



Building a Healthier World Together



We thank the FDA for their generous
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through the FDA SCIENTIFIC CONFERENCE
GRANT PROGRAM (R13FD006972)



Thank you OHDSI Scientific Review Committee

- Thamir Alshammari
 - Nsikak Akpakpan
 - Juan Banda
 - Maytal Bivas-Benita
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 - Azza Shoaibi
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 - Rohit Vashisht
 - Andrew Williams
 - Chen Yanover
 - Seng Chan You
-



Thank you to those who made today happen

- Elisse Katzman
 - Craig Sachson
 - Jody-Ann McLeggon
 - Ann Marshak
 - Anita Barrett
 - Sofia Loren-Ellis-Chin
 - Tiffany Callahan
 - Kanchan Chaudhari
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 - Harry Reyes
 - Tony Sun
 - Linying Zhang
 - Lee Evans
 - James Wiggins, AWS
 - Mui Van Zandt, Iqvia
 - OHDSI Steering Workgroup
-



Titan Awards

- To recognize OHDSI collaborators (or collaborating institutions) for their contributions towards OHDSI's mission, the OHDSI Titan Awards were introduced at the 2018 Symposium and have been handed out at the U.S./Global Symposium each year since.
- Annually, community members are invited to nominate individuals or institutions they feel have made significant contributions towards advancing [OHDSI's mission, vision and values](#).
- Once nominations are submitted, the OHDSI Titan Award Committee will select the award winners.



Congratulations to our 2022 Titan Award Nominees!



Thamir Alshammary • **Juan Banda** • Adam Black • **Fan Bu** • Montse Camprubi • **Yong Chen** • Marcel de Wilde • **Frank DeFalco** • Egill Fridgeirsson • **Jamie Gilbert** • Jake Gillberg • **Jason Hsu** • Nigel Hughes • **Yu-Chuan Jack Li** • Mik Kallfelz • **Andy Kanter** • Elisse Katzman • **Chungsoo Kim** • Greg Klebanov • **Christopher Knoll** • Kristin Kostka • **Manlik Kwong** • Christophe Lambert • **Martin Lavallee** • Jing Li • **Xintong Li** • Star Liu • **Ajit Londhe** • Aniek Markus • **Evan Minty** • Paul Nagy • **Karthik Natarajan** • Aki Nishimura • **Anna Ostropolets** • Melanie Philofsky • **Gowtham Rao** • Berta Raventos • **Craig Sachson** • Martijn Schuemie • **Azza Shoaibi** • Marc Suchard • **Cynthia Sung** • Joel Swerdel • **May Terry** • Don Torok • **Cynthia Yang** • Jacob Zelko • **Center for Surgical Science Prediction study team** • **LEGEND-T2DM** • **N3C** • Thrombosis with Thrombocytopenia phenotype project team • **Vaccine Evidence Workgroup**



Titan Awards



Data Standards

This award recognizes extraordinary contributions by an individual, organization, or team in development or evaluation in community data standards, including OMOP common data model and standardized vocabularies



2022 Titan Awards



Melanie Philofsky





Titan Awards



Methodological Research

This award recognizes extraordinary contributions by an individual, organization, or team in development or evaluation in analytical methods for clinical characterization, population-level effect estimation, or patient-level prediction



2022 Titan Awards



Fan Bu





Titan Awards



Open-Source Development

This award recognizes extraordinary contributions by an individual in design, development, testing, and deployment of open-source software to enable observational analyses



2022 Titan Awards



Egill Fridgeirsson

James Gilbert





Titan Awards



Clinical Applications

This award recognizes extraordinary contributions by an individual, organization, or team in generating clinical evidence that improves health by informing better health decisions and better care



2022 Titan Awards



Xintong Li





Titan Awards



Community Collaboration

This award recognizes an individual for their collaborative spirit in helping their fellow community members reach their goals



2022 Titan Awards



Ajit Londhe





Titan Awards



Community Leadership

This award recognizes an individual for their leadership in advancing the OHDSI mission



2022 Titan Awards



Paul Nagy





Titan Awards



Community Support

This award recognizes an individual, team, or organization for their contributions to ensuring the sustainability of the OHDSI community



2022 Titan Awards



Craig Sachson





Housekeeping

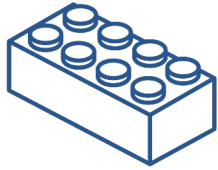
- Don't forget to vote for Best Community Contribution!
 - Please fill out evaluation form to tell us how we can do better next year
 - Don't leave before the end of my closing talk, we need a group photo!
 - Rest of weekend, OHDSI Collaborator activities all downstairs, starting at 8amET.
-



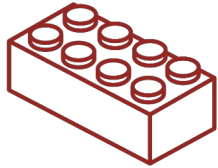
Building a Healthier World Together



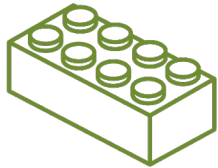
Data are Like Lego Bricks for Phenotyping



