



Welcome to OHDSI

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OHDSI's mission

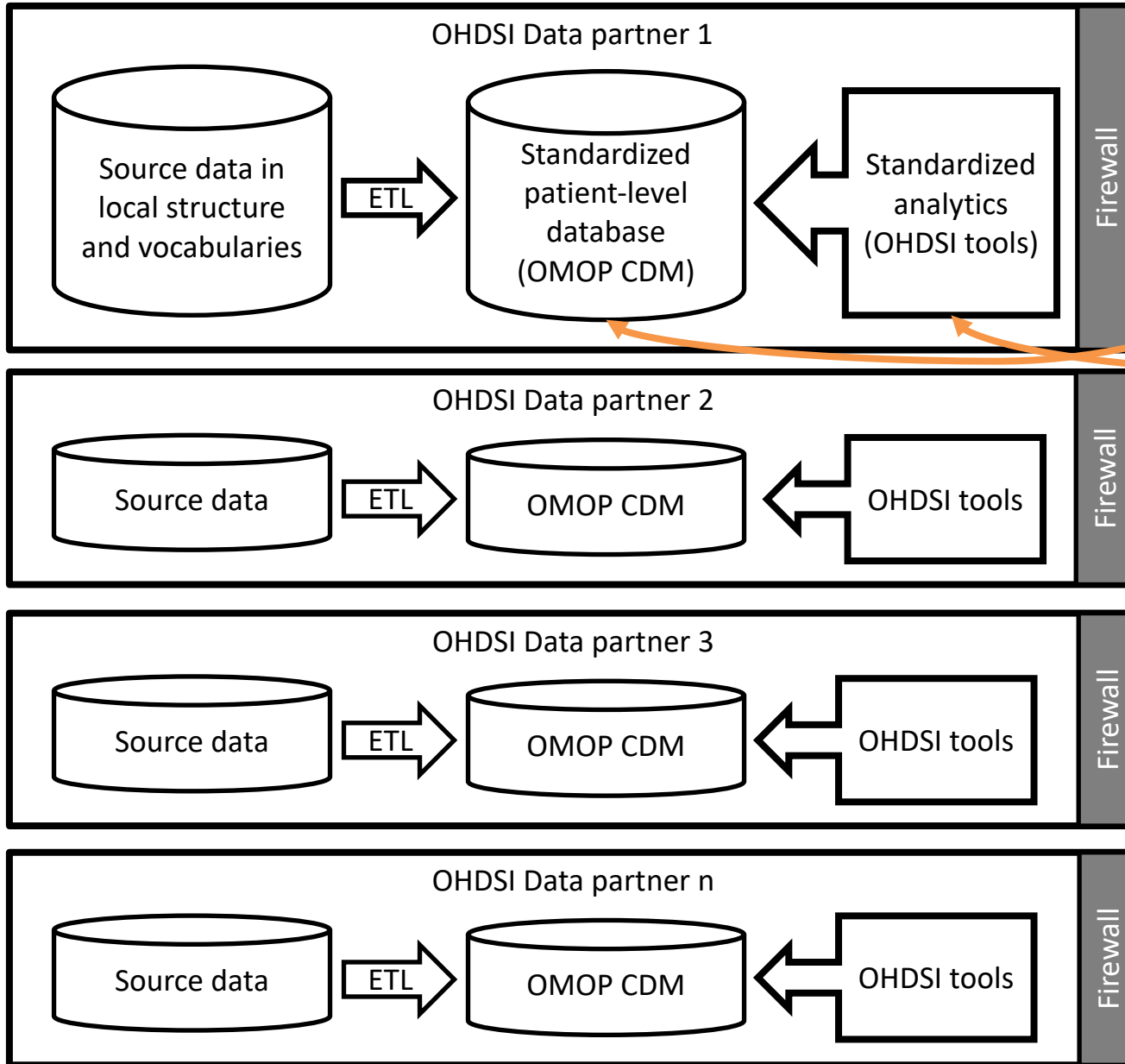
To improve health by empowering a community to collaboratively generate the evidence that promotes better health decisions and better care



