Integrating ATLAS Cohorts with DICOM Images and ECG Waveforms to Enrich Real-World Evidence Research

CHDI
Summary

Integrated workflow to extract external data sources into secure enclave via Atlas:
• DICOM
• ECG Waveforms
• Clinical notes and reports/narratives
  + patient level data from OMOP CDM

• Storage of artifacts in secure enclave (HPC)
• Integration with IRB
Atlas UI

Imaging Domain
Stored as procedures and linked to PACS DB

Tied to IRB

Choice to materialize images

Export Location
Automation/Orchestration

Uses procedure id’s to link to accession numbers and queries PACS.

1. Retrieve from PACS FS
2. Create deidentified copy
3. Link to OMOP cohort/person
4. Push to enclave
5. Establish permission based on IRB