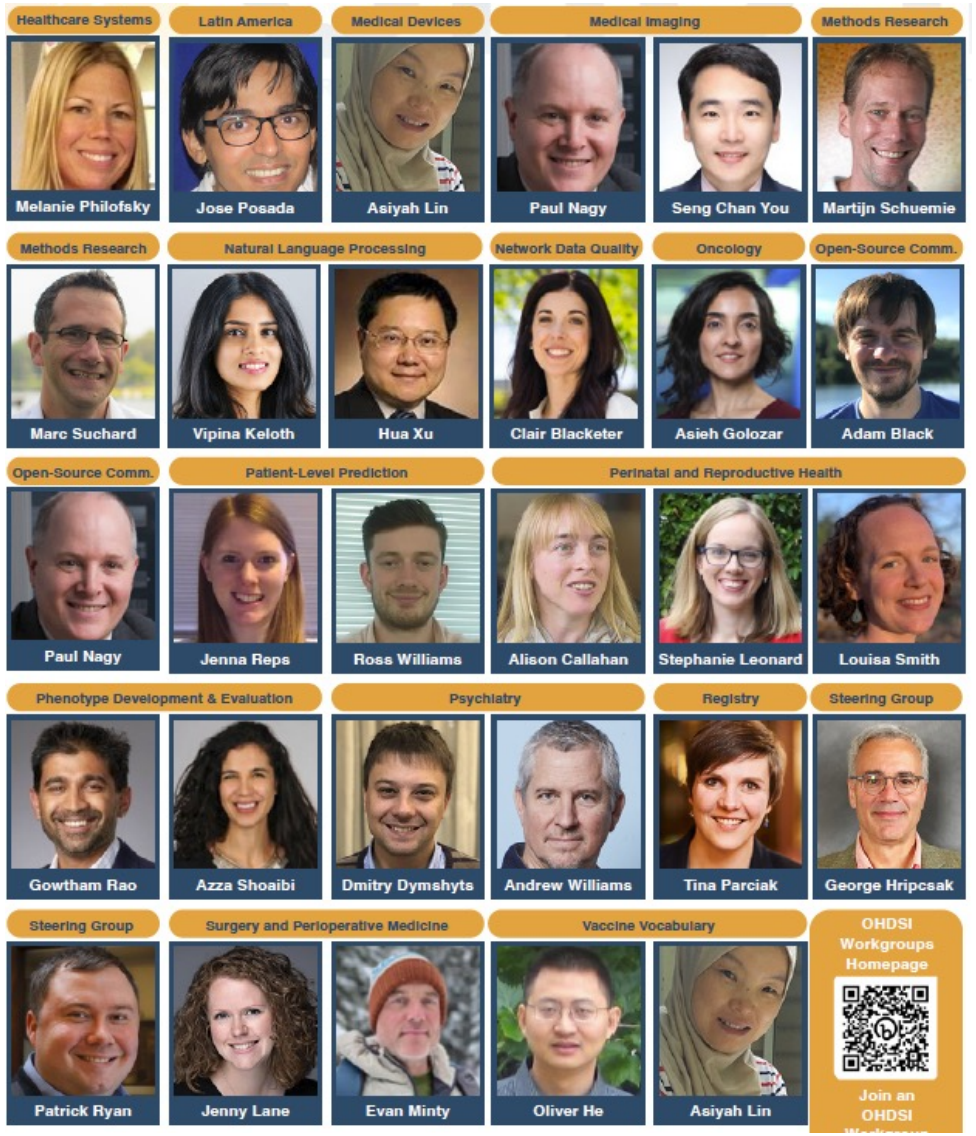
United Kingdon
Lead Institution: Health Data Sciences Section, Botnar Research Centre, University of Oxford