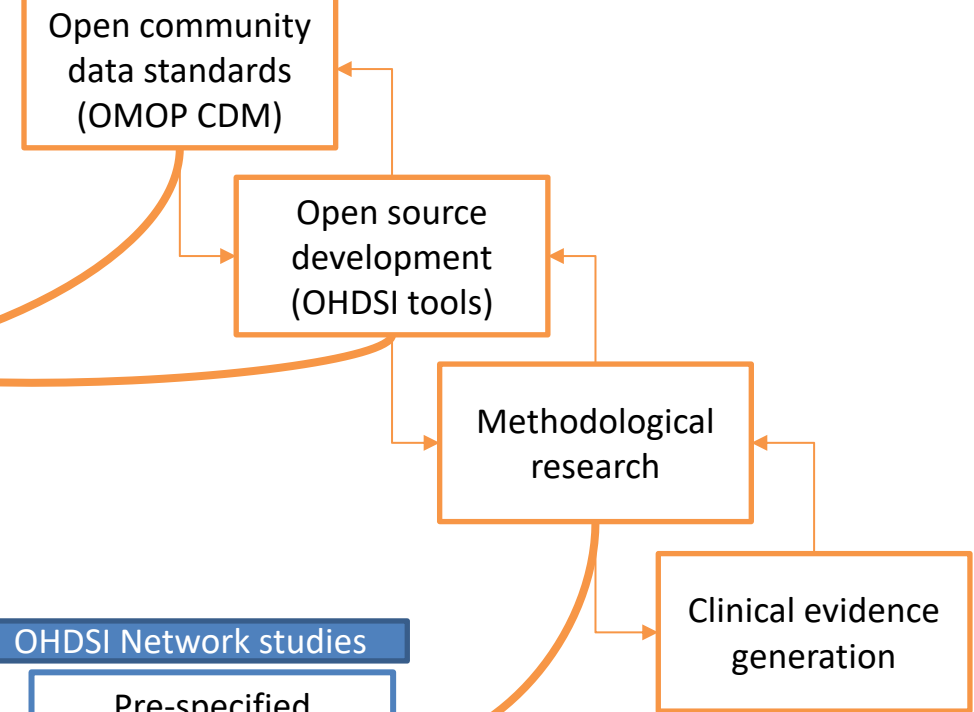
OHDSI's values

- **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.

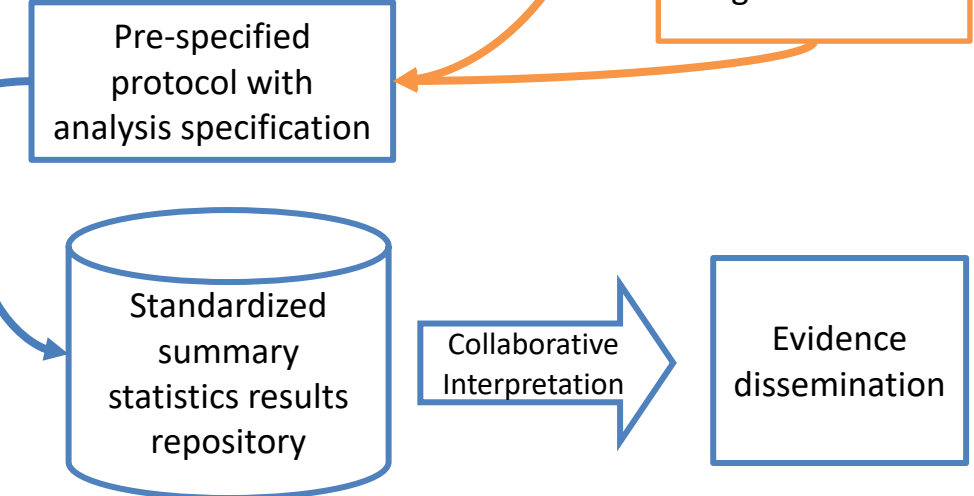
OHDSI data network



OHDSI collaborations

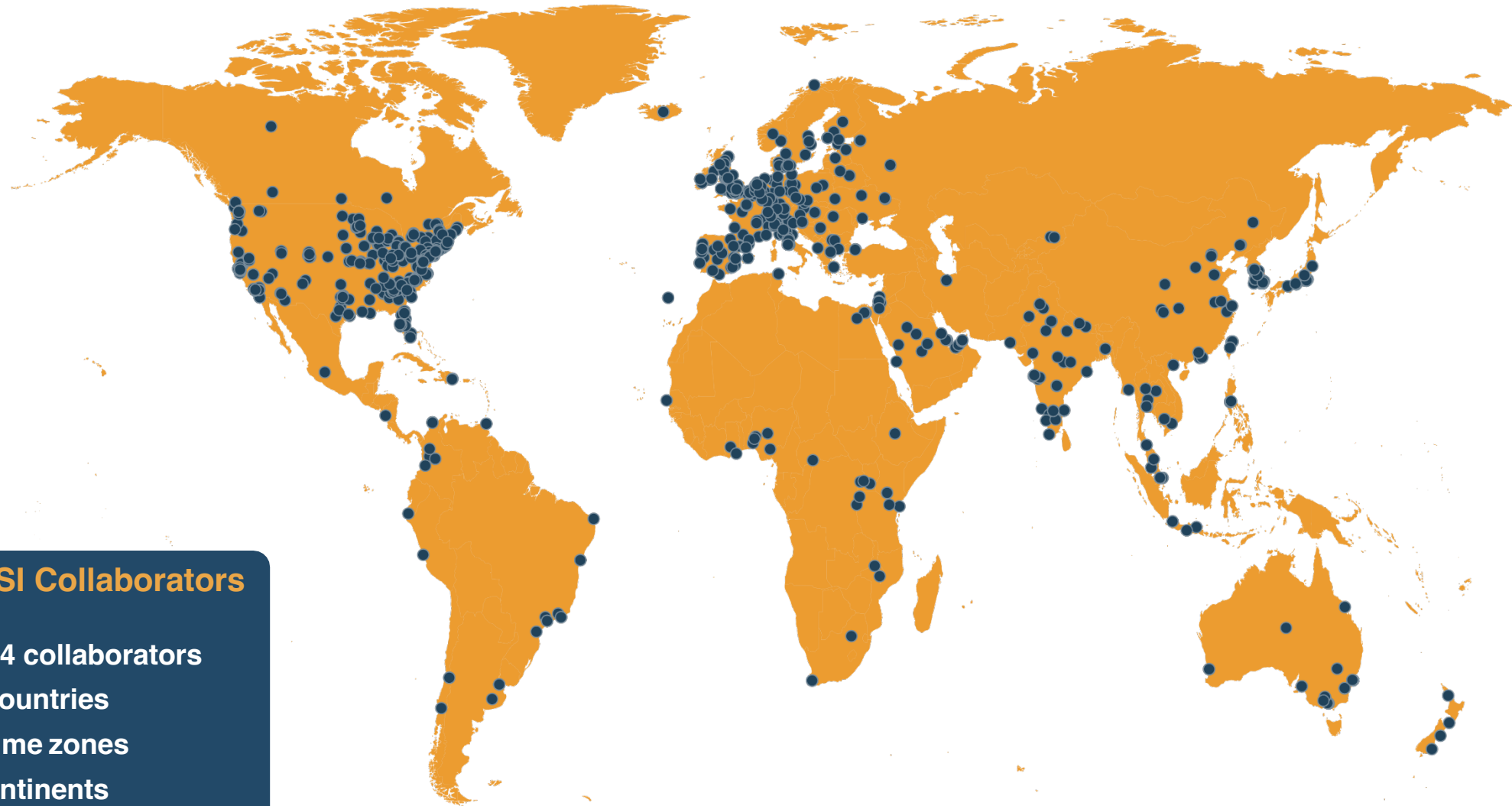


OHDSI Network studies





OHDSI collaborators



OHDSI Collaborators

- 4,294 collaborators
- 83 countries
- 21 time zones
- 6 continents

Join the Journey at <https://ohdsi.org/>



Regional chapters and national nodes

Africa Chapter



Agnes Kiragga



Cynthia Sung

Asia-Pacific (APAC)



Mui Van Zandt



Nicole Pratt

Australia



Hua Xu

China

Europe



Peter Rijnbeek



Swetha Kiranmayi Jakkuv

India



Vikram Patil



Parthiban Sular

Japan



Tatsuo Hiramatsu

Latin America



Jose Posada

Republic of Korea



Rae Woong Park

Singapore



Seng Chan You

Taiwan



Mengling 'Mornin' Feng



Jason Hsu

Node..... Lead(s)