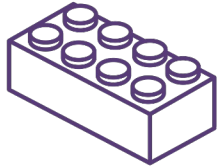
Conditions



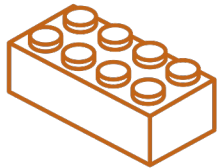
Drugs



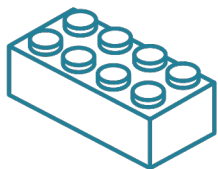
Procedures



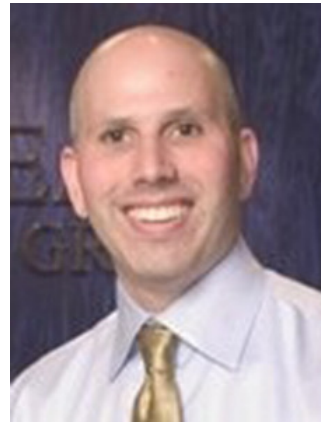
Measurements



Observations

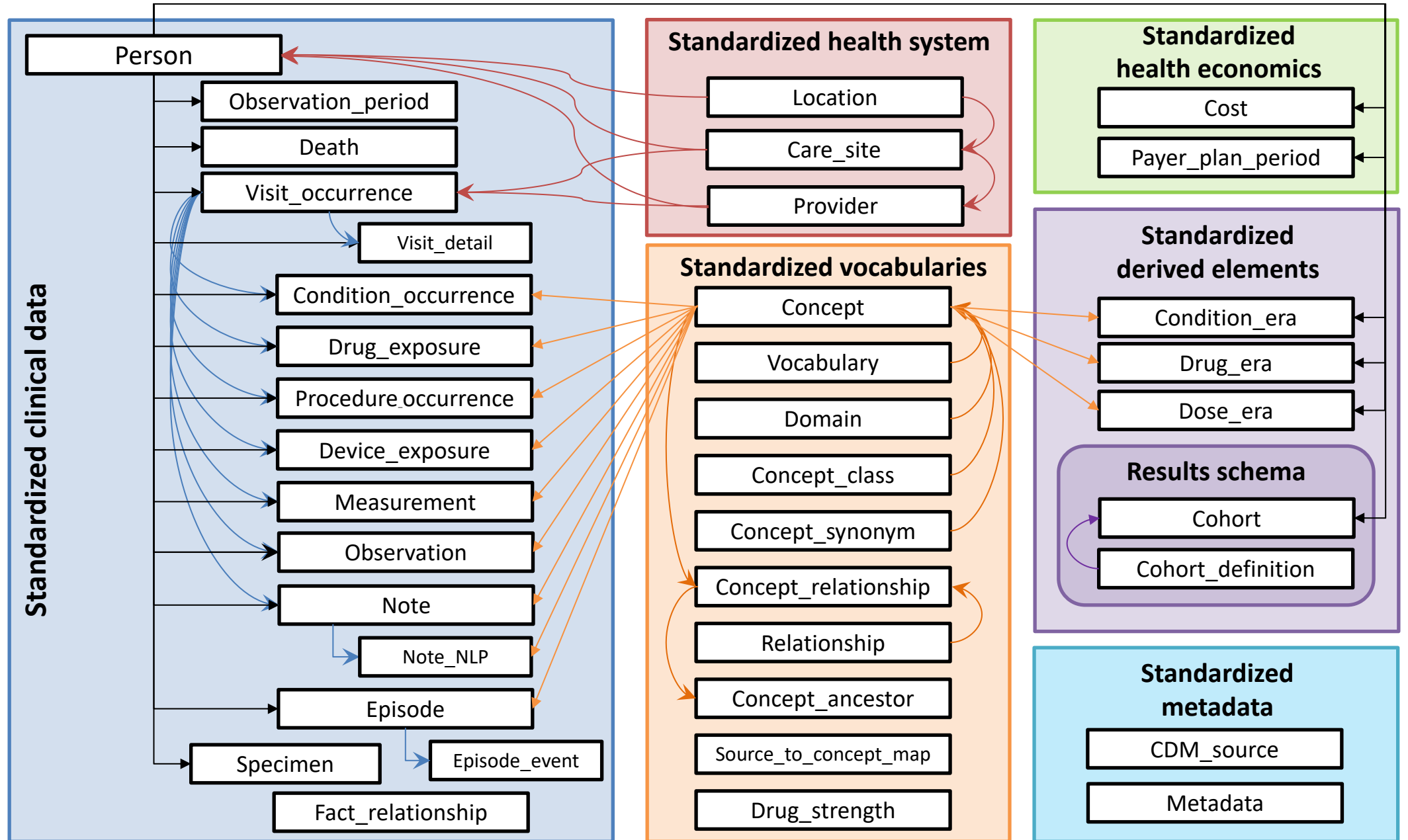


Visits



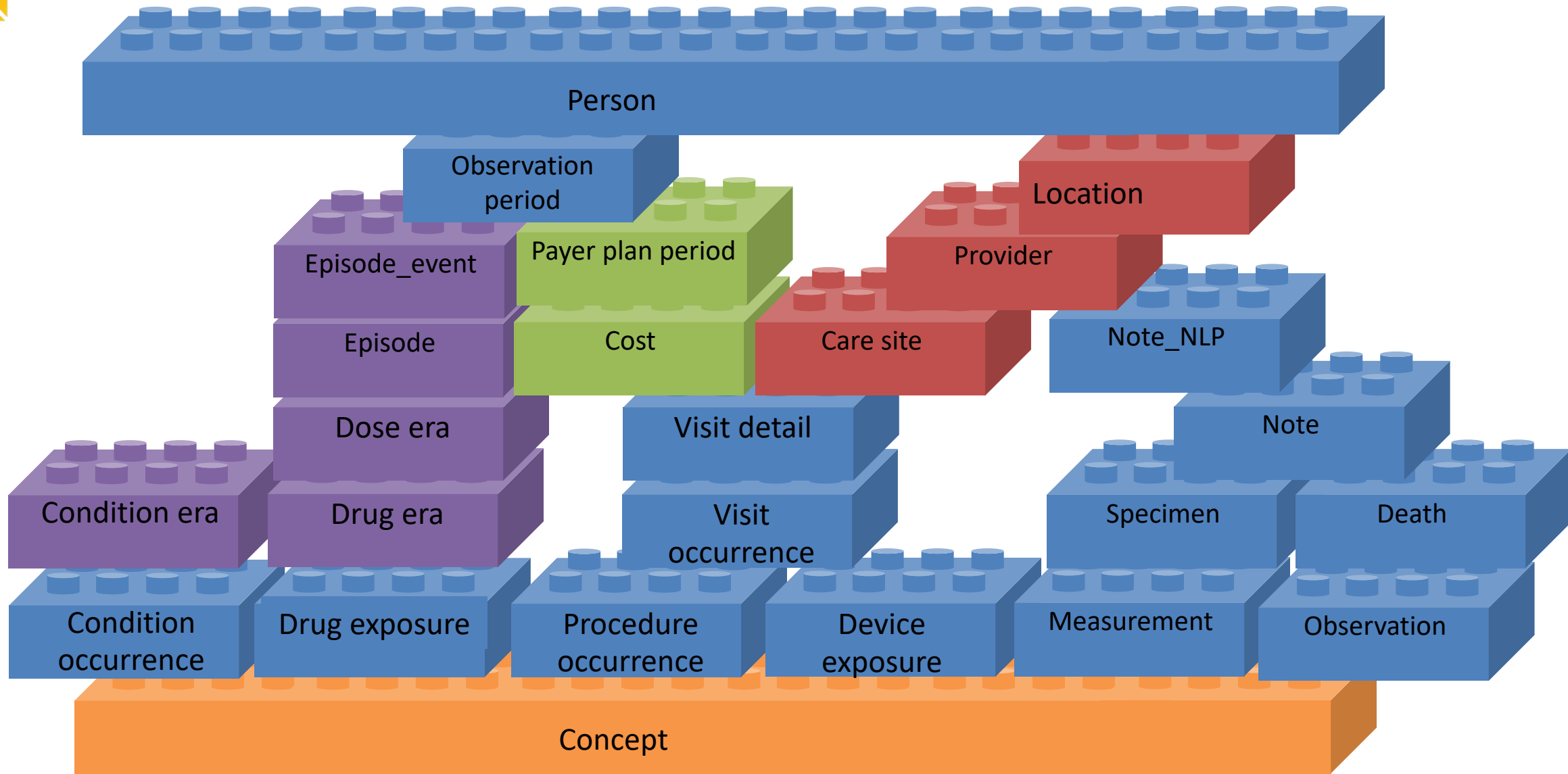
OHDSI 2016

OMOP Common Data Model





Building standardized data



[Installation](#)[Learn How to Use HADES](#)

HADES

HEALTH ANALYTICS DATA-TO-EVIDENCE SUITE

HADES (formally known as the OHDSI Methods Library) 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 observation study from data to estimates and supporting statistics, figures, and tables. The packages interact directly with observational data in the [Common Data Model \(CDM\)](#), and are designed to support both large datasets and large numbers of analyses (e.g. for testing many hypotheses including control hypotheses, and testing many analyses design variations). For this purpose, each Method 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.

HADES has already been used in many published clinical and methodological studies, as can be seen in the [Publications section](#).

Installation

See the Support section for instructions on [setting up the R environment](#) for HADES, including Java and RTools. Each package in HADES can be installed independently, but it is also possible to install all HADES packages at once, as described [here](#). You can learn how connect to your database using HADES [here](#).

Learn How to Use HADES



Building open source analytics

CohortMethod

Self Controlled
Case Series

Self Controlled
Cohort

Empirical
Calibration

Evidence
Synthesis

Patient Level
Prediction

Deep Patient
Level Prediction

Ensemble Patient
Level Prediction

CirceR

CapR

Cohort
Generator

Phenotype
Library

Cohort
Diagnostics

Andromeda

Database
Connector

SqlRender

Parallel Logger

Eunomia

ROhdsiWebApi

Cyclops

Iterative Hard
Thresholding

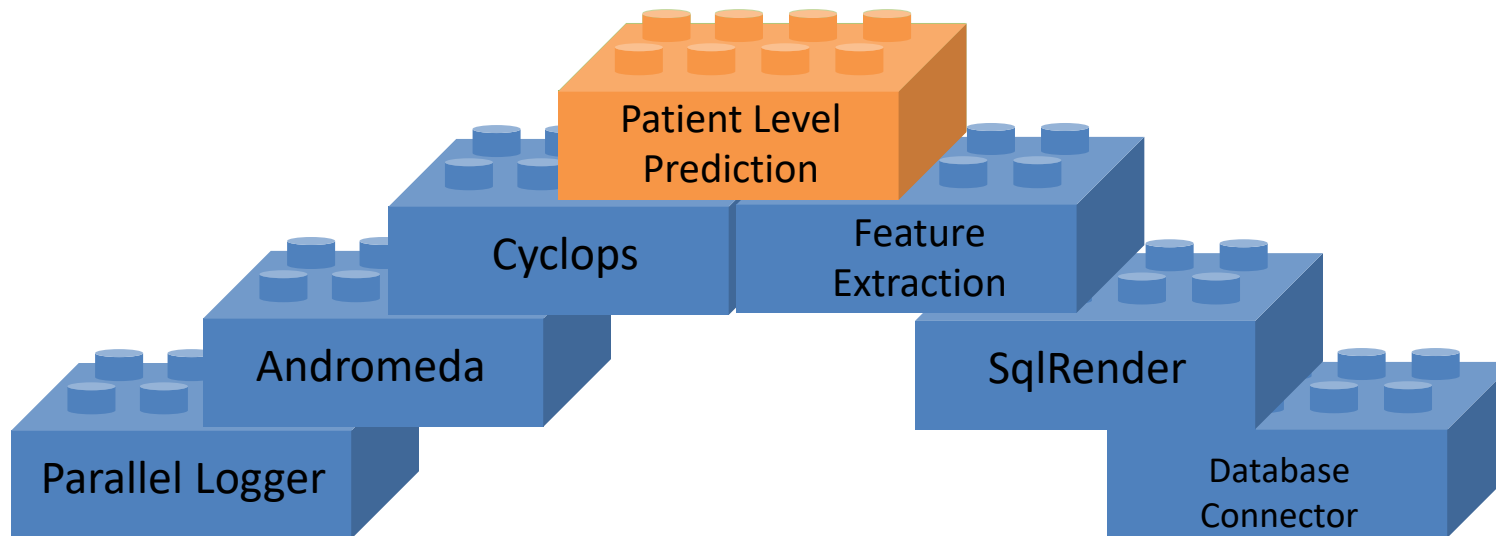
Feature
Extraction

Hydra

OhdsiSharing



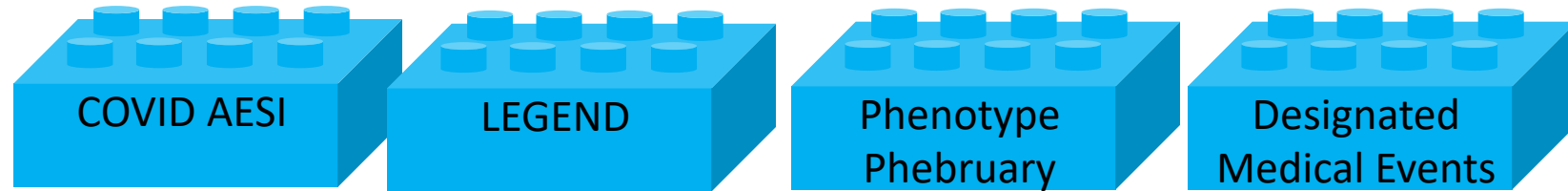
Building an open source analytics ecosystem



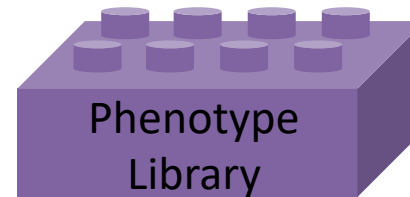


Building community phenotypes

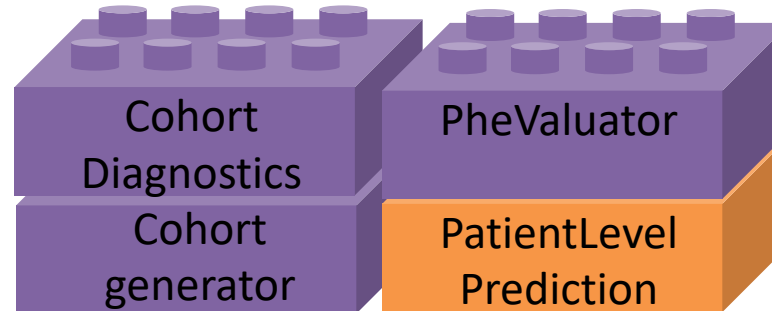
Phenotypes:



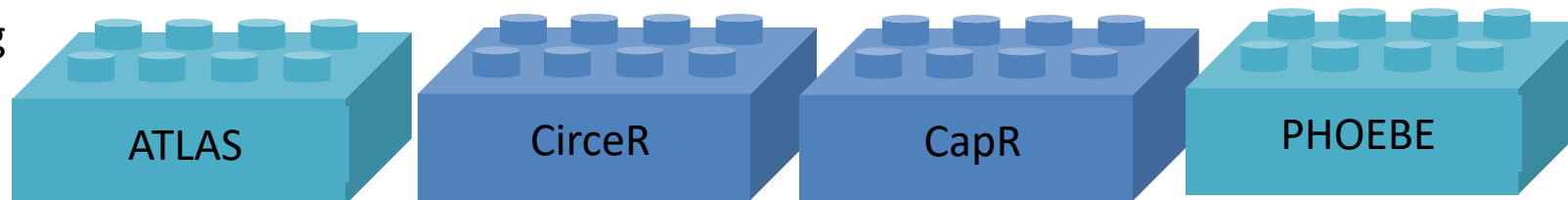
Tools for disseminating phenotypes:



Tools for evaluating phenotypes:

