Mapping more than 1.4 million patients from Greece to OMOP-CDM

Title: Conversion of the Papageorgiou General Hospital EHR to the OMOP Common Data Model

Background: Papageorgiou General Hospital (PGH) situated in Thessaloniki, Greece, has facilities comprising 30 clinics, including 2 Internal Medicine clinics, 2 Surgery clinics, 9 collaborative departments, and 10 laboratory centers. It accommodates over 220,000 hospitalization days annually, conducts 15,000 surgeries each year, and caters to 1,200 daily visits at outpatient departments.

Result 1: Distribution of age at first record in the database.

Result 2: Distribution of records by domain.

Methods

Vocabulary mapping:
- automated translation of Greek terms
- manual verification by a trained medical professional
- mapping of PGH database terms to OMOP using USAGI
- conflicts resolved over 1-on-1 meetings with physician

Conclusion: We successfully mapped the PGH database to OMOP-CDM, capturing data of patients treated in one of the largest hospitals in the Balkans, an area that is notably under-represented within the EHDEN network.