

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

Data source type, other

Electronic Medical Records from the hospital's clinical systems

Main financial support

Funding by own institution

Care setting

Hospital inpatient care

Hospital outpatient care

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

Data source website

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

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Data source regions and languages

Data source countries

Norway

Data source languages

Bokmål, Norwegian

Data source regions

Agder

Innlandet

Oslo

Vestfold og Telemark

Viken

Data source establishment

Data source established

01/01/2016

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

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

Pregnancy and/or neonates

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

Yes

Hospital admission and/or discharge

Yes

ICU admission

Is information on intensive care unit admission available?

Yes

Cause of death

Not Captured

Prescriptions of medicines

Captured

Prescriptions vocabulary

ATC

Dispensing of medicines

Captured

Dispensing vocabulary

ATC

other

Dispensing vocabulary, other

Norwegian trade item identifier

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

Contraception

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

Yes

Indication for use

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

Captured

Indication vocabulary

ICD-10

Medical devices

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

Yes

Administration of vaccines

No

Procedures

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

Captured

Procedures vocabulary

Other

Procedures vocabulary, other

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

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

Clinical measurements

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

Yes

Genetic data

Are data related to genotyping, genome sequencing available?

Not Captured

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

Biomarker data vocabulary

Other

Biomarker vocabulary, other

Norwegian codes

Patient-reported outcomes

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

No

Patient-generated data

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

No

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

Unique identifier for persons

Are patients uniquely identified in the data source?

Yes

Diagnostic codes

Captured

Diagnosis / medical event vocabulary

ICD-10

Medicinal product information

Captured

Medicinal product information collected

Active ingredient(s)

Brand name

Dosage regime

Dose

Formulation

Route of administration

Strength

Medicinal product vocabulary

ATC

Not coded (Free text)

Other

If 'other,' what vocabulary is used?

Norwegian trade item identifier

Quality of life measurements

Not Captured

Lifestyle factors

Not Captured

Sociodemographic information

Captured

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 (≥ 18 years)

Adults (18 to < 65 years)

Adults (18 to < 46 years)

Adults (46 to < 65 years)

Elderly (≥ 65 years)

Adults (65 to < 75 years)

Adults (75 to < 85 years)

Adults (85 years and over)

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.

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

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	Population size	Active population size
Elderly (≥ 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

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

1.20

Data flows and management

Access and validation

Biospecimen access

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

Yes

Biospecimen access conditions

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

Access to subject details

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

No

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

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

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

Other

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

Opt-out

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

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

Linkage strategy

Deterministic

Linkage variable

Patient ID

Linkage completeness

100%

Data management specifications that apply for the data source

Data source refresh

Monthly

Informed consent for use of data for research

Other

Possibility of data validation

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

Yes

Data source preservation

Are records preserved in the data source indefinitely?

Yes

Approval for publication

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

Yes

Informed consent, other

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

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

CDM website

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

Data source ETL CDM version

5.4

Data source ETL frequency

0,03 months

Data source ETL status

In progress

Data source ETL specifications (link)

https://www.ous-research.no/files/ous-ccc/dokumenter/Bouissou_OUS_OMOP_Network_...