Belgium Liesbet Peeters, Annelies Verbiest, Ilse Vermeulen

Denmark Ismail Gögenur, Martin Høyer Rose, Andreas Weinberger Rosen

Estonia..... Raivo Kolde, Sulev Reisberg

Finland..... Eric Fey

Germany Ines Reinecke, Michele Zoch

Greece Anastasia Farmaki, Pantelis Natsiavas, Grigoris Papapostolou

Israel Chen Yanover

Italy Lucia Sacchi, Matteo Gabetta

Luxembourg..... Claudine Backes, Andreas Kremer, Maria Quaranta

Netherlands..... Renske Los, Aniek Markus

Norway..... Espen Enerly, Siri Larønningen

Portugal..... Patricia Couceiro, Carmen Nogueira

Spain..... Miguel Angel Mayer, Talita Duarte Salles

United Kingdom..... Daniel Prieto-Alhambra

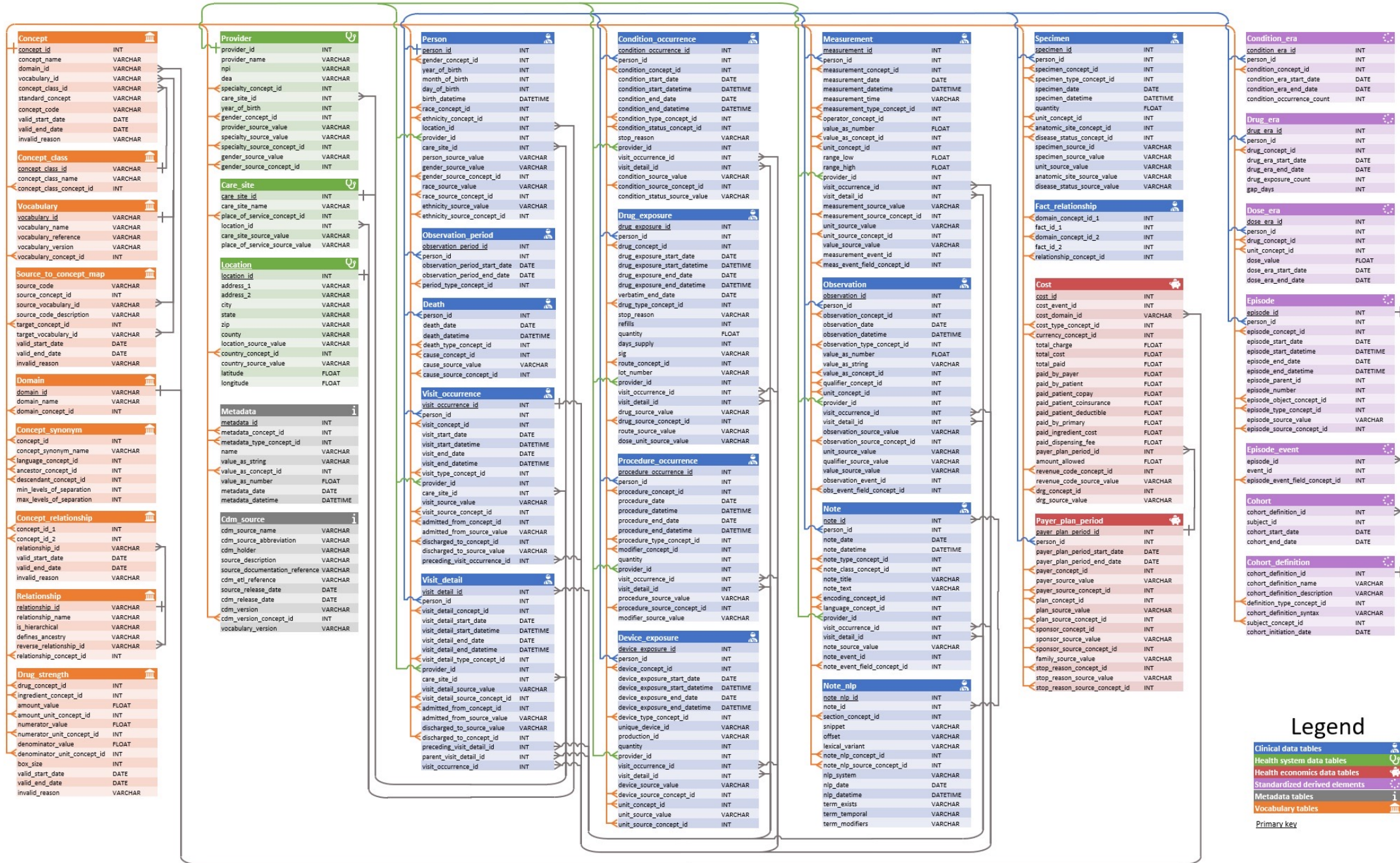




Workgroups led by community

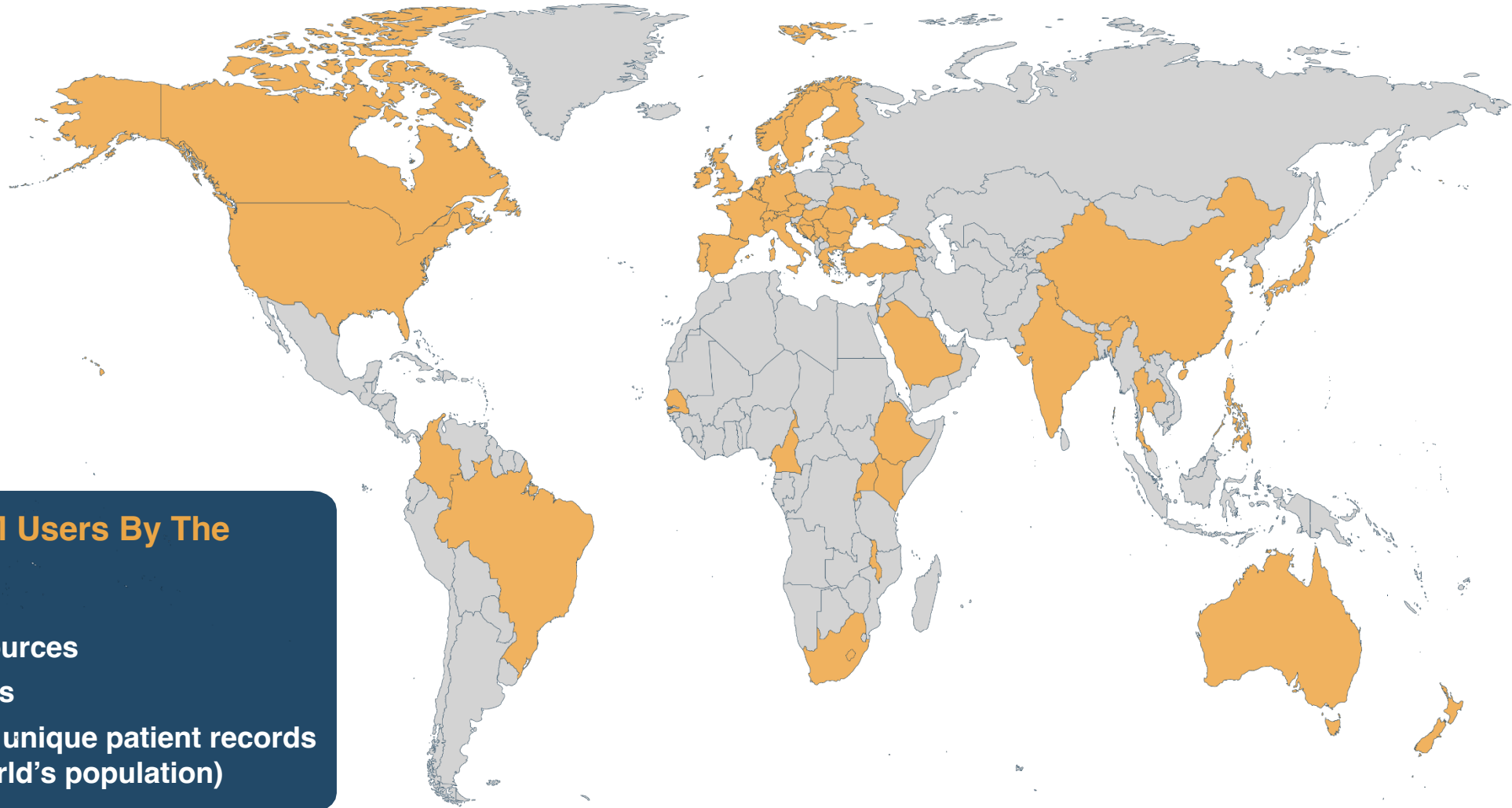
ATLAS		Clinical Trials		CDM Survey		Medical Imaging		Methods Research		Natural Language Processing (NLP)			
CDM Vocabulary	Common Data Model	Dentistry		Early-Stage Researchers		Network Data Quality	Oncology	Open-Source Community		Patient-Level Prediction (PLP)			
Electronic Animal Health Records		Eye Care and Vision Research			FHIR and OMOP			Perinatal and Reproductive Health			Phenotype Development & Evaluation		Psychiatry
FHIR and OMOP		Gen. AI & Analytics		GIS - Geographic Information System				Psychiatry	Registry	Rehabilitation		Steering	
HADES	Health Equity	Healthcare Systems	Industry	Medical Devices		Surgery and Perioperative Medicine		Themis	Vaccine Vocabulary		OHDSI Workgroups Homepage		

OMOP Common Data Model 5.4





OMOP Common Data Model adoption



OMOP CDM Users By The Numbers

- 544 data sources
- 54 countries
- 974 million unique patient records (12% of world's population)