OHDSI Workgroups

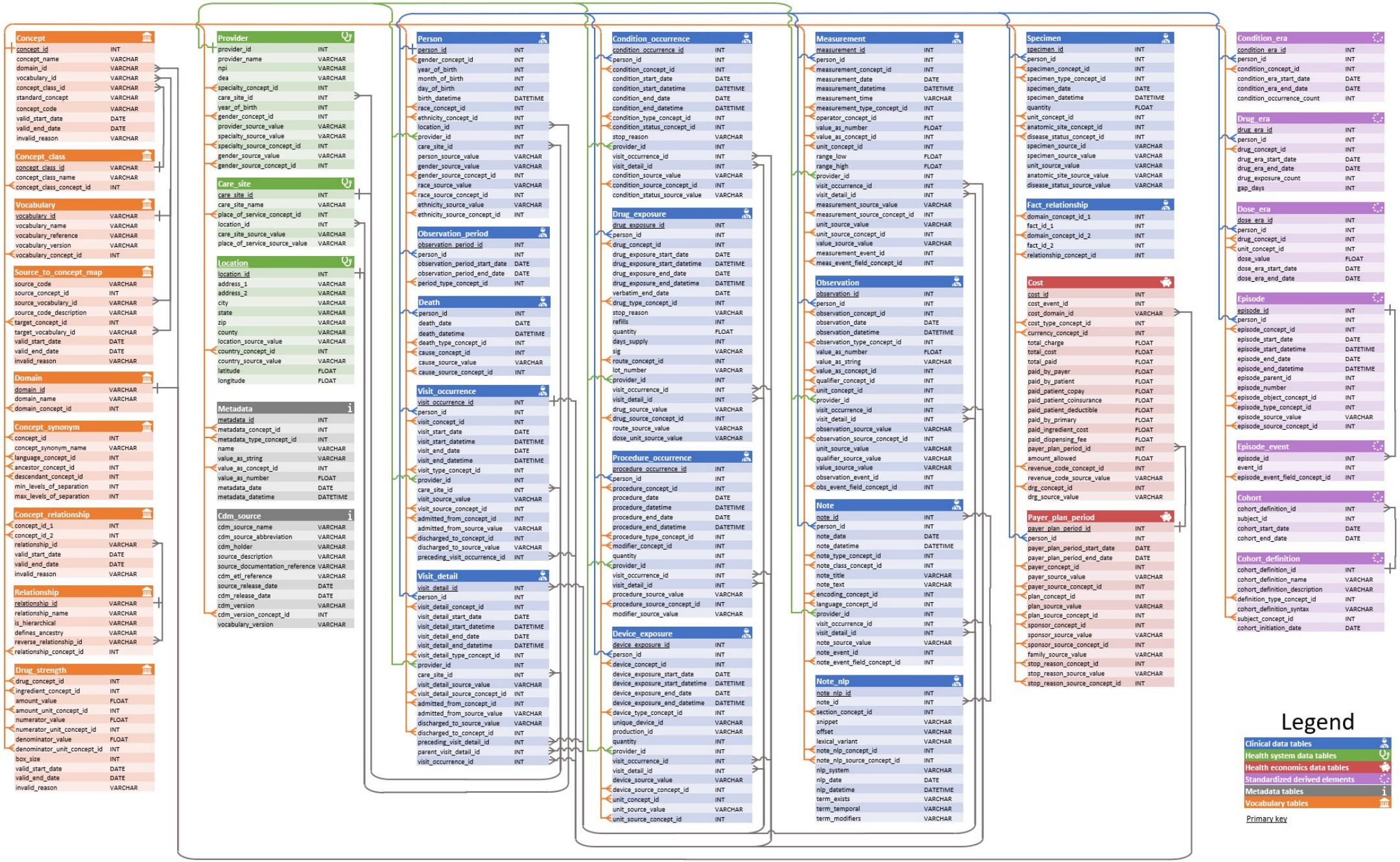
OHDSI has a central mission to improve health globally, but there are countless areas where our community can be of service. Work around data, methods, open-source tools, and clinical applications are all pieces of the puzzle, and within OHDSI, there are opportunities to work in any or many of these areas.

Our workgroups, led by the extraordinary leads shown on these pages, present opportunities for all community members to find a home for their talents and passions, and make meaningful contributions. We are always looking for new collaborators. See an area where you want to contribute? Please Join The Journey!

