

OHDSI APAC Community Call

20261015

Agenda

- **OHDSI News**
- **2026 OHDSI APAC Symposium Preview**
- **Community Discussion**: Leveraging AI in OHDSI, Does Standardization still matter in the Era of Medical AI/Foundation Model?

Congratulations to our 2026 Titan Nominees!

ASSURE team, David Bard, Robert Barrett, Clair Blacketer, Rich Boyce, Danielle Boyce, Evanette Burrows, Cindy Cai, Carrot and Bunny Team, Cindy Chen, Pascal Coorevits, Data4Life, Scott Duvall, Noémie Elhadad, Lee Evans, Eye Care and Vision Research WG, FastOMOP, Mornin Feng, Davera Gabriel, Josh Gagne, Sarah Gasman, Lars Halvorsen, Peter Hoffmann, Christian Högberg, Michelle Hribar, Jason Hsu, Ben Illigens, Andy Kanter, Elisse Katzman, Masha Khitrun, Mack Kigada, Chungsoo Kim, Chris Knoll, Haeun (Hannah) Lee, Gaeun Lee, Renske Los, Benjamin Martin, Valentina Martufi, Mind Meets Machine, Evan Minty, Karthik Natarajan, Bill O'Brien, Sean O'Reilly, OHDSI UK organizers, Julio Oliveria, Anna Ostropolets, Woo Yeon (Jen) Park, Rowan Parry, Paul Petraro, Melanie Philofsky, Hanieh Razzaghi, Jenna Reps, Harry Reyes Nieva, Marti Sabate, Craig Sachson, Alexander Saelmans, Martijn Schuemie, Sarah Seager, Anthony Sena, Cynthia Sung, Jim Todd, Mui Van Zandt, Annelies Verbiest, Fleur Vereijken, Katia Verhamme, Ilse Vermeulen, David Vizcaya, Tom White, Qi Yang, Seng Chan You, Bingyu Zhang

Building Community Generating Reliable Evidence Advancing Data Science

2026 OHDSI GLOBAL SYMPOSIUM

October 20-22

Hyatt Regency
2 Albany Street
New Brunswick, New Jersey
USA 08901

Symposium recap: n = you?



2026 OHDSI APAC Symposium @ Seoul, Korea

- https://www.youtube.com/watch?v=ll-FtlguGYc



2026 APAC Symposium UPDATE

Main Conference | Friday · November 13, 2026

08:30–09:30	Opening Keynote & OHDSI Global Update
09:30–10:35	**SESSION 1 | REGULATORY**
10:50–12:15	**SESSION 2 | REPRODUCIBLE & RELIABLE (AI)**
12:15–13:45	Lunch · Poster & Networking
13:45–14:45	**SESSION 3 | REGIONAL BUT GLOBAL**
15:00–16:25	**SESSION 4 | RESEARCH IN ACTION**
16:40–17:40	Lightning Talks & Closing

2026 APAC Symposium UPDATE

Tutorial | Saturday · November 14, 2026

09:00–09:30	**Registration / Reception**	
09:30–09:50	**OHDSI / OMOP Introduction**	Mui Van Zandt
09:50–10:50	**OMOP CDM and Vocabulary**	Jason Hsu
10:50–12:00	**OHDSI Analyses: Building Cohorts**	Seng Chan You
12:00–13:00	**Lunch**	
13:00–13:40	**AI-based Cohort Creation**	Peter Hoffmann (D4L)
13:40–14:20	**Basics of Cohort Diagnostics**	Thanh-Phuc Phan
14:20–14:30	**Break**	
14:30–15:00	**Interpreting Results**	Nicole Pratt

2026 APAC Symposium UPDATE

Datathon | November 14–15, 2026

DAY 1 · SAT, NOV 14

Orientation & team work

08:30–09:00	Registration / Reception
09:00–10:00	Orientation — Chungsoo Kim
10:00–12:30	Team project work
12:30–13:30	Lunch
13:30–19:00	Team work continues
17:00	Dinner during team work