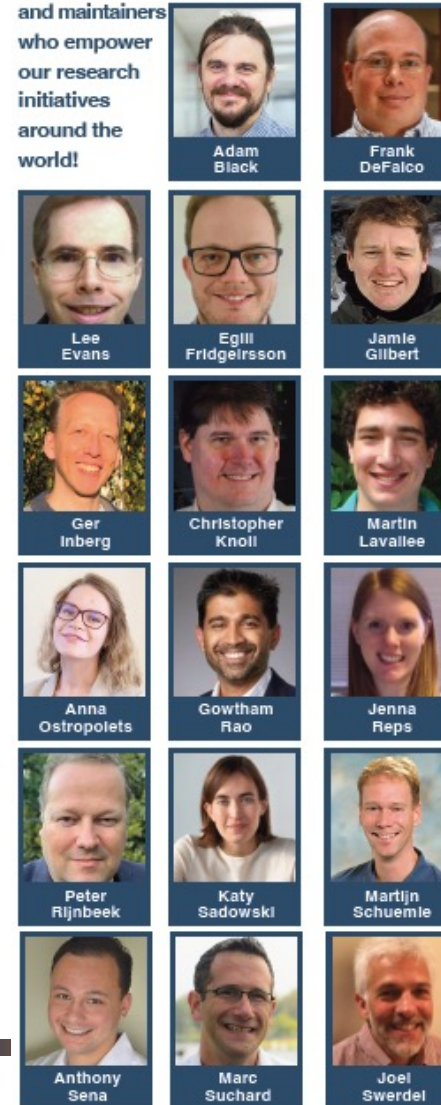


Open-source software development

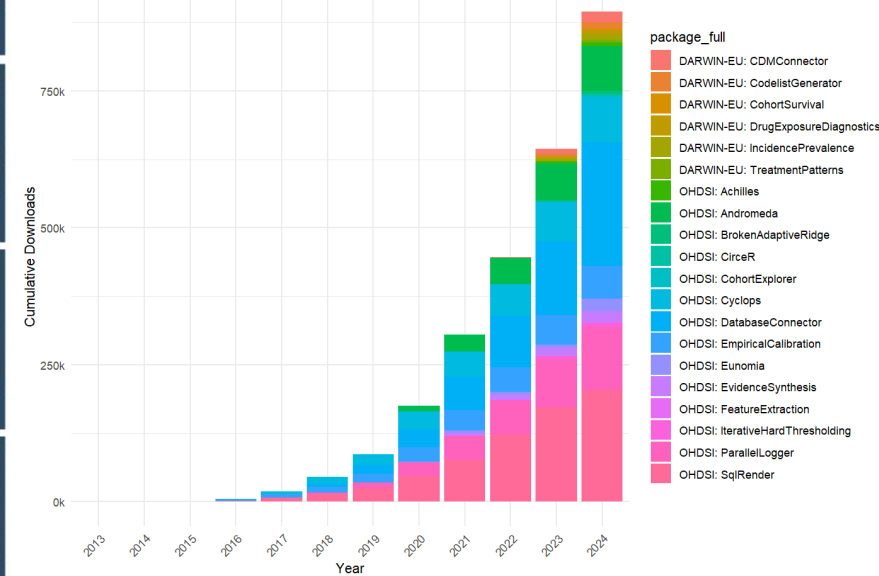
- HADES is an ecosystem of 37 R packages to support standardized analytics for the OMOP CDM and across OHDSI network
- OHDSI CRAN packages have been downloaded >800,000 times