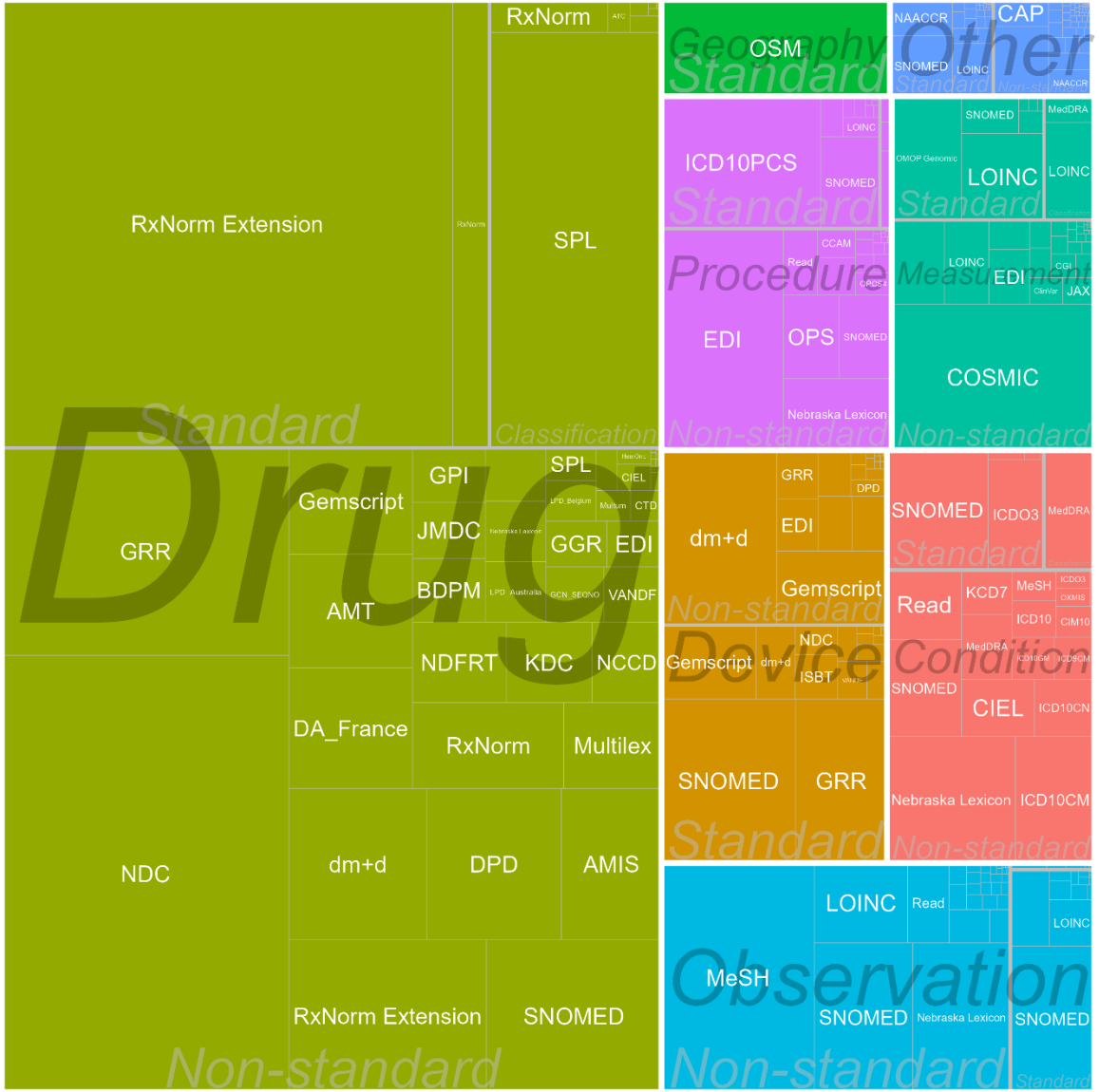
www.ohdsi.org/workgroups



OMOP Common Data Model 5.4



OHDSI standardized vocabularies

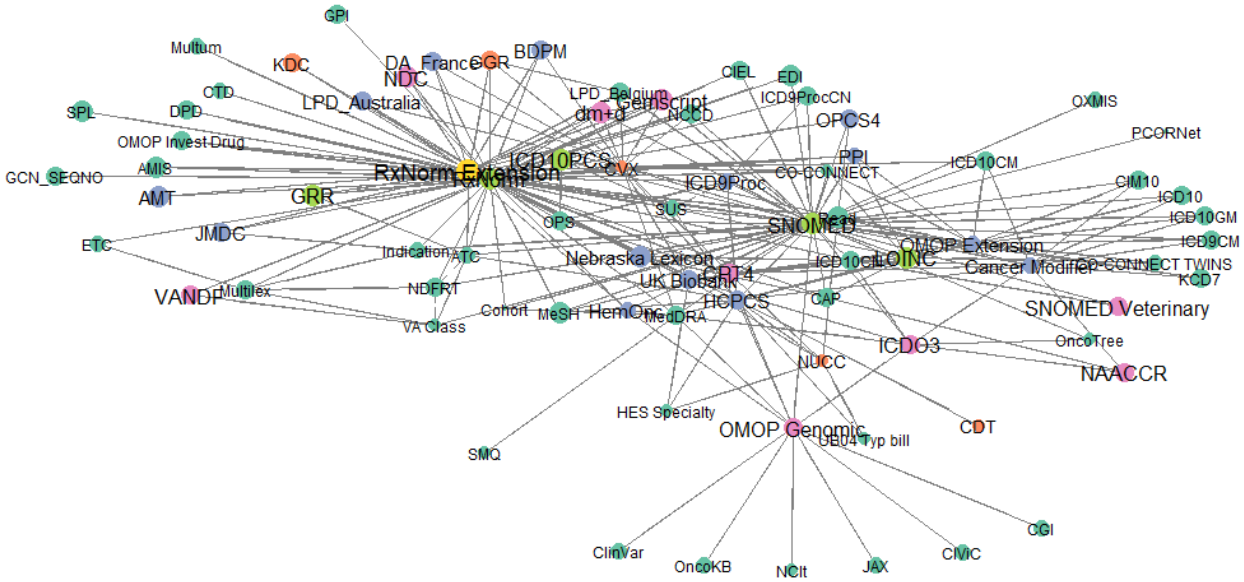


OHDSI Vocabularies By The Numbers

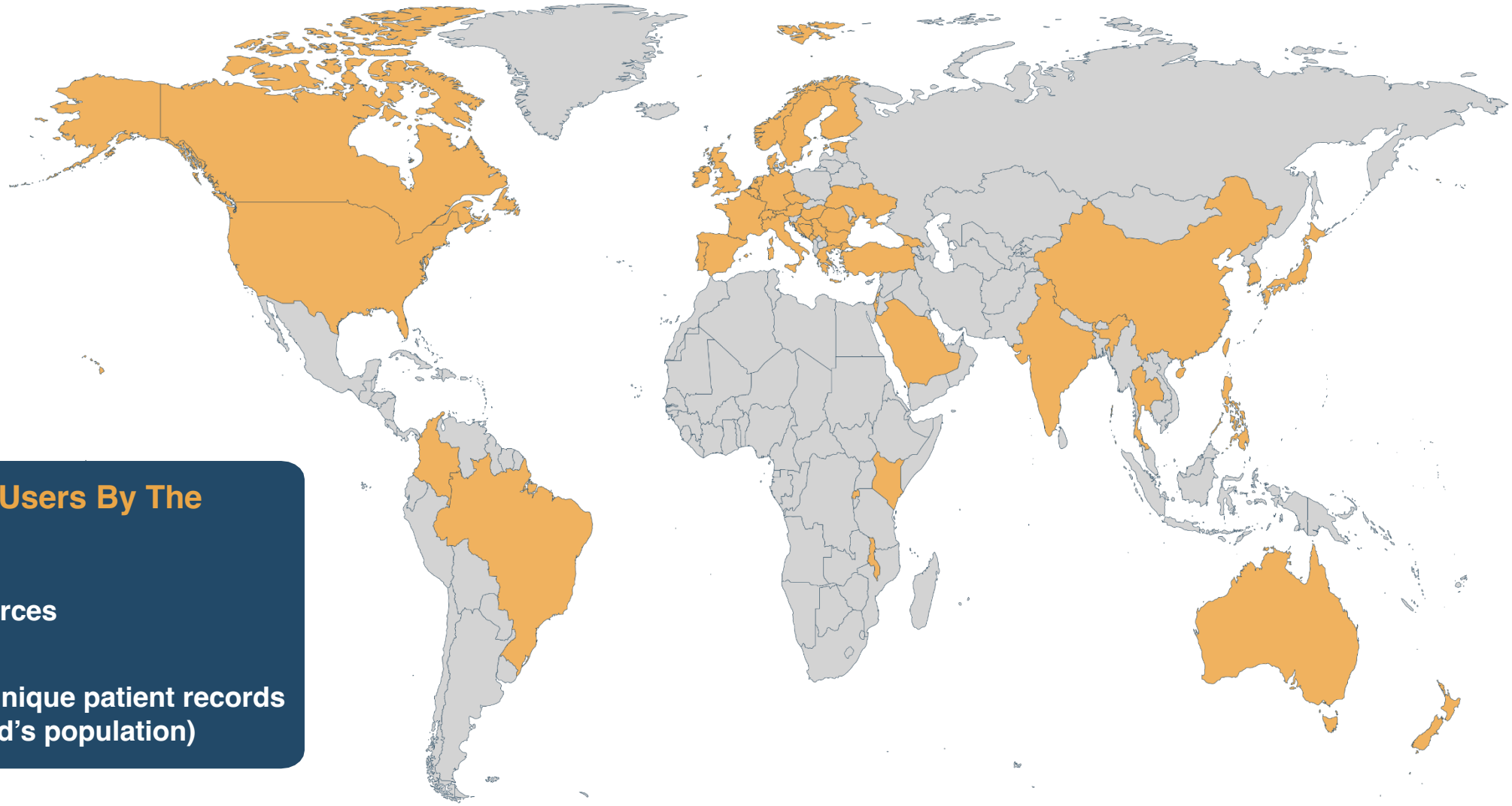
as of August 2023 release

- 11,027,290 concepts
