Title: The transformation process of PGH’s data to OMOP CDM

**Background:** Papageorgiou General Hospital (PGH), is a pioneer in the Greek Public Health sector and its information system consists of many modernized databases and software tools. We state the steps and the challenges of the transformation process to the OMOP CDM.

**Result 1:** Challenges

- **Legal issues:** Data protection laws in Greece and the EU, such as GDPR, resulted in the signing of legal contracts between parties.
- **Technical issues:** Hospital data sensitivity and information security impose that data is restricted to the hospital, and developers have limited access.

**Result 2:** ETL Automation

- **INPUT SCHEMA:** Contains tables with the unprocessed data from the sources. Tables have no dependencies or constraints.
- **STAGING SCHEMA:** Contains tables and procedures by which input table’s data are processed.
- **TARGET SCHEMA:** Includes the OMOP CDM tables.

**Methods**

1. **Transformation procedure**
   - **Source Data**
   - **Rabbit in a Hat**
     - Structural Mapping
     - Semantic Mapping
   - **Data Source Report**
   - **Extract Transform Load**
   - **OMOP CDM**
   - **Iterative Process**
   - **ETL Documentation**

2. **Semantic mapping**

**OMOP CDM Challenges**

ETL Automation

---

Pantelis Natsiavas
Grigoris Papapostolou