Happy New Year!
OHDSI in 2023

OHDSI's mission

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

OHDSI

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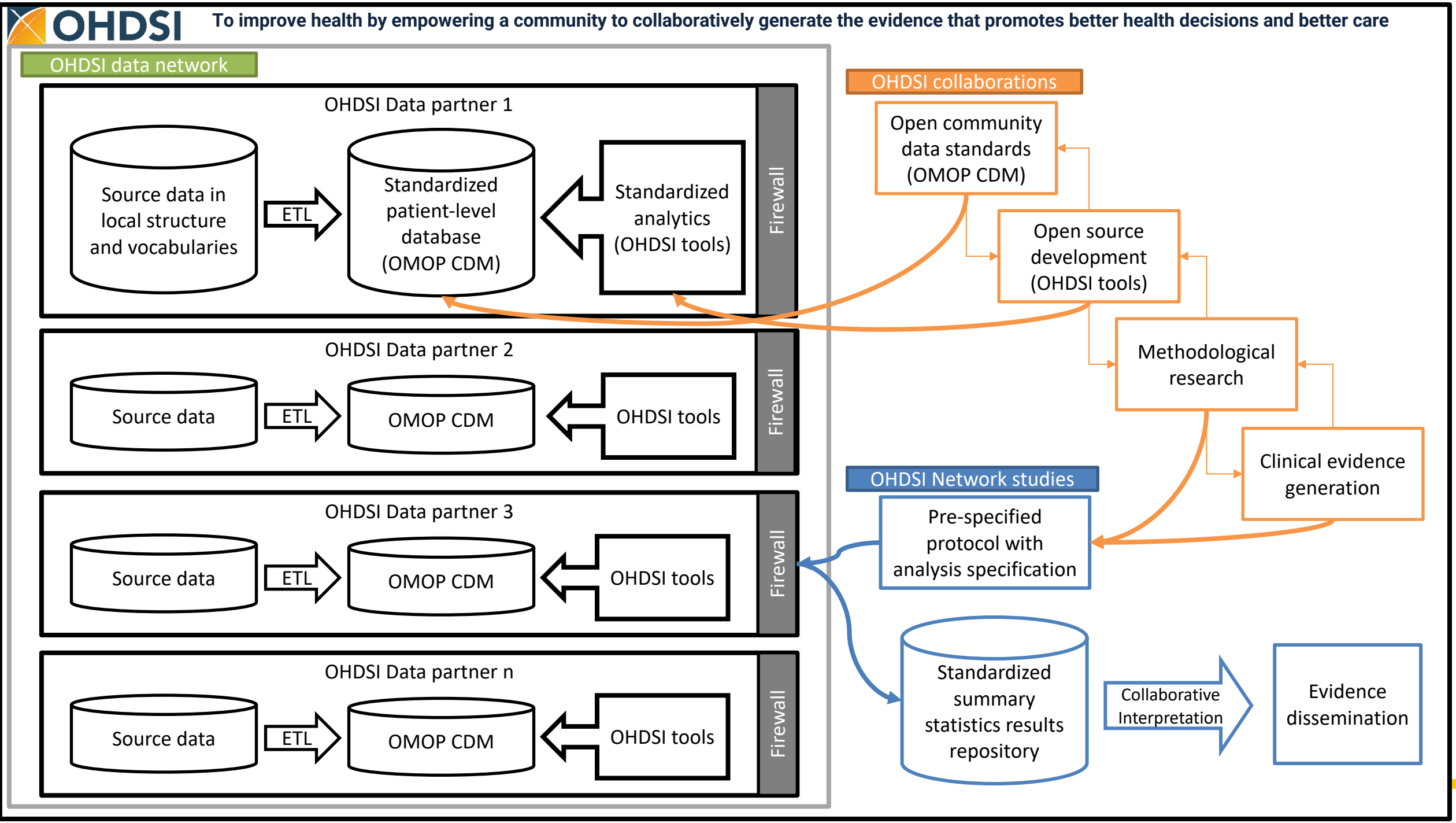