  - 3,598,454 standard concepts
  - 847,008 classification concepts
- 142 vocabularies
- 44 domains
- 82,142,038 concept relationships
- 87,967,689 ancestral relationships
- 4,673,156 concept synonyms

1 Shared Resource to Enable Data Standards



OMOP Common Data Model adoption



OMOP CDM Users By The Numbers

- 534 data sources
- 49 countries
- 956 million unique patient records (12% of world's population)

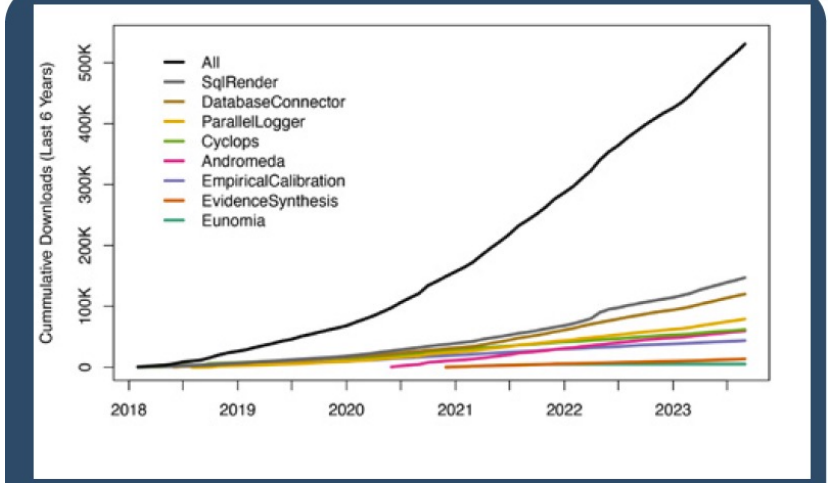
HADES

HADES is a set of open source R packages for large scale analytics, including population characterization, population-level causal effect estimation, and patient-level prediction.

