

Semmelweis University Clinical Data

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Data source

Human

Emergency care discharge records

Hospital discharge records

Hospital inpatient records

Hospital outpatient visit records

Administrative details

Administrative details

Data source ID

1000000184

Data source acronym

SUCD

Data holder

[Semmelweis University](#)

Data source type

Emergency care discharge records

Hospital discharge records

Hospital inpatient records

Hospital outpatient visit records

Main financial support

National, regional, or municipal public funding

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.

Yes

Description of the qualification

We are a DARWIN EU data partner.

Data source website

[Semmelweis University website](#)

Contact details

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Data source regions and languages

Data source countries

Hungary

Data source