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**

**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

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