The packages offer R functions that together can be used to perform an observational study through the full journey from data to evidence, including data manipulation, statistical modeling, and results generation with supporting statistics, tables and figures.

Each package includes functions for specifying and subsequently executing multiple analyses efficiently. HADES supports best practices for use of observational data as learned from previous and ongoing research, such as transparency, reproducibility, as well as measuring of the operating characteristics of methods in a particular context and subsequent empirical calibration of estimates produced by the methods.

Learn more about the individual HADES packages in this section.



The eight HADES packages shown above have been released on CRAN and have been downloaded more than 500,000 times.

HADES Maintainers

The open-source tools that empower OHDSI research are not only available to the community, but they are DEVELOPED by the community. We thank the many developers and maintainers who empower our research initiatives around the world!


Adam Black


Frank DeFalco


Lee Evans


Egill Fridgeirsson


Jamie Gilbert


Christopher Knoll


Martin Lavallee


Gowtham Rao


Jenna Reps


Peter Rijnbeek


Katy Sadowski


Martijn Schuemie

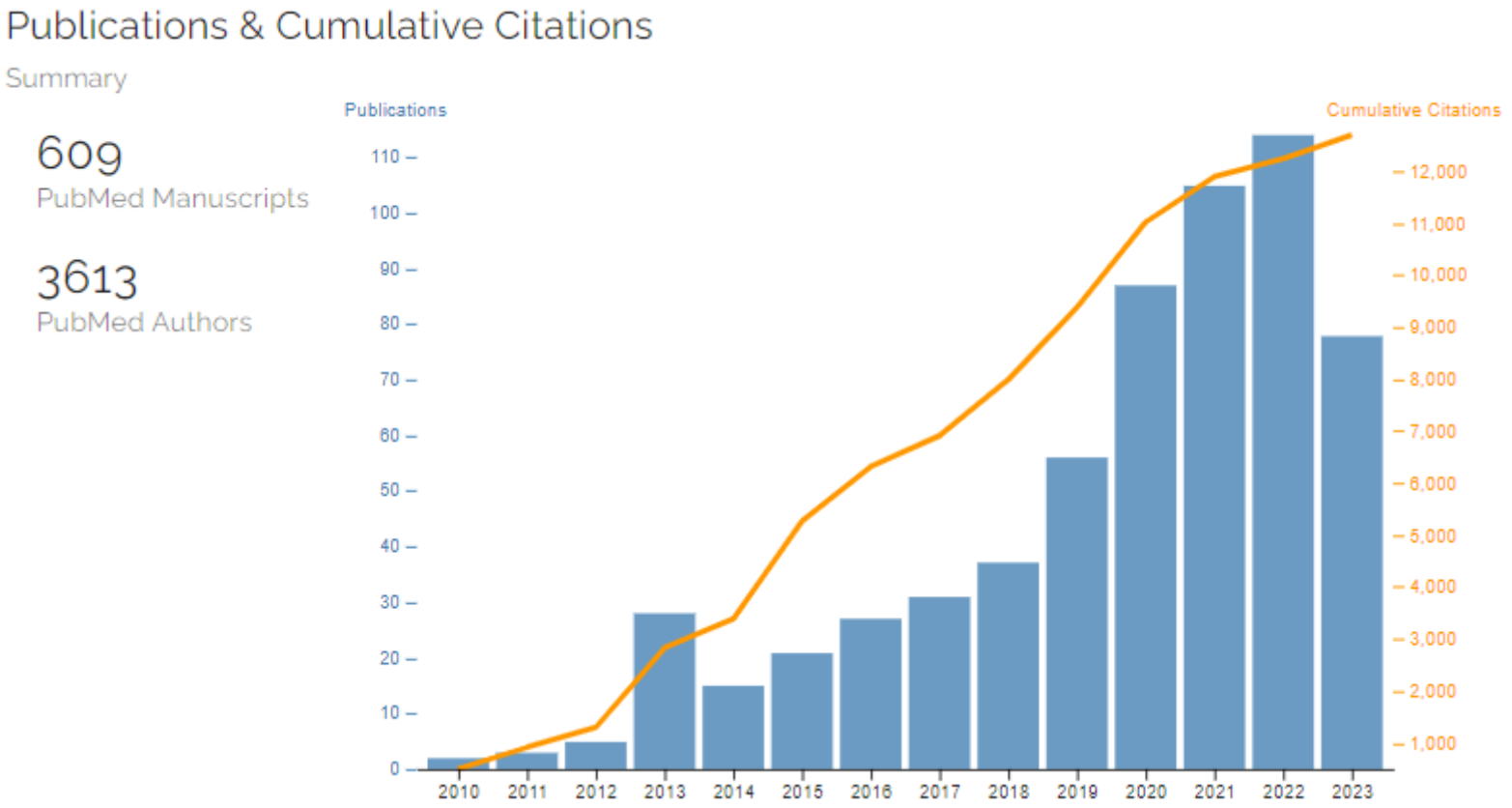

Anthony Sena


Marc Suchard

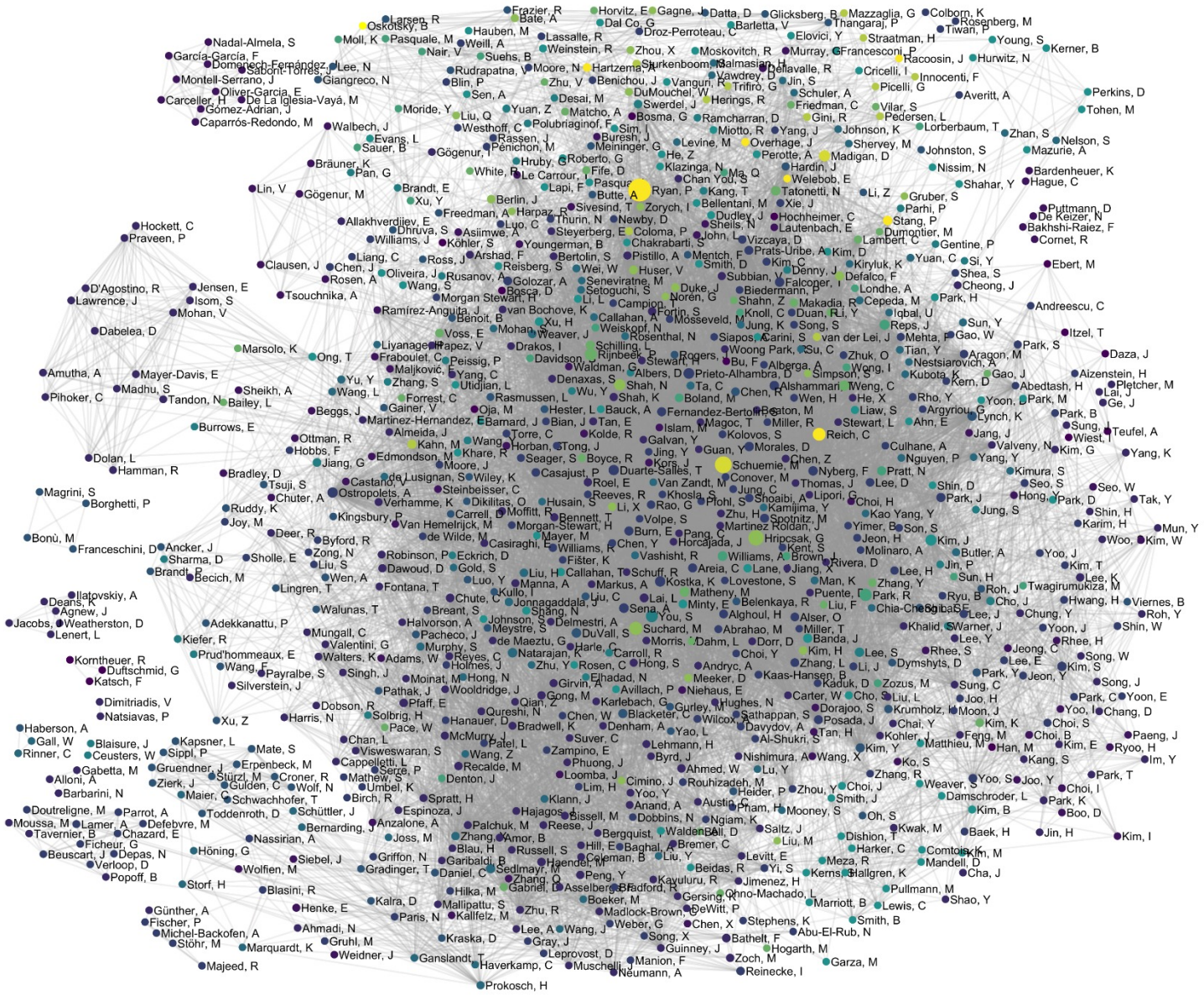

Joel Swerdel

Package	Version	Maintainer(s)	Availability
Achilles	v1.7.2	Frank DeFalco	CRAN
Andromeda	v0.6.3	Adam Black	CRAN
BigKnn	v1.0.2	Martijn Schuemie	GitHub
BrokenAdaptiveRidge	v1.0.0	Marc Suchard	CRAN
Capr	v2.0.7	Martin Lavallee	GitHub
Characterization	v0.1.2	Jenna Reps	GitHub
CirceR	v1.3.1	Chris Knoll	GitHub
CohortDiagnostics	v3.2.4	Jamie Gilbert	GitHub
CohortExplorer	v0.0.17	Gowtham Rao	CRAN
CohortGenerator	v0.8.0	Anthony Sena	GitHub
CohortMethod	v5.1.0	Martijn Schuemie	GitHub
Cyclops	v3.3.1	Marc Suchard	CRAN
DatabaseConnector	v6.2.4	Martijn Schuemie	CRAN
DataQualityDashboard	v2.4.0	Katy Sadowksi	GitHub
DeepPatientLevelPrediction	v2.0.0	Egill Fridgeirsson	GitHub
EmpiricalCalibration	v3.1.1	Martijn Schuemie	CRAN
EnsemblePatientLevelPrediction	v1.0.2	Jenna Reps	GitHub
Eunomia	v1.0.2	Frank DeFalco	GitHub
EvidenceSynthesis	v0.5.0	Martijn Schuemie	CRAN