DAY 2 · SUN, NOV 15

Presentations & closing

08:30–09:00	Registration / Reception
09:00–12:00	Team work; lunch at 11:00
12:00–14:00	Team presentations
14:00–14:10	Judges' discussion
14:10–14:20	Awards & closing

Team work: AI Institute 3F / Medical School PBL rooms • Final presentations: Yoo-il Han Hall

2026 APAC Symposium UPDATE

Lightning Talks | Friday · November 13 · 16:40–17:30 KST

1 Jack Janetzki

How to develop a good research question: use cases for hospital electronic medical record data in the Australian Health Data Evidence Network

2 Septi Melisa

The CARVE Study: Cardiovascular Adverse Reaction Vigilance and Evaluation

3 Changhoon Han

Diagnostic Resilience and Post-Diagnosis Mortality Across 16 Diseases and Four Health Systems During COVID-19

4 Xiaowei Chen

The effect of angiotensin-receptor blockers on the development of chronic diabetic complications in patients with type 2 diabetes mellitus and hypertension: target trial emulation study

5 Sarah Ulfa

Opportunities and Challenges in Aligning Tuberculosis Data in Indonesia with the OMOP Common Data Model

6 Cynthia Sung

Mapping Clinical Trial Adverse Events in the OMOP CDM

Nov 13 · 16:40–17:30 KST | Speaker order to be confirmed

2026 APAC Symposium UPDATE

Tutorial & Datathon Registration

REGISTRATION CLOSED

Tutorial · November 14, 2026

Datathon · November 14–15, 2026

Thank you for your interest and participation.



Leveraging AI in OHDSI:

Does Standardization still matter in the Era of Medical AI/Foundation Model?

Moderator: Mengling 'Mornin' Feng, PhD
Associate Professor, Saw Swee Hock School of Public Health, National University of Singapore (NUS)
Director, AI for Public Health (AI4PH) Programme
Domain Lead, Biostatistics, Modelling, AI and Data Analytics (B.MAD)

Special guests: Nico Noesch, Zhi Min



NUS National University of Singapore

Saw Swee Hock School of Public Health

Love and Hate between OHDSI and AI?

Mengling 'Mornin' FENG, PhD

Associate Professor
Director of AI for Public Health
Saw Swee Hock School of Public Health
National University of Singpaore

OHDSI Singapore Chapter Chair

mornin@nus.edu.sg



OHDSI enables AI?



Auto-Frail: Frailty Risk Assessment Tool for Elderlies

AutoFRAIL

- **Frailty** is …
  - Decline in physical capacity, and the increased vulnerability to adverse health outcomes in elderly people.
- In **Singapore** …
  - Every 1 in 16 elderly people above 60 years old are frail (6%).
  - Health systems are struggling to deliver quality healthcare against challenges posed by ageing population.
- Our solution is **Population-level Frailty Screening** …