Workgroups

APAC (Asia-Pacific)
Current Participants: 289
Lead: Mui Van Zandt

ATLAS/WebAPI
Current Participants: 226
Lead: Anthony Sena

Clinical Trials
Current Participants: 252
Leads: Mike Hamidi, Lin Zhen

Medical Imaging
Current Participants: 114
Leads: Paul Nagy, Seng Chan You

Natural Language Processing
Current Participants: 379
Lead: Hua Xa

Oncology
Current Participants: 241
Lead: Asieh Golozar

Common Data Model
Current Participants: 596
Lead: Clair Blacketer

Data Quality Dashboard Development
Current Particip
Lead: Clair Bl

Early-Stage Researchers

Open-Source Community

Patient-Level Prediction
nt Participants: 355
nna Reps, Ross Williams

Phenotype Development & Evaluation
Current Participants: 249
Lead: Gowtham Rao

Education
Current Participants: 116
Lead: Nigel Hughes

Eye Car Vision Res
Current Partici
Leads: Sally Baxter

Psychiatry
nt Participants: 115
s: Dmitry Dymshyts,
ndrew Williams

Registry
Current Participants: 115
Lead: Tina Parciak

Geographic Information System (GIS)
Current Participants: 122
Leads: Robert Miller, Andrew Williams

HADE (Health An Data-to-Evide
Current Participants: 262
Lead: Martijn Schuemie

urgery and erative Medicine
nt Participants: 37
Lead: Evan Minty

Vaccine Vocabulary
Current Participants: 76
Lead: Adam Black

Healthcare Systems
Current Participants: 430
Lead: Melanie Philofsky

Latin America
Current Participants: 48
Lead: Jose Posada

Medical Devices
Current Participants: 130
Leads: Vojtech Huser, Asiyah Lin

Dentistry
Lead: Robert Koski

2023 Resolution:

1) All workgroup leaders will provide their purpose and 2023 Objectives and Key Results by end of January
2) All workgroups will present on a community call in February to encourage participation

Community collaboration events

In-person events:

- OHDSI Europe, Rotterdam, NL, June tbd

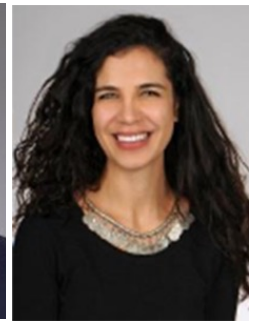
- OHDSI APAC, Sydney, Australia, July 14-15

- OHDSI Global, US, October tbd

Virtual events:

- DevCon

- Phenotype Phebruary



- Save our Sisyphus Challenge

YOU!

OHDSI Symposia!

OHDSI community activities

OHDSI DevCon 2022 Welcomes & Mentors New Contributors To Our Open-Source Environment

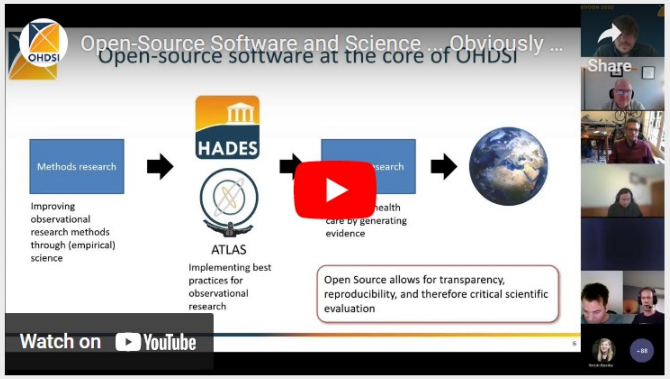
Watch All Eight Workshops, Talks & The Panel From DevCon Below

The Open-Source Community hosted the first Dev Con on Friday, April 22 as a way of accepting and mentoring new contributors to our environment. Organized by **Paul Nagy** and **Adam Black**, the event included eight workshops, talks and a panel discussion to both welcome and engage both current and future developers within OHDSI.

All videos from this session have or will be uploaded to this page. A big announcement from DevCon was the formation of the Khieron Contributor Cohort, which will help onboard and mentor open-source developers in the community. If you are interested in joining the effort, please fill out the application.

To learn more about the Khieron Contributor Cohort, please check out the State of the Open Source Community presentation below.