FeatureExtraction	v3.3.1	Anthony Sena	GitHub
Hydra	v0.4.0	Anthony Sena	GitHub
IterativeHardThresholding	v1.0.2	Marc Suchard	CRAN
MethodEvaluation	v2.3.0	Martijn Schuemie	GitHub
OhdsiSharing	v0.2.2	Lee Evans	GitHub
OhdsiShinyModules	v2.0.0	Jenna Reps	GitHub
ParallelLogger	v3.3.0	Martijn Schuemie	CRAN
PatientLevelPrediction	v6.3.5	Jenna Reps & Peter Rijnbeek	GitHub
PhenotypeLibrary	v3.25.0	Gowtham Rao	GitHub
PheValuator	v2.2.10	Joel Swerdel	GitHub
ResultModelManager	v0.5.1	Jamie Gilbert	GitHub
ROhdsiWebApi	v1.3.3	Gowtham Rao	GitHub
SelfControlledCaseSeries	v4.2.0	Martijn Schuemie	GitHub
SelfControlledCohort	v1.6.0	Jamie Gilbert	GitHub
ShinyAppBuilder	v1.1.2	Jenna Reps	GitHub
SqlRender	v1.16.1	Martijn Schuemie	CRAN

OHDSI scholarship



OHDSI collaborations in scholarship



OHDSI demonstration of impact

- Treatment pathways → clinical heterogeneity
- Negative controls → regulatory best practices
- Background incidence rates → regulatory decisions on vaccines
- LEGEND-HTN → clinical guidelines

Our Journey

Where The OHDSI Community Has Been And Where We Are Going

2023 edition

OHDSI

OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS