Hands-on: OMOP CDM

Data Model Overview

- Common Data Model by OHDSI
- Standardized tables & vocabularies
- Observation period, Visit, Condition
- Drug exposure, Measurement, Procedure

ETL Implementation

- Map source codes to standard concepts
- Transform dates to OMOP format
- Preserve provenance
- White Rabbit, Rabbit-in-a-Hat tools

OHDSI Tools

- ATLAS: Cohort definition & analytics
- ACHILLES: Data quality reports
- PatientLevelPrediction: ML models
- CohortMethod: Causal inference

Example Analysis

- Define diabetes cohort (Type 2)
- Characterize baseline demographics
- Predict HbA1c control
- Compare metformin vs sulfonylureas