Package	Version	Maintainer(s)	Availability
Achilles	v1.7.2	Frank DeFalco	CRAN
Andromeda	v0.6.7	Martijn Schuemie	CRAN
BigKnn	v1.0.2	Martijn Schuemie	GitHub
BrokenAdaptiveRidge	v1.0.0	Marc Suchard	CRAN
Caer	v2.0.8	Martin Lavallee	GitHub
Characterization	v2.0.1	Jenna Reps	GitHub
CirceR	v1.3.3	Chris Knoll	CRAN
CohortDiagnostics	v3.3.0	Jamie Gilbert	GitHub
CohortExplorer	v0.1.0	Gowtham Rao	CRAN
CohortGenerator	v0.11.2	Anthony Sena	GitHub
CohortIncidence	v4.0.0	Chris Knoll	GitHub
CohortMethod	v5.4.0	Martijn Schuemie	GitHub
Cyclops	v3.4.1	Marc Suchard	CRAN
DatabaseConnector	v6.3.2	Martijn Schuemie	CRAN
DataQualityDashboard	v2.6.1	Katy Sadowski	GitHub
DeepPatientLevelPrediction	v2.1.0	Egill Fridgeirsson	GitHub
EmpiricalCalibration	v3.1.3	Martijn Schuemie	CRAN
EnsemblePatientLevelPrediction	v1.0.2	Jenna Reps	GitHub
Eunomia	v2.0.0	Frank DeFalco	CRAN
EvidenceSynthesis	v0.5.0	Martijn Schuemie	CRAN
FeatureExtraction	v3.7.1	Ger Inberg	CRAN
Hydra	v0.4.0	Anthony Sena	GitHub
IterativeHardThresholding	v1.0.2	Marc Suchard	CRAN
Keeper	v0.2.0	Anna Ostropolets	GitHub
MethodEvaluation	v2.3.0	Martijn Schuemie	GitHub
OhdaiSharing	v0.2.2	Lee Evans	GitHub
OhdaiShinyModules	v3.0.2	Jenna Reps	GitHub
ParallelLogger	v3.3.1	Martijn Schuemie	CRAN
PatientLevelPrediction	v6.3.9	Egill Friogeirsson & Jenna Reps	GitHub
PhenotypeLibrary	v3.34.0	Gowtham Rao	GitHub
PheValuator	v2.2.11	Joel Swerdel	GitHub
ResultModelManager	v0.5.11	Jamie Gilbert	GitHub
ROhdaiWebApi	v1.3.3	Gowtham Rao	GitHub
SelfControlledCaseSeries	v5.3.0	Martijn Schuemie	GitHub
SelfControlledCohort	v1.6.0	Jamie Gilbert	GitHub
ShinyAppBuilder	v3.1.0	Jenna Reps	GitHub
SqlRender	v1.18.1	Martijn Schuemie	CRAN

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!

