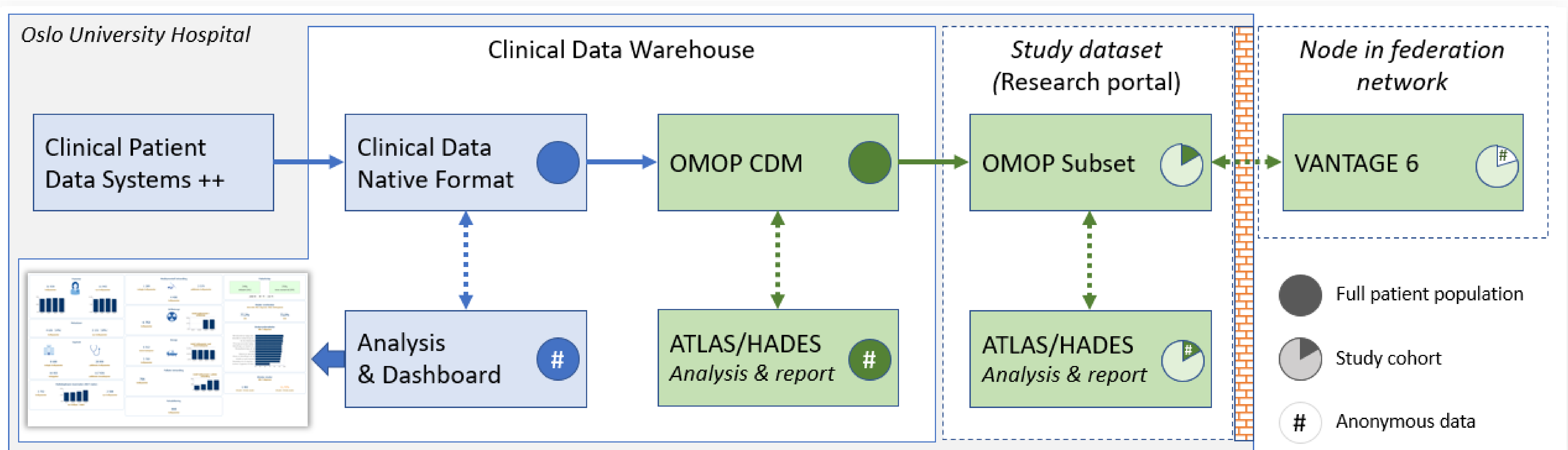


# Creating a sustainable framework for building federated real world evidence

## Oslo University Hospital Participation in a European Cancer OMOP Network - DigiONE

**Background:** Oslo University Hospital (OUS) participation to DigiONE is a logical development of a fruitful collaboration between the Clinical Data Warehouse (CDW) team and the Division of Cancer Medicine, resulting in a cancer data dashboard. A key factor of success is the collaborators' complementary networks and knowledge in clinical practice and data science. The CDW, established in 2016, provides the technical and legal infrastructure and is the backbone for data federation.

**Result 1:** Extending OUS Clinical Data Warehouse (CDW) to deliver DigiONE federated studies



## Methods

### 1 Workstreams (WS)

We propose three parallelized WS where the clear separation of concerns between each WS is key in risk-reducing our delivery:

- WS1 Source DigiONE/MEDOC variables into CDW
- WS2 Convert data into OMOP-CDM
- WS3 Effectuate the infrastructure for local and federated analyses:
  - - Study specific data subset delivery
  - - Report and assess data quality
  - - Exchange of anonymous data through Vantage6

### 2 Converting CDW data to OMOP CDM

#### Structural mapping

- The CDW infrastructure provides a sturdy foundation for organising and converting part of our CDW data model to OMOP CDM.
- For converting the required data into OMOP CDM, we will use the ETL and reporting tools already in use in the CDW.

#### Semantic mapping

- Some of the coding schemes are based on codes specific to OUS and Norway and will be mapped to OMOP CDM concepts with the help of clinicians.

**Conclusion:** Participation in DigiONE and conversion to OMOP CDM fit perfectly with OUS' strategic shift towards improved use of secondary data. It gives us an opportunity to join a community that will improve the patient outcomes.