typically done as a bedside assessment

Time and Money Consuming

Evolution



let AI supports doctors to make decisions

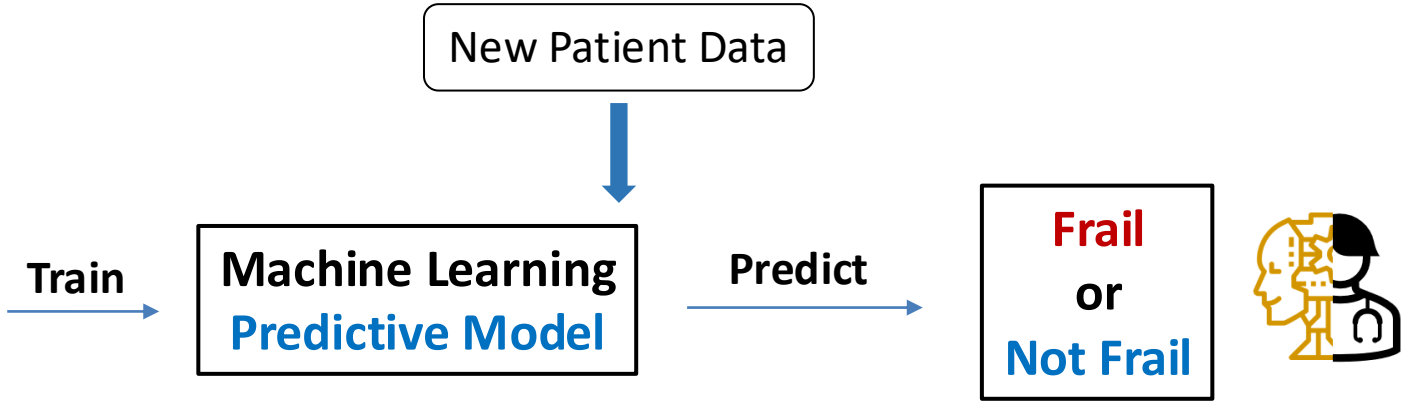
Efficient, Accurate, Economical

AutoFRAIL

- To achieve the **Goal** …

14,319 rows of
Electronic Health Records (EHR)
from **GP Clinics**

Demographical Information	Hospital Admission
Laboratory Tests	Treatments



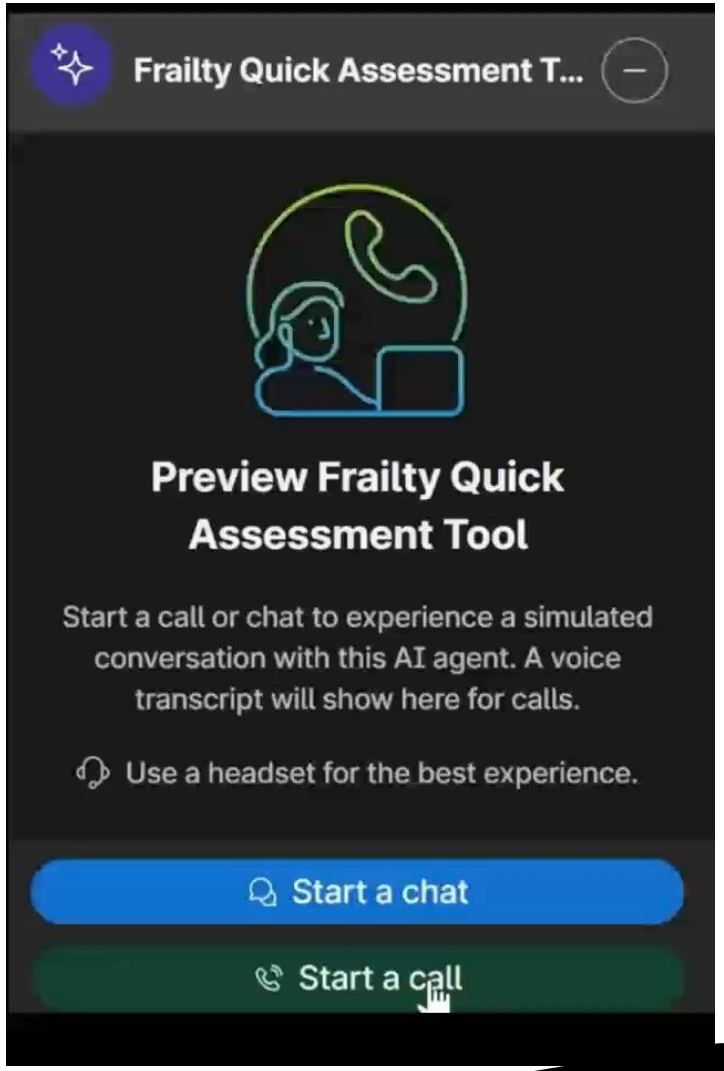
Real-time Interactive Frailty Screener

A Demo Video

AutoFRAIL

webex by cisco

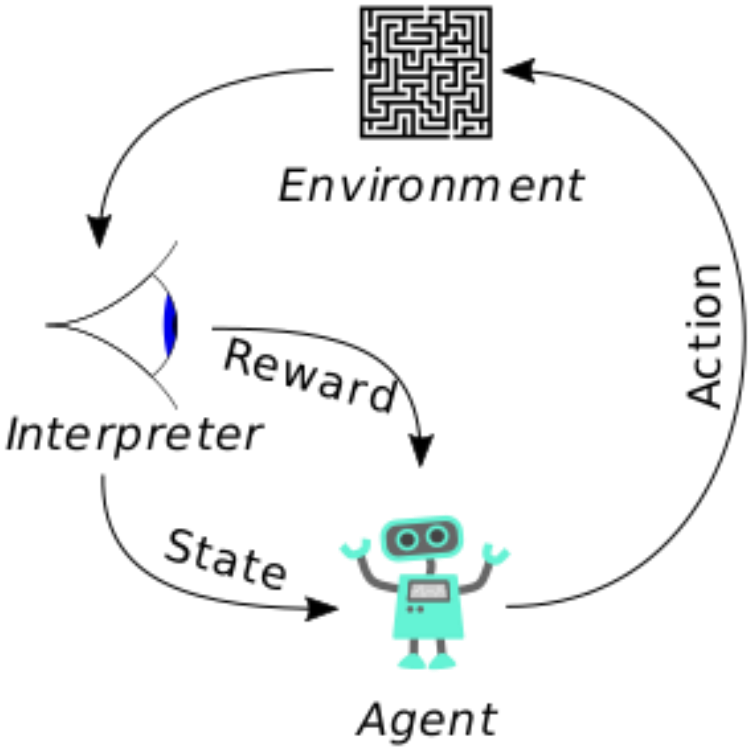
- A voice-enabled, 15-question frailty assessment assistant
- Generate real-time frailty risk prediction
- Followed by:
  - evidence-based health recommendations
  - specific local resources (e.g., AIC, Senior Activity Centres) with real contacts





Reinforcement Learning (RL) for Treatment Recommendation

What is Reinforcement Learning (RL)?



- An agent interact with an environment
- Sequentially, the agent observes the environment, and takes an action
- The action changes the environment which then incur rewards/penalties
- The agent try to maximize total rewards

EZ-Vent

- **Context:** Mechanical Ventilation is critical in the ICU for respiratory support.
- **Challenge:** Improper settings carry high risks, including lung injury and increased mortality.
- **Gap:** Current “one-size-fits-all” protocols do not address individual patient variability.
- **Solution:** AI provides personalized recommendations for clinical decision-making support.



EZ-Vent Demo





AI enables OHDSI?

Our Agentic ETL for the OMOP CDM

Proposed architecture: agents draft and investigate, approved pipelines transform and publish

VERSIONED KNOWLEDGE CDM + THEMIS conventions | Athena vocabularies | Source dictionaries | Approved mappings

WORKFLOW ORCHESTRATOR Persist state, restrict tools, record evidence, bound retries and route exceptions

01 Discover
Profile schemas
Find keys and gaps

WhiteRabbit / SQL

02 Map & specify
Select valid concepts
Specify joins and dates

Athena / Usagi

03 Build & execute
Generate ETL and tests
Execute sandbox jobs

SQL or Spark / CI runner

04 Validate
Reconcile records
Diagnose and retest

DQD / Achilles

05 Release
Apply release policy
Monitor data drift

Registry / monitoring

HUMAN REVIEW Clinical steward: uncertain mappings and rule changes | Data owner: first release and material changes