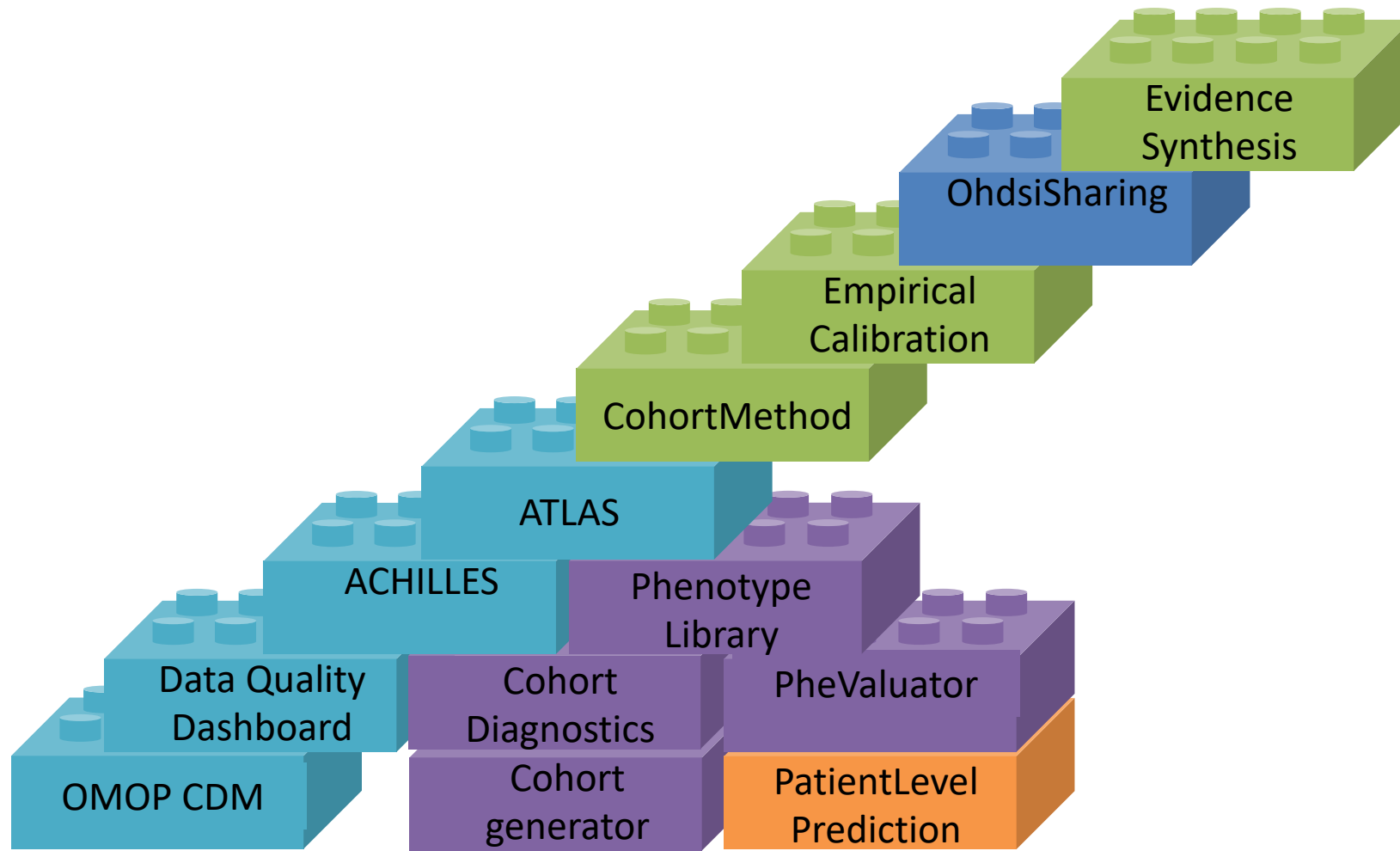


Tools for developing phenotypes:





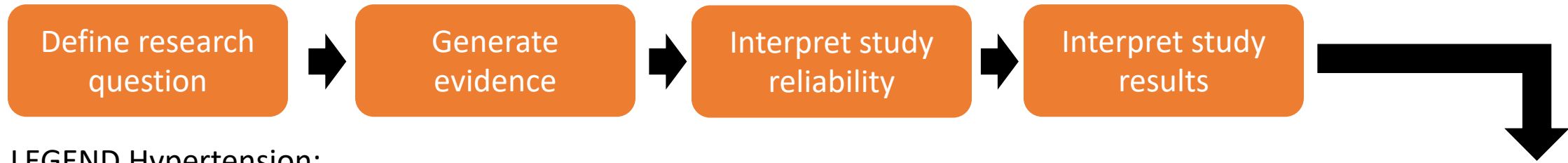
Building network studies





Pre-specification of a systematic approach

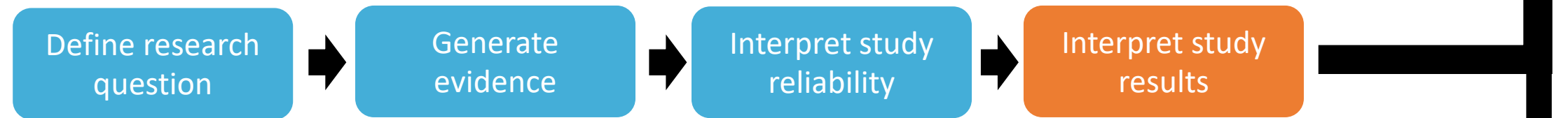
Traditional observational study:



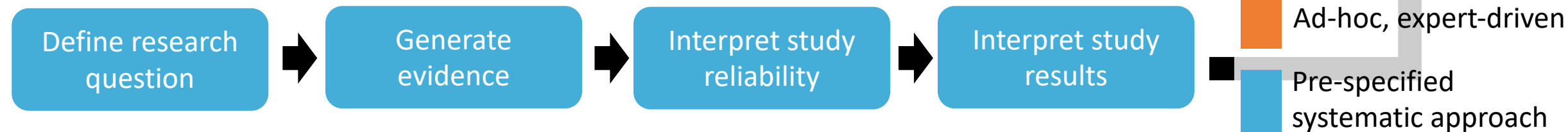
LEGEND Hypertension:



New recommendation:

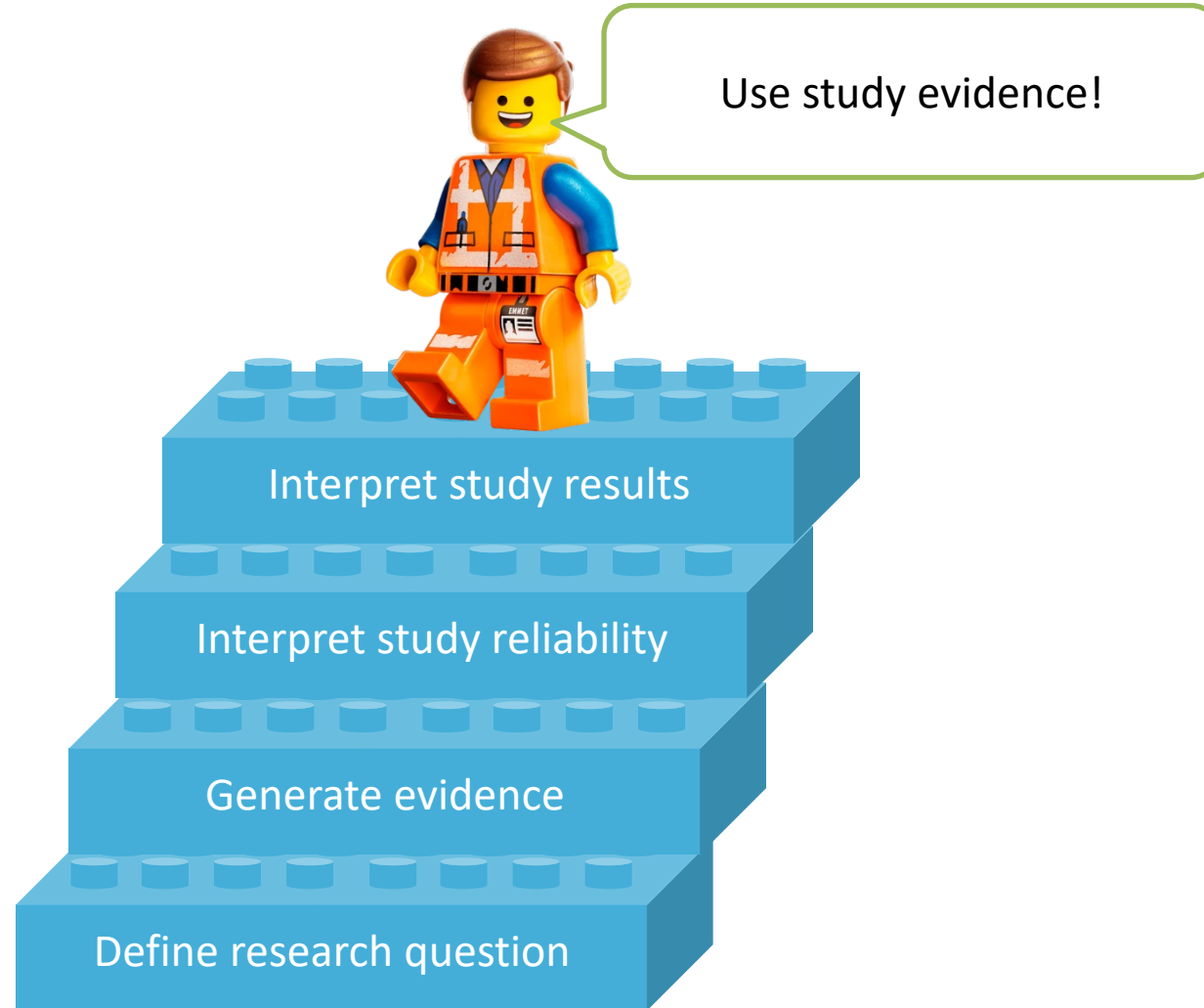


Future:



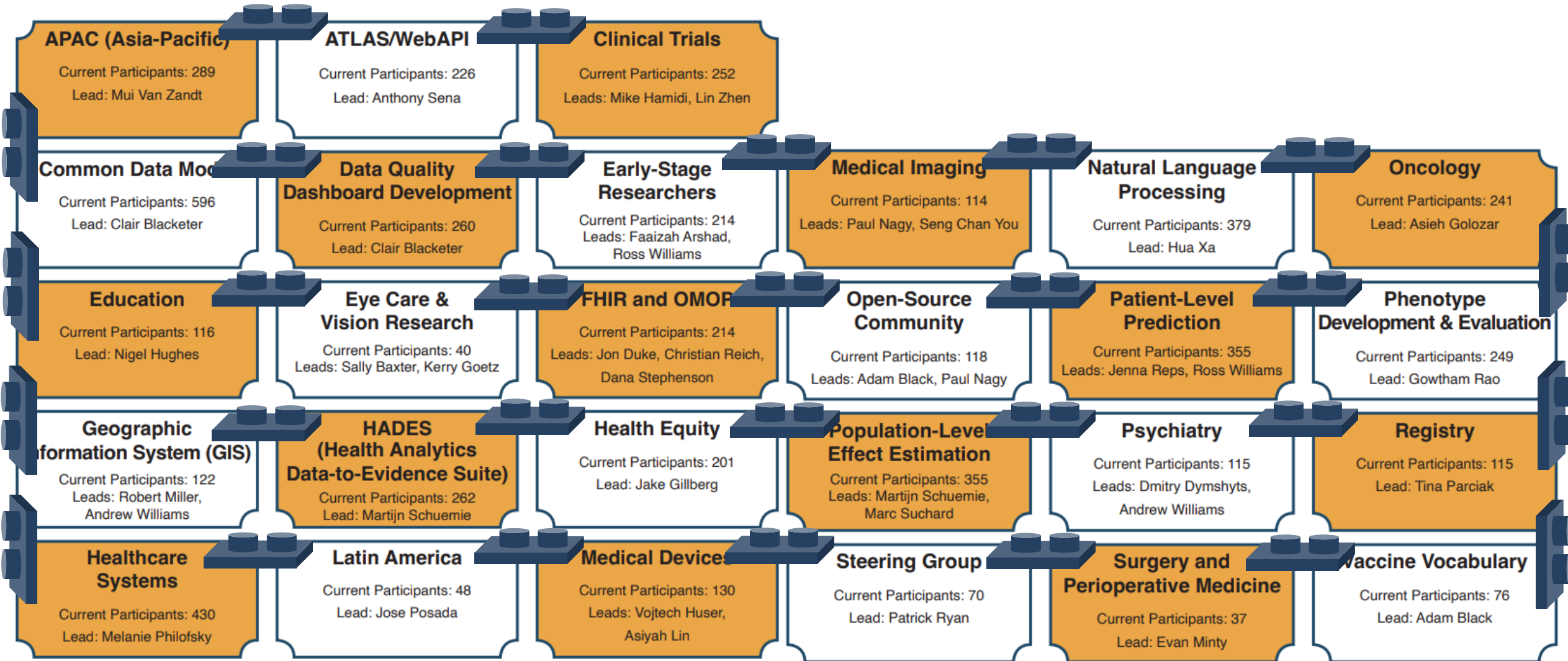


Building a systematic approach to evidence generation and interpretation





Building collaborations







What are we going to build
together?



Let's have a OHDSI builder challenge

- Each table is one team of up to 12 individuals
- Each team will receive one project and have **15** minutes to complete it
 - Each project contains:
 - 1 team membership form
 - 1 instruction sheet
 - 3 Sharpie markers
 - 1 Lego baseplate (16x16 studs) with a colored pattern
 - Lots of random Lego bricks that match the colors on the baseplate
- Your team's tasks:
 1. Come up with a team name and list of all team members on the team membership form
 2. Every team member must sign their name on 1 Lego brick
 3. Build the most creative Lego art/sculpture you can before time expires



Ground rules for building your sculpture

- Do not change your baseplate pattern
- Only build within the 16x16 stud area, no pieces can hang over any edge
- Only build with bricks that match the color of the stud below it, starting with the baseplate colors. So, build blue on blue, white on white. Colors should not hang over different colors
- All the signed bricks must be used, plus whatever other bricks you choose (but you do not need to use all bricks)



Ground rules

You can build BLUE pieces here...

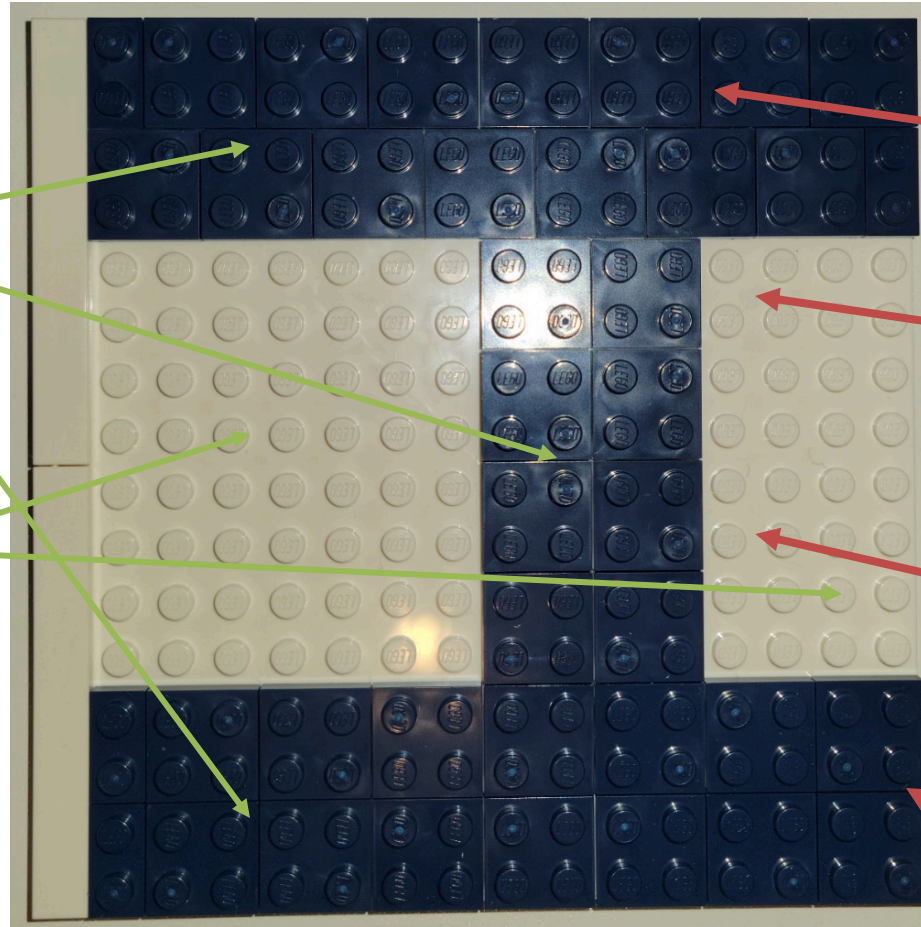
You can build WHITE pieces here...

You can NOT put WHITE pieces here

You can NOT put BLUE pieces here

You can NOT have a BLUE piece hang over the white stud

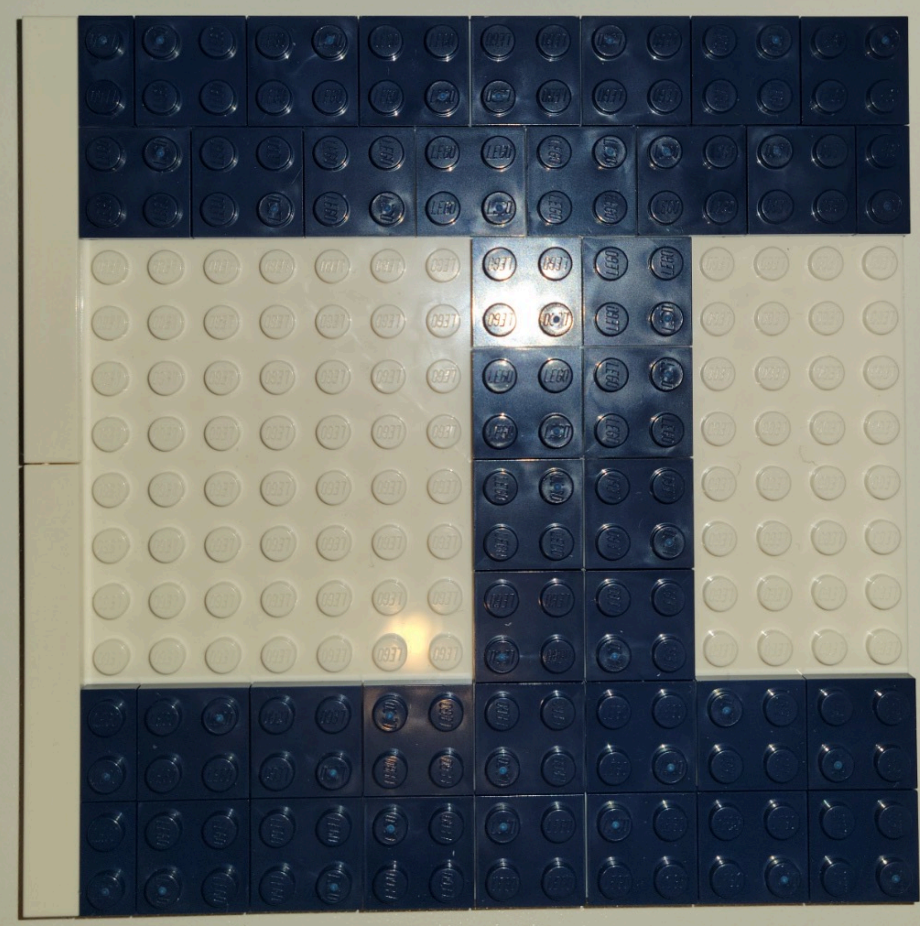
You can NOT have any piece hang over the edge



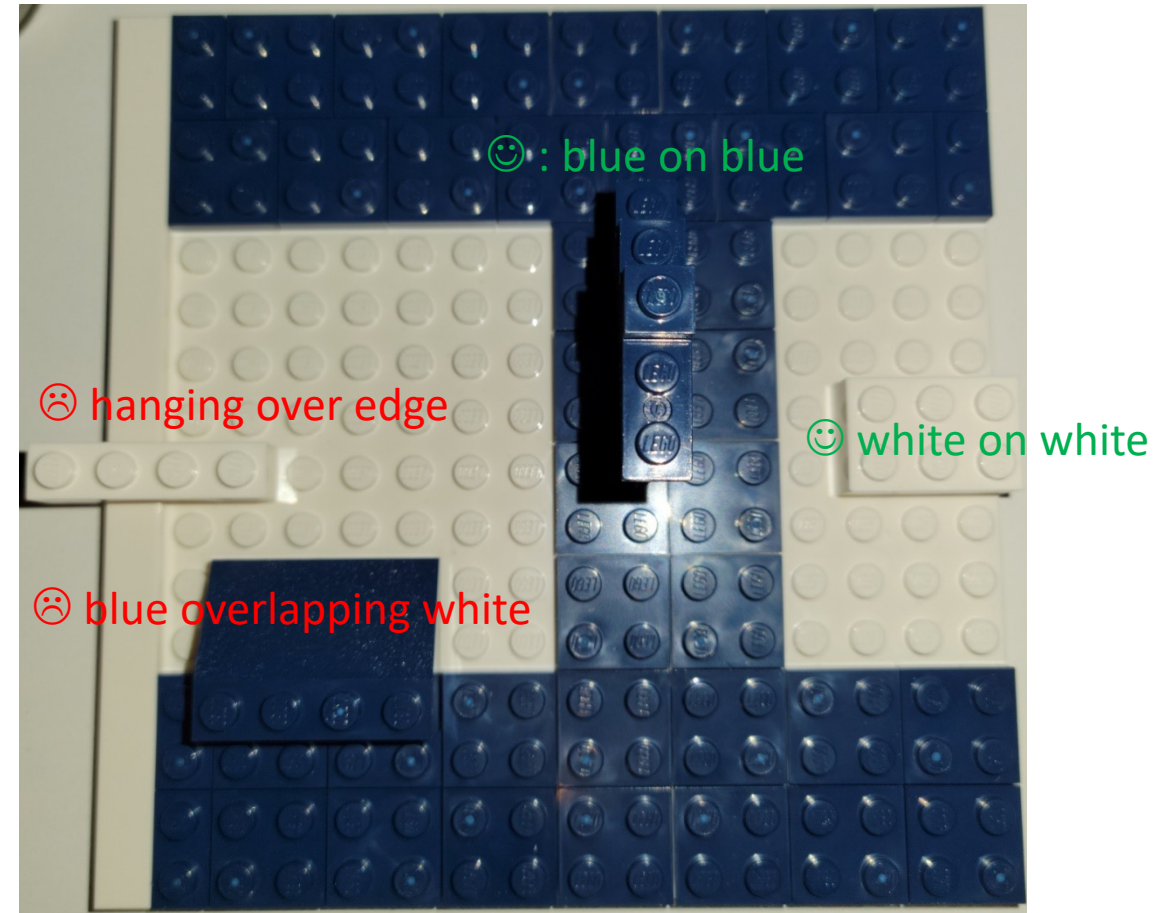


Ground rules

How it starts:



How it should (and shouldn't) be going:





OHDSI 2022 Builder Challenge

00 : 15 : 00





OHDSI



Housekeeping

- Group photo now! Craig will provide directions
- AFTER group photo:
 - Get your LEGO minifigure
 - If you were in the video, find your name
 - If you weren't in the video, come build your own!
 - Get your OHDSI long-sleeve shirt
 - Get your OHDSI frame, we will send you the picture of group photo to include in it
 - Enjoy the network reception
 - Make sure you hit up the OHDSI photo booth, several special surprises there!
 - Hint: some of the Lego themed items are edible 😊