OHDSI DevCon Keynote



Martijn Schuemie provided the keynote address during DevCon 2022, entitled "Open-Source Software and Science … Obviously." His slides are available here.

https://www.ohdsi.org/devcon2022/

https://www.ohdsi.org/phenotype-phebruary/

A look back on 1st Save Our Sisyphus Challenge

OHDSI Home | Forums | Wiki | Github

OHDSI

Save Our Sisyphus Challenge

General

MauraBeaton 1 Mar '17

The task of a research idea from design through execution through publication can seem a daunting challenge, much like rolling a boulder up a hill. That task is all the more challenging when researchers try to go it alone, as each step requires a distinct set of skills. Observational study design requires epidemiologic understanding and statistical methodological expertise. Implementing a study design requires statistical programming ability. Interpreting and reporting results requires domain knowledge of the clinical problem.

But when you are part of the OHDSI community, you never have to go it alone. And as a team effort, what seems a arguous task can become an efficient and effective process.

We are seeking good research questions that you want to take from idea to publication. The OHDSI community will provide support through every step of the process, working with you to design an appropriate protocol, implement a network analysis package, execute across OHDSI data partners, and prepare a manuscript for publication. Our goal is to see your project through in 1 month or less, utilizing the open-source tools and process that OHDSI has established.

Our first SOS Challenge will be a population-level effect estimation study, using the comparative cohort design. Using the OHDSI framework, research questions can be expressed in the following form:

To compare the risk of [insert outcome here] between [insert target cohort here] and [insert comparator cohort here], we will estimate the population-level effect of exposure on the [insert relative risk metric] of the outcome during [insert time-at-risk here].

Mar 2017

1 / 3
Mar 2017

Mar 2017

SCIENTIFIC REPORTS
nature research

Check for updates

OPEN

Comparative safety and effectiveness of alendronate versus raloxifene in women with osteoporosis

Yeesuk Kim[1], Yuxi Tian[2], Jianxiao Yang[2], Vojtech Huser[3], Peng Jin[4], Christophe G. Lambert[5], Hojun Park[6], Seng Chan You[6], Rae Woong Park[6], Peter R. Rijnbeek[7], Mui Van Zandt[8], Christian Reich[8], Rohit Vashisht[9], Yonghui Wu[10], Jon Duke[11], George Hripcsak[4,12], David Madigan[13], Nigam H. Shah[9], Patrick B. Ryan[14], Martijn J. Schuemie[14] & Marc A. Suchard[2,15,16]

Alendronate and raloxifene are among the most popular anti-osteoporosis medications. However, there is a lack of head-to-head comparative effectiveness studies comparing the two treatments. We conducted a retrospective large-scale multicenter study encompassing over 300 million patients across nine databases encoded in the Observational Medical Outcomes Partnership (OMOP) Common Data Model (CDM). The primary outcome was the incidence of osteoporotic hip fracture, while secondary outcomes were vertebral fracture, atypical femoral fracture (AFF), osteonecrosis of the jaw (ONJ), and esophageal cancer. We used propensity score trimming and stratification based on an expansive propensity score model with all pre-treatment patient characteristics. We accounted for unmeasured confounding using negative control outcomes to estimate and adjust for residual systematic bias in each data source. We identified 283,586 alendronate patients and 40,463 raloxifene patients. There were 7.48 hip fracture, 8.18 vertebral fracture, 1.14 AFF, 0.21 esophageal cancer and 0.09 ONJ events per 1,000 person-years in the alendronate cohort and 6.62, 7.36, 0.69, 0.22 and 0.06 events per 1,000 person-years, respectively, in the raloxifene cohort. Alendronate and raloxifene have a similar hip fracture risk (hazard ratio [HR] 1.03, 95% confidence interval [CI] 0.94–1.13), but alendronate users are more likely to have vertebral fractures (HR 1.07, 95% CI 1.01–1.14). Alendronate has higher risk for AFF (HR 1.51, 95% CI 1.23–1.84) but similar risk for esophageal cancer (HR 0.95, 95% CI 0.53–1.70), and ONJ (HR 1.62, 95% CI 0.78–3.34). We demonstrated substantial control of measured confounding by propensity score adjustment, and minimal residual systematic bias through negative control experiments, lending credibility to our effect estimates. Raloxifene is as effective as alendronate and may remain an option in the prevention of osteoporotic fracture.

Save Our Sisyphus Challenge, Round 2!

Network studies are hard!

2023 Resolution:

Let's help each other learn how to do network studies by doing a network study together!

1) Collaboratively identify an important research question
2) Collaboratively design the analysis
3) Collaboratively execute across the network
4) Collaboratively interpret results and disseminate findings

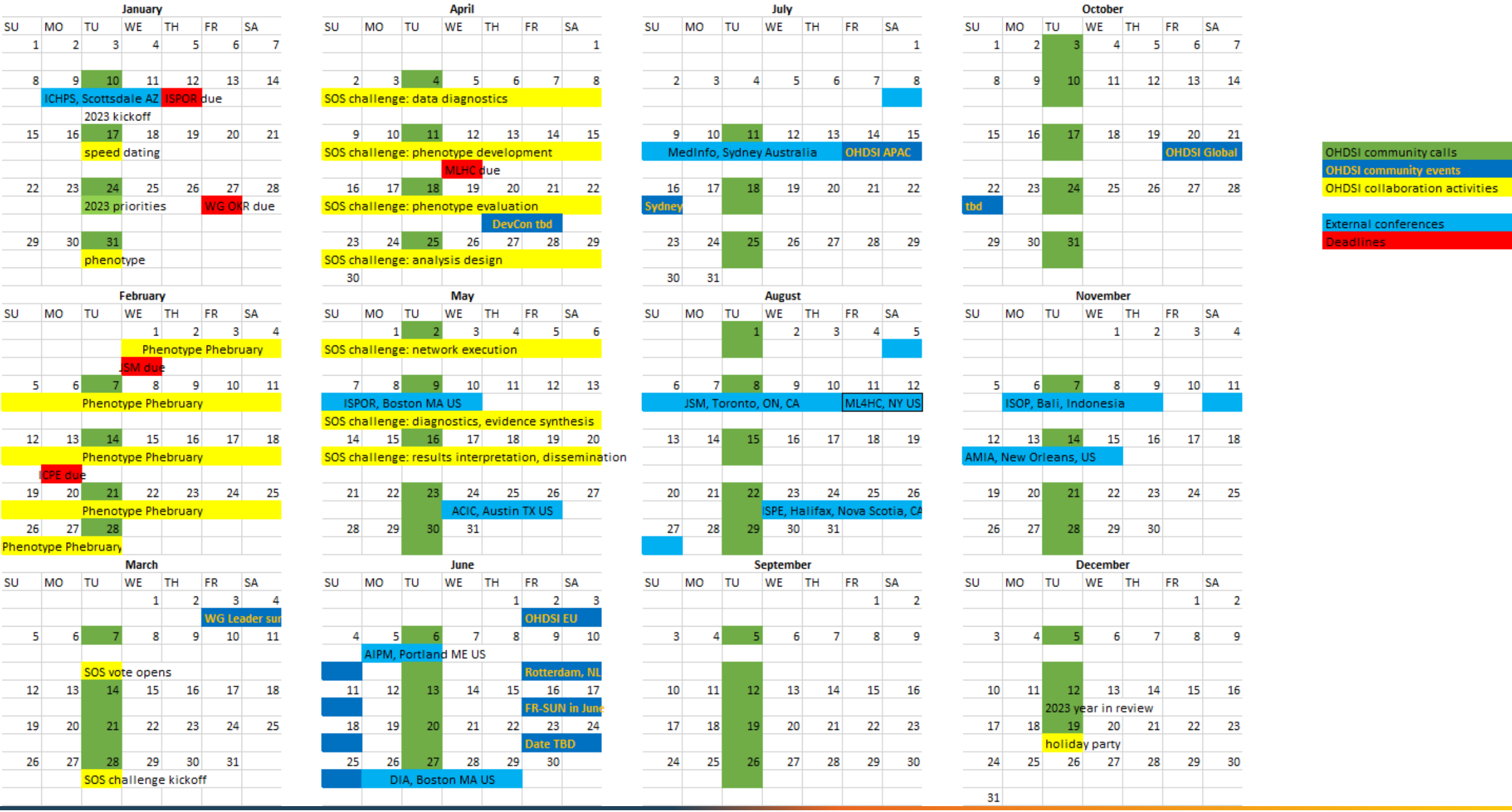
More details to come later this month

External collaboration opportunities

- Scientific conferences
- Abstract/paper submissions
- Grants
- Requests for Information
- Call for papers

2023 Resolution:

We will actively monitor external collaboration opportunities and promote them on OHDSI.org and community calls


January
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ICHPS, Scottsdale AZ
ISPOR due
2023 kickoff
15 16 17 18 19 20 21
speed dating
22 23 24 25 26 27 28
2023 priorities
WG OKR due
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phenotype
February
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JSM due
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CPE due
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SOS challenge kickoff
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SOS challenge: data diagnostics
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SOS challenge: phenotype development
MLHC due
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SOS challenge: phenotype evaluation
DevCon tbd
23 24 25 26 27 28 29
SOS challenge: analysis design
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May
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SOS challenge: network execution
7 8 9 10 11 12 13
ISPOR, Boston MA US
SOS challenge: diagnostics, evidence synthesis
14 15 16 17 18 19 20
SOS challenge: results interpretation, dissemination
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ACIC, Austin TX US
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Rotterdam, NL
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MedInfo, Sydney Australia
OHDSI APAC
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Sydney
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JSM, Toronto, ON, CA
ML4HC, NY US
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ISPE, Halifax, Nova Scotia, CA
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September
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OHDSI Global
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November
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ISOP, Bali, Indonesia
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AMIA, New Orleans, US
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December
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2023 year in review
17 18 19 20 21 22 23
holiday party
24 25 26 27 28 29 30
31
OHDSI community calls
OHDSI community events
OHDSI collaboration activities
External conferences
Deadlines

When poll is active, respond at **PollEv.com/patrickryan800**

What conferences are you looking forward to participating in during 2023?

Top

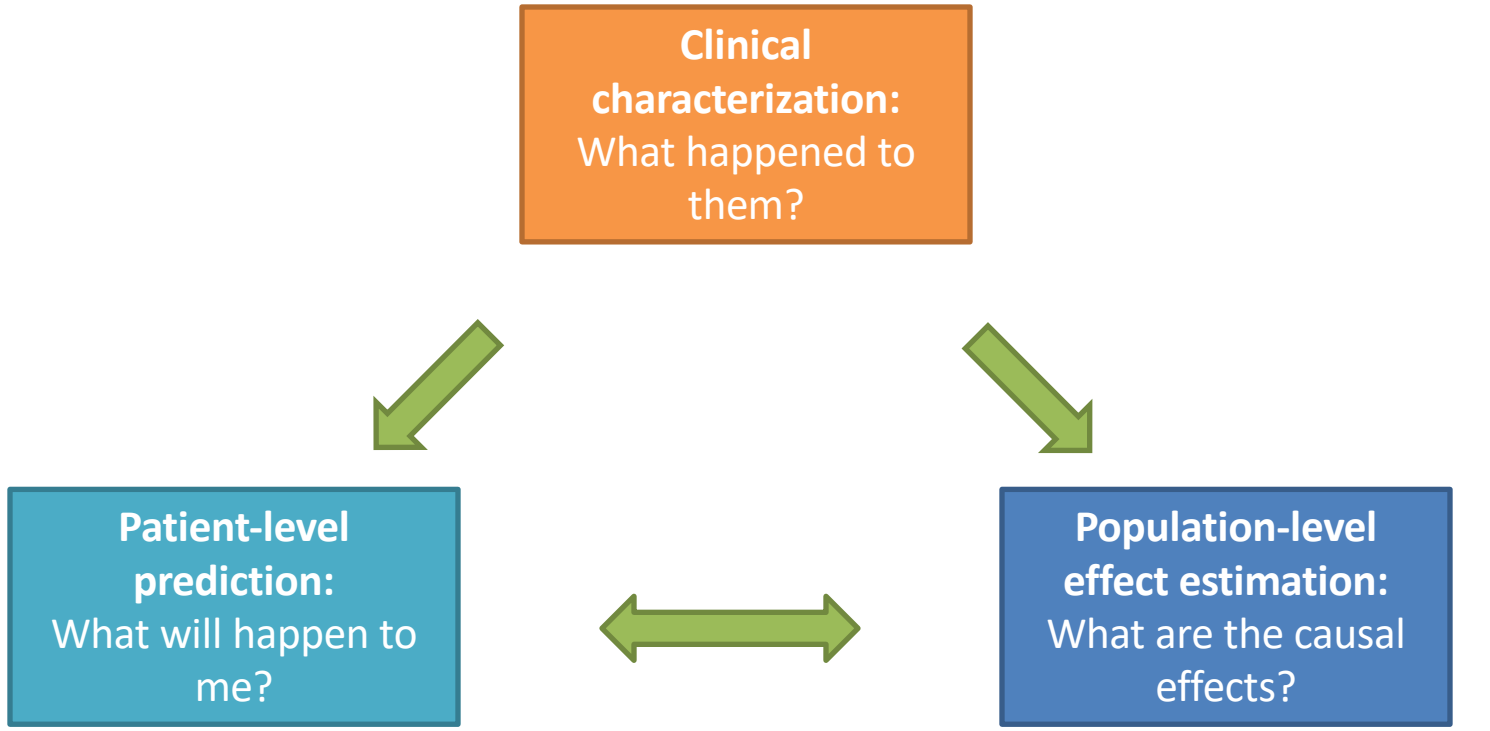
0	American Medical Informatics Association (AMIA)
0	International Society for Pharmacovigilance (ISOP)
0	International Society for Pharmacoepidemiology (ISPE)
0	Machine Learning 4 Health Care (ML4HC)
0	Joint Statistics Meetings (JSM)


OHDSI
Observational Health Data Sciences and Informatics
Future directions of OHDSI
George Hripcsak MD MS
Director, Columbia University OHDSI Coordinating Center
Professor and Chair of Biomedical Informatics
Columbia University Irving Medical Center
NewYork-Presbyterian Hospital
Patrick Ryan PhD
Johnson & Johnson
Columbia University Irving Medical Center

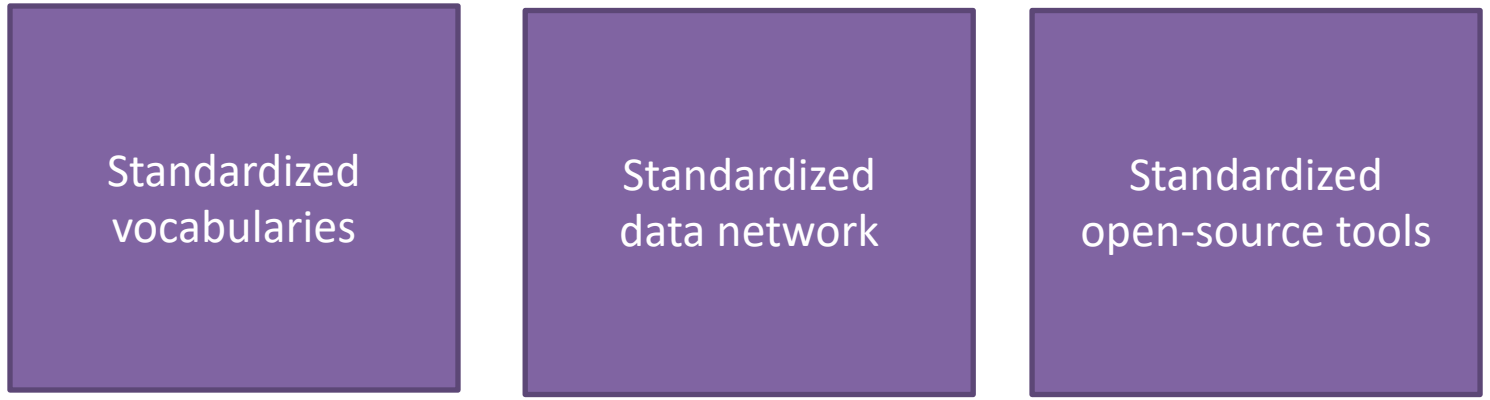
25Oct2022

Foundational elements to enable reliable evidence generation

Evidence use cases:



Foundational pillars:



Pillar #1: Standardized vocabularies

- Opportunity: Increase transparency and maturity with vocabulary development and evaluation process
- Proposed solutions:
  - Conduct landscape assessment to understand community needs
  - Develop code of conduct and developer guidelines
  - Disseminate vocabulary process and end-user documentation and roadmap
  - Establish centralized development infrastructure
  - Create standardized test development
  - Build vocabulary version release distribution service