CONTROLLED DATA EXECUTION

Source snapshot
EHR, claims, labs

Staging
Preserve source + lineage

ETL runtime
Code + mapping versions

Candidate CDM
Tests + quality evidence

Published CDM
Versioned release

Publish only after required checks and approvals pass

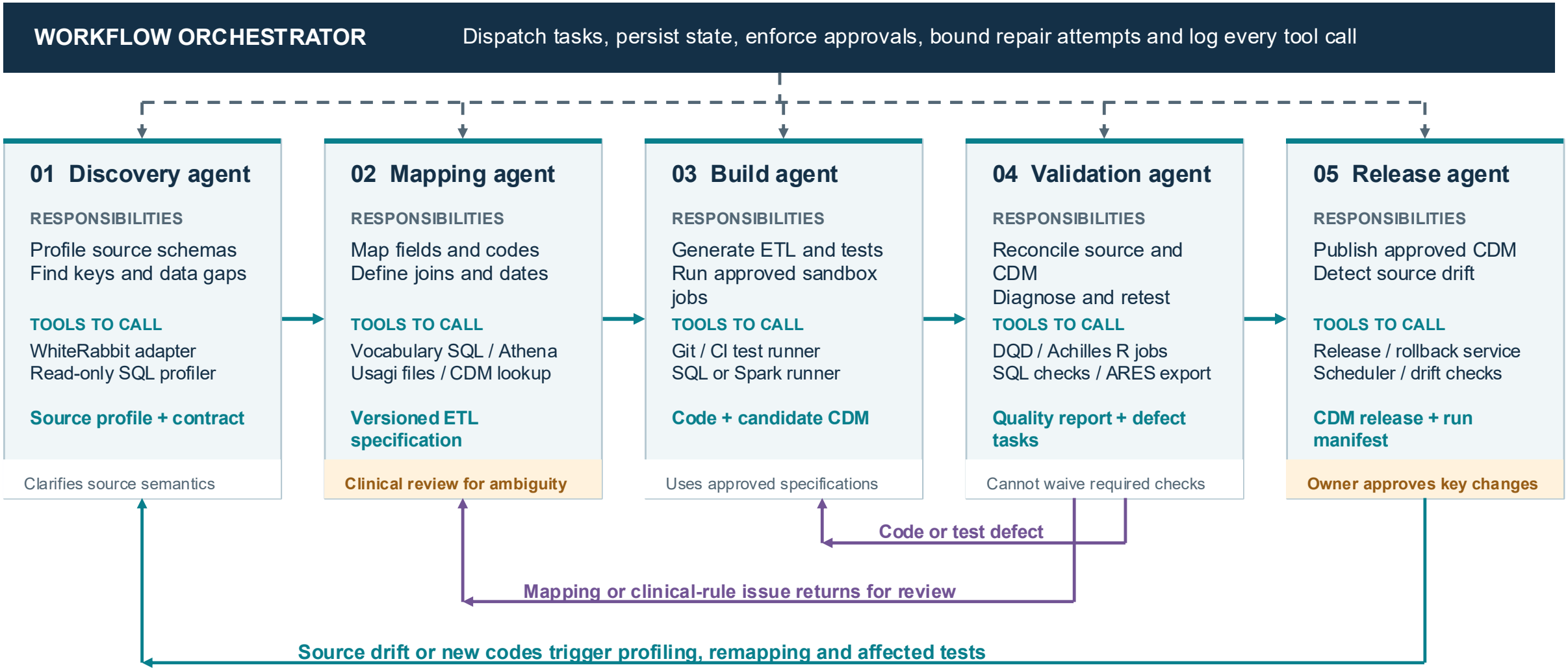
Failed checks or drift reopen affected specifications, mappings and tests

Advantages:

Local patient data access | **Audit trail for every change** | **Quarantine unresolved records** | **Repeatable loads and rollback**

OMOP ETL agents and collaboration

Proposed responsibilities, tool calls and artifact handoffs



SHARED EVIDENCE Pinned CDM + vocabularies | Mapping registry | Git code + tests | Run logs, lineage and approvals



AI replaces OHDSI?