

Implementing OMOP Standardization for Rheumatology Data in a Dutch Hospital

Background:

- Growing demand for standardized comparability and transparency
- Labor-intensive data gathering/manipulation for research
- Focus on Gout, Rheumatology Arthritis, and Spondyloarthritis



Challenges

- **Complex EHR data structure**
- **Lack of structured integration:** Many data sources into EHR.
- **GDPR interpretation variation:** Across and within hospitals.

Solutions

- **Intermediate layer for EHR data**
- **Tailored SQL queries:** Address data variation.
- **Manual transformation codes:** Extra SQL tables (e.g., RxNorm).
- **Stakeholder communication**

Methods

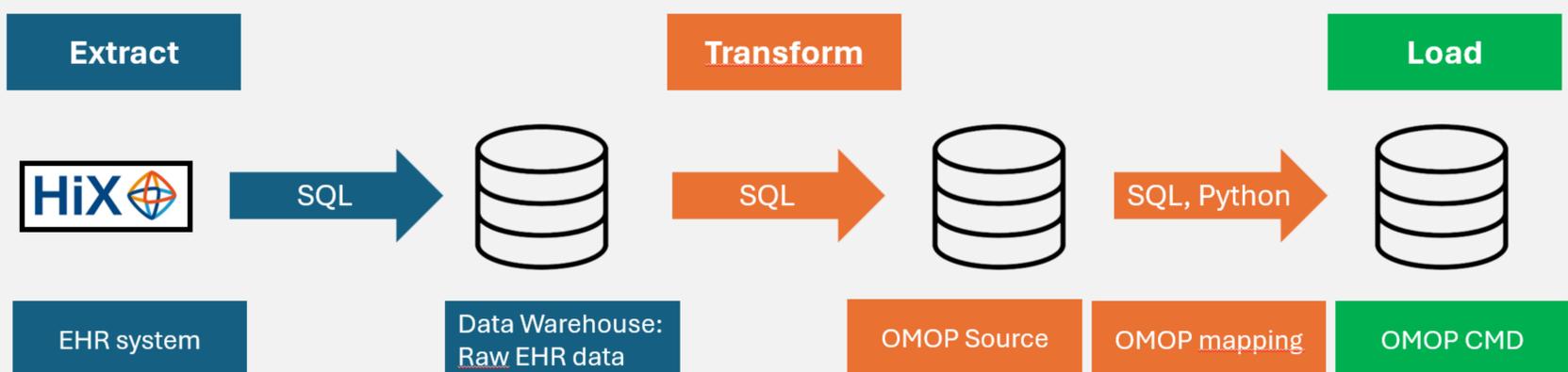


Figure 1: Technical infrastructure for OMOP conversion in VieCuri Medical Center

Limitation

- **Data Integration:** Ongoing challenges with additional systems
- **Data Structuring:** Need to convert unstructured text in HIX
- **GDPR Compliance:** Varying interpretations complicate approval
- **Informed Consent:** No standardized registration protocols

Future

- **Expanding our Rheumatology dataset**
- **Integrating additional specialties**
- **Cooperating in national and international studies**