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Pillar #2: Standardized data network

- Opportunity: Increase transparency and maturity of OHDSI data network
- Proposed solutions:
  - Create OHDSI data network catalog to encourage network studies across interested partners and promote data quality practices
  - Generate OHDSI network concept prevalence data and make accessible for ATLAS users to enable more generalizable phenotype development
  - Promote database diagnostics by having data partners share limited subset of ACHILLES to allow for users to identify databases that satisfy study criteria

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Pillar #3: Standardized open-source tools

- Opportunity: Increase adoption and ease-of-use of HADES packages and other OHDSI open-source analytic tools
- Proposed solutions:
  - Create central infrastructure to enable testing of all OHDSI tools against each of the supporting database platforms
  - Establish referent benchmark study that all organizations can execute to demonstrate that OHDSI toolstack is operational
  - Improve documentation and educational materials to promote adoption of OHDSI tools
  - Encourage greater community support of open-source development activities: we need more help to maintain our solutions!

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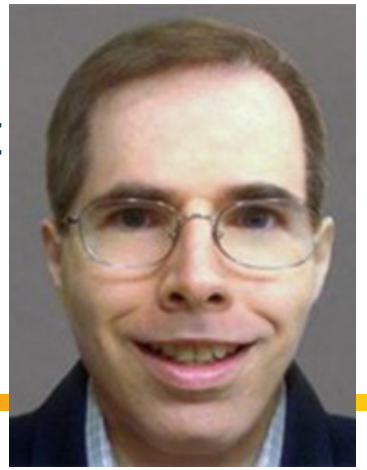

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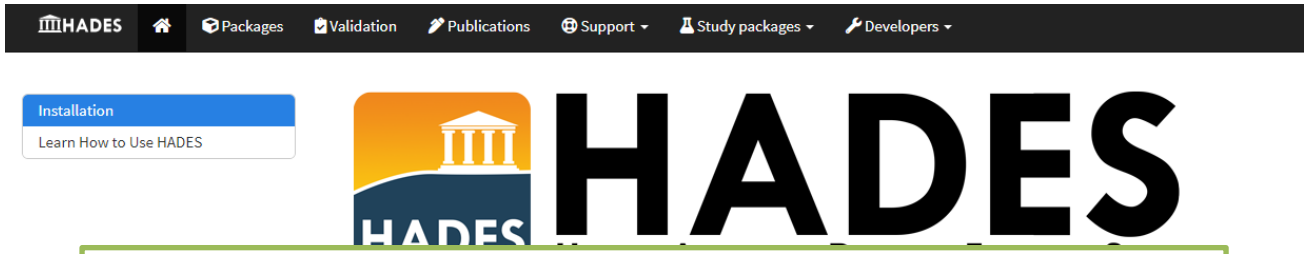

2023 Resolution:

1) All 'supported' RDBMSs must be available to all developers with test CDM to allow unit tests to run via GitActions
2) All 'supported' RDBMSs must have a Platform User Group with a Platform Champion to ensure community participation

Any platforms that do not have a test environment or platform user group by 3Q2023 will not be considered supported by OHDSI

https://ohdsi.github.io/Hades/

Technology

HADES is a set of R packages that execute against data in a database server. HADES supports traditional database systems (PostgreSQL, Microsoft SQL Server, and Oracle), parallel data warehouses (Microsoft APS, IBM Netezza, and Amazon RedShift), as well as 'Big Data' platforms (Hadoop through Apache Impala, Apache Spark, and Google BigQuery). HADES does *not* support MySQL.

Challenges:

1) In order to claim we 'support' a technology, we need to be able to test our tools against the technology.

2) In order to 'support' a technology, we need a community of experts and users of the technology

Respond at **PollEv.com/patrickryan800**

What relational database management platform are you using for your OMOP CDM and OHDSI research?

Top

1	AWS Redshift
0	Snowflake
0	DataBricks
0	Google BigQuery
0	Apache Spark

Pillar #3: Standardized open-source tools

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What other collaboration opportunities are you looking forward to in 2023?

Top

No responses received yet. They will appear here...