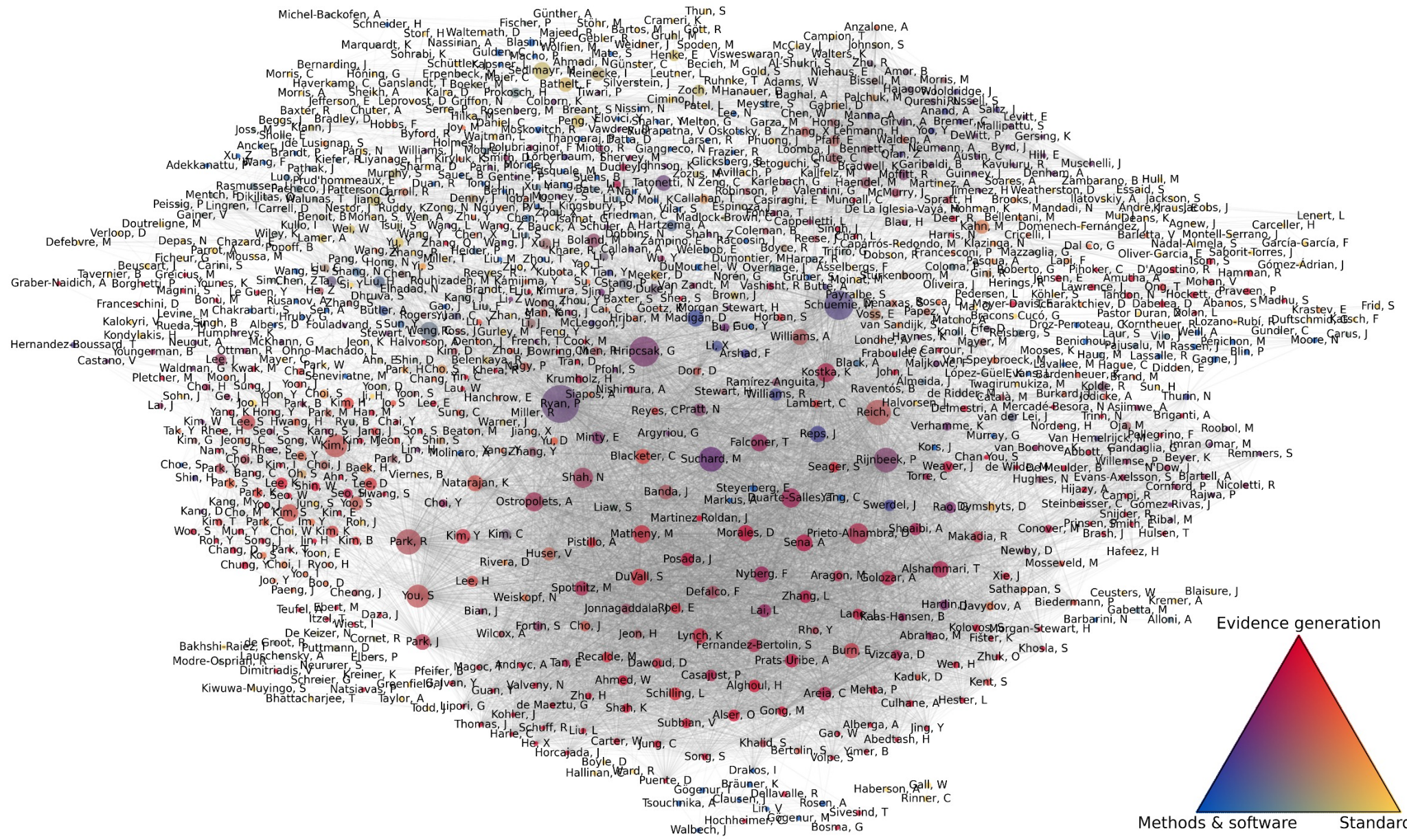


Cumulative Downloads of OHDSI and DARWIN-EU R Packages by Year





OHDSI collaborations in scholarship

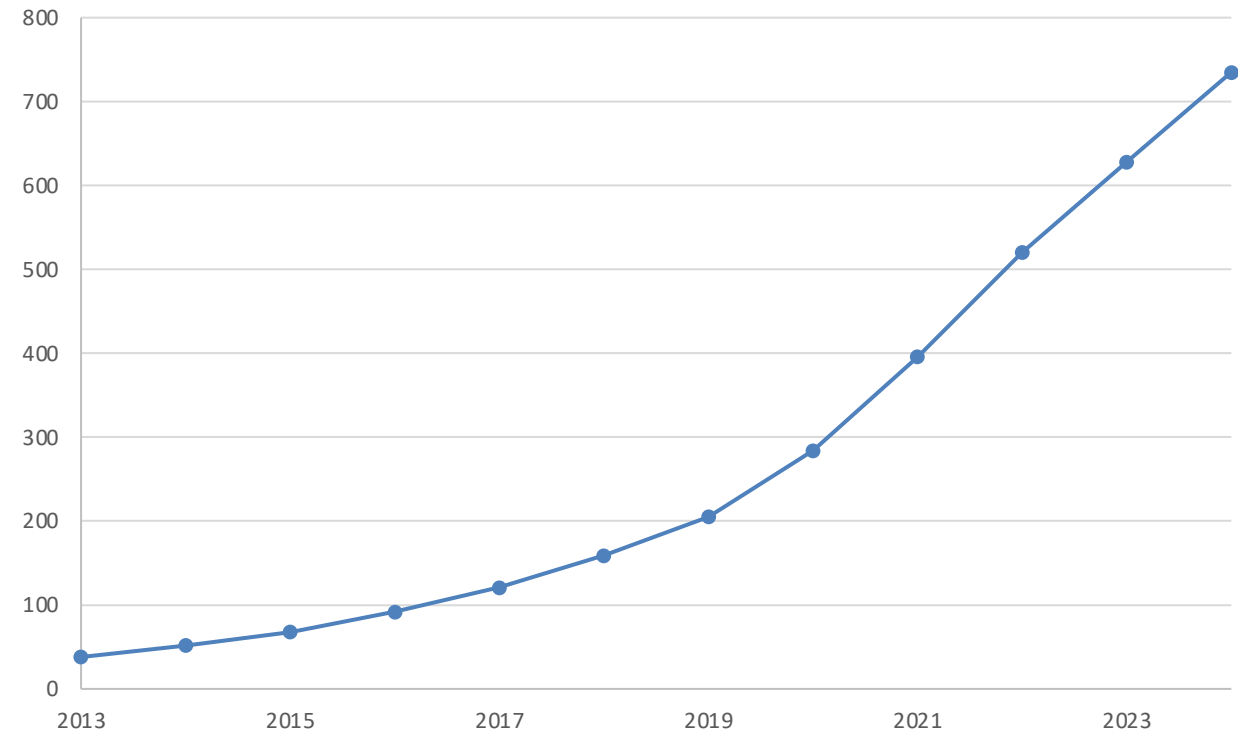




Academic scholarship and clinical evidence generation

- >730 publications, including in top clinical journals (JAMA, BMJ, Lancet, JAMA Internal Medicine, JACC) and leading methodological journals (JAMIA, JBI, Nature Digital Medicine)
- Clinical evidence generated to inform range of therapeutic areas, including hypertension, diabetes, COVID-19, vision care, depression, oncology

Cumulative Publications from the OHDSI community





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*
2024 edition



OHDSI

OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS