

# Oslo University Hospital Clinical Data Warehouse

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Data source

Human

Hospital discharge records

Hospital inpatient records

Hospital outpatient visit records

Other

## Administrative details

### Administrative details

#### Data source ID

1000000300

#### Data source acronym

OUHCDW

#### Data holder

[Oslo University Hospital](#)

#### Data source type

Hospital discharge records

Hospital inpatient records

Hospital outpatient visit records

Other

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### **Data source type, other**

Electronic Medical Records from the hospital's clinical systems

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### **Main financial support**

Funding by own institution

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### **Care setting**

Hospital inpatient care

Hospital outpatient care

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### **Data source qualification**

If the data source has successfully undergone a formal qualification process (e.g., from the EMA, ISO or other certifications), this should be described.

No

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### **Data source website**

[Oslo University Hospital Participation in a European Cancer OMOP Network](#)

## Contact details

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# Data source regions and languages

## Data source countries

Norway

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## Data source languages

Bokmål, Norwegian

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## Data source regions

Agder

Innlandet

Oslo

Vestfold og Telemark

Viken

# Data source establishment

## Data source established

01/01/2016

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## Data source time span

**First collection:** 01/01/2011

The date when data started to be collected or extracted.

# Publications

## Data source publications

[A federated learning system for precision oncology in Europe: DigiONE](#)

## Data elements collected

The data source contains the following information

## **Disease information**

Does the data source collect information with a focus on a specific disease? This might be a patient registry or other similar initiatives.

No

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## **Rare diseases**

Are rare diseases captured? In the European Union a rare disease is one that affects no more than 5 people in 10,000.

Yes

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## **Pregnancy and/or neonates**

Does the data source collect information on pregnant women and/or neonatal subpopulation (under 28 days of age)?

Yes

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## **Hospital admission and/or discharge**

Yes

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## **ICU admission**

Is information on intensive care unit admission available?

Yes

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## **Cause of death**

Not Captured

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## **Prescriptions of medicines**

Captured

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## **Prescriptions vocabulary**

ATC

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## **Dispensing of medicines**

Captured

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## **Dispensing vocabulary**

ATC

other

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## **Dispensing vocabulary, other**

Norwegian trade item identifier

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## **Advanced therapy medicinal products (ATMP)**

Is information on advanced therapy medicinal products included? A medicinal product for human use that is either a gene therapy medicinal product, a somatic cell therapy product or a tissue engineered products as defined in Regulation (EC) No 1394/2007 [Reg (EC) No 1394/2007 Art 1(1)].

Yes

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## **Contraception**

Is information on the use of any type of contraception (oral, injectable, devices etc.) available?

Yes

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## **Indication for use**

Does the data source capture information on the therapeutic indication for the use of medicinal products?

Captured

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## **Indication vocabulary**

ICD-10

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## **Medical devices**

Is information on medicinal devices (e.g., pens, syringes, inhalers) available?

Yes

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## Administration of vaccines

No

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## Procedures

Does the data source capture information on procedures (e.g., diagnostic tests, therapeutic, surgical interventions)?

Captured

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## Procedures vocabulary

Other

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## Procedures vocabulary, other

NKPK (Norwegian vocabulary covering medical, surgical and radiological procedures)

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## Healthcare provider

Is information on the person providing healthcare (e.g., physician, pharmacist, specialist) available?  
The healthcare provider refers to individual health professionals or a health facility organisation licensed to provide health care diagnosis and treatment services including medication, surgery and medical devices.

Yes

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## Clinical measurements

Is information on clinical measurements (e.g., BMI, blood pressure, height) available?

Yes

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## Genetic data

Are data related to genotyping, genome sequencing available?

Not Captured

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## Biomarker data

Does the data source capture biomarker information? The term “biomarker” refers to a broad subcategory of medical signs ( objective indications of medical state observed from outside the patient), which can be measured accurately and reproducibly. For example, haematological assays, infectious disease markers or metabolomic biomarkers.

Captured

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### **Biomarker data vocabulary**

Other

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### **Biomarker vocabulary, other**

Norwegian codes

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### **Patient-reported outcomes**

Is information on patient-reported outcomes (e.g., quality of life) available?

No

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### **Patient-generated data**

Is patient-generated information (e.g., from wearable devices) available?

No

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### **Units of healthcare utilisation**

Are units of healthcare utilisation (e.g., number of visits to GP per year, number of hospital days) available or can they be derived? Units of healthcare utilisation refer to the quantification of the use of services for the purpose of preventing or curing health problems.

Yes

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### **Unique identifier for persons**

Are patients uniquely identified in the data source?

Yes

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### **Diagnostic codes**

Captured

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## **Diagnosis / medical event vocabulary**

ICD-10

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## **Medicinal product information**

Captured

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## **Medicinal product information collected**

Active ingredient(s)

Brand name

Dosage regime

Dose

Formulation

Route of administration

Strength

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## **Medicinal product vocabulary**

ATC

Not coded (Free text)

Other

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## **If 'other,' what vocabulary is used?**

Norwegian trade item identifier

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## **Quality of life measurements**

Not Captured

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## **Lifestyle factors**

Not Captured

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## **Sociodemographic information**

Captured

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### **Sociodemographic information collected**

Age

Gender

## Quantitative descriptors

### Population Qualitative Data

#### **Population age groups**

All

Paediatric Population (< 18 years)

Preterm newborn infants (0 – 27 days)

Term newborn infants (0 – 27 days)

Infants and toddlers (28 days – 23 months)

Children (2 to < 12 years)

Adolescents (12 to < 18 years)

Adult and elderly population ( $\geq 18$  years)

Adults (18 to < 65 years)

Adults (18 to < 46 years)

Adults (46 to < 65 years)

Elderly ( $\geq 65$  years)

Adults (65 to < 75 years)

Adults (75 to < 85 years)

Adults (85 years and over)

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## Estimated percentage of the population covered by the data source in the catchment area

OUH is a local hospital for patients in the Oslo region (pop. 700K), a region hospital for patients in the South-East region (population: 3.1 millions) and also has some national responsibilities (population: 5.5 millions).

In the last 15 years we have collected data about 1.7 million patients.

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## Description of the population covered by the data source in the catchment area whose data are not collected (e.g., people who are registered only for private care)

People who choose to receive their care in another public or private care provider.

## Population

### Population size

1615000

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### Active population size

1470000

## Population by age group

Age group	Population size	Active population size
Paediatric Population (< 18 years)	359000	357000
Adults (18 to < 65 years)	1032000	993000

Age group	Populationsize	Active populationsize
Elderly ( $\geq 65$ years)	330000	219000

## Median observation time

**Median time (years) between first and last available records for unique individuals captured in the data source**

1.30

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**Median time (years) between first and last available records for unique active individuals (alive and currently registered) capt**

1.20

## Data flows and management

### Access and validation

#### Biospecimen access

Are biospecimens available in the data source (e.g., tissue samples)?

Yes

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#### Biospecimen access conditions

We have access to the results from analyses run on biospecimens.

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#### Access to subject details

Can individual patients/practitioners/practices included in the data source be contacted?

No

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### **Description of data collection**

We use Oracle Data Integrator as an Extract Transform Load (ETL) tool to collect data from the patient health records, load them into the clinical data warehouse (daily) and quality assure and compile the data so that it is ready for secondary use (ad hoc reports, dashboards, machine learning).

## Event triggering registration

### **Event triggering registration of a person in the data source**

Birth

Disease diagnosis

Other

Start of treatment

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### **Event triggering registration of a person in the data source, other**

Any registration about a patient in one of the systems that are sources for the clinical data warehouse

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### **Event triggering de-registration of a person in the data source**

Other

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### **Event triggering de-registration of a person in the data source, other**

Opt-out

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### **Event triggering creation of a record in the data source**

Any registration about a patient in one of the systems that are sources to the clinical data warehouse

## Data source linkage

## Linkage

Is the data source described created by the linkage of other data sources (prelinked data source) and/or can the data source be linked to other data source on an ad-hoc basis?

Yes

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## Linkage description, pre-linked

The data warehouse creates a unique patient key that identifies each patient across all sources.

## Linked data sources

### Pre linked

Is the data source described created by the linkage of other data sources?

Yes

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### Linkage strategy

Deterministic

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### Linkage variable

Patient ID

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### Linkage completeness

100%

## Data management specifications that apply for the data source

### **Data source refresh**

Monthly

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### **Informed consent for use of data for research**

Other

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### **Possibility of data validation**

Can validity of the data in the data source be verified (e.g., access to original medical charts)?

Yes

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### **Data source preservation**

Are records preserved in the data source indefinitely?

Yes

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### **Approval for publication**

Is an approval needed for publishing the results of a study using the data source?

Yes

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### **Informed consent, other**

Depending on the purpose of the study, the consent is implicit or required.

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### **Data source last refresh**

21/08/2024

## **Common Data Model (CDM) mapping**

### **CDM mapping**

Has the data source been converted (ETL-ed) to a common data model?

Yes

### **CDM Mappings**

**CDM name**

OMOP

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**CDM website**

<https://www.ohdsi.org/Data-standardization/>

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**Data source ETL CDM version**

5.4

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**Data source ETL frequency**

0,03 months

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**Data source ETL status**

In progress

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**Data source ETL specifications (link)**

[https://www.ous-research.no/files/ous-ccc/dokumenter/Bouissou\\_OUS\\_OMOP\\_Network\\_...](https://www.ous-research.no/files/ous-ccc/dokumenter/Bouissou_OUS_OMOP_Network_...)