



## A collaborative open-source platform for OMOP-based health research with OHDSI tools integration

<u>Data2Evidence (D2E)</u>, released by <u>Data4Life</u> in April 2025, is an open-source platform built for the OMOP Common Data Model (CDM). It streamlines health data standardization, management, and analysis through deep integration with OHDSI tools such as White Rabbit, Rabbit in a Hat, ATLAS, PHOEBE, Achilles, and the Data Quality Dashboard (DQD). Designed with the FAIR principles at its core, D2E empowers researchers to get the most from their OMOP datasets — faster, more reliably, and at scale.

## What Data2Evidence offers

**OMOP-native architecture:** designed specifically for OMOP CDM, eliminating redundant setup steps and reducing time-to-insight.

**Deep integration with the OHDSI ecosystem:** Data2Evidence connects the most widely used OHDSI tools in a single, coherent platform:

- White Rabbit and Rabbit in a Hat for data scanning, metadata generation, and ETL design
- DQD for automated data quality checks
- Achilles for descriptive analytics and data characterization
- **PHOEBE** for concept set recommendations
- ATLAS for cohort definitions and study design.

Further OHDSI tools will continuously be integrated to the platform.

**ETL pipeline orchestration & data validation:** transform heterogeneous source data into OMOP CDM using OHDSI tools for efficient scanning and mapping. D2E integrates **Prefect**, a modern workflow management system, to orchestrate and monitor ETL pipelines — improving transparency, error handling, and reproducibility. **DQD** ensures immediate visibility into data quality, building trust from day one.

**Descriptive and interactive analytics:** use custom dashboards and **Achilles** for population-level analytics, and anonymized exploration. **Jupiter Enterprise Gateway** is integrated, allowing researchers to interactively explore OMOP data in Python and R, which is ideal for ad hoc analysis, data science workflows, and machine learning experimentation.

**Intuitive cohort definitions:** define, refine, and assess cohorts interactively with real-time feasibility checks. Cohorts can be exported to **ATLAS**, allowing seamless handover to study execution while maintaining reproducibility and consistency.

**Global collaboration without data transfer:** support privacy-preserving, FAIR-compliant analytics across institutions. D2E enables federated research without moving sensitive data, making cross-site collaboration both secure and efficient.

**Built for usability and scale:** D2E is easy to set up and operate. Thanks to containerized deployment (via **Docker** and **npm**), researchers can get started quickly with minimal technical overhead. The platform is compatible with MacOS and Ubuntu and supports local or cloud-based operation.

**Open, auditable, and extensible:** fully open-source and license-free, D2E is available on <u>GitHub</u> for audit, adaptation, and contribution. It's designed to be extended — whether you're building ML pipelines, adding new tools, or integrating custom visualizations.

**Drive innovation together:** your feedback matters to us. Through co-development partnerships and direct input, your research needs actively shape the platform's evolution and priorities, making the platform stronger for the entire OHDSI community.

**Support whenever needed:** from onboarding to troubleshooting, D2E team offers responsive hands-on support to help you stay productive and overcome potential roadblocks quickly.

## Why researchers choose Data2Evidence

- All-in-one workflow: move from raw data to actionable cohorts, quality checks, analytics, and export in one coherent environment.
- **Designed for usability**: a clean, modern interface helps researchers stay focused, minimizing technical overhead and decision fatigue.
- **Reliable, reproducible studies**: built-in validation and consistent workflows promote trust and reduce variation across studies.
- **Fast setup, low barriers**: lightweight installation and ready-to-use defaults enable fast onboarding without expert DevOps knowledge.
- **Beyond the OHDSI stack**: from interactive cohort building tools and notebooks to ML-ready datasets, D2E unlocks capabilities that go further than existing OHDSI tools.
- **Built to evolve**: research evolves and so does D2E. Your feedback and use cases directly inform our development roadmap.
- **Support that understands your needs**: with real-world experience in OMOP and OHDSI tooling, our team is ready to help from first setup to advanced customization.

## **Get started today**

Data2Evidence is developed by <u>Data4Life</u> — a nonprofit healthtech organization dedicated to accelerating research through open science and collaboration. With support from the Hasso Plattner Foundation and partnerships with leading research institutions, we are building infrastructure that empowers global health research. <u>www.data4life.care</u>

Visit www.data2evidence.org to explore the documentation, try out the platform, or book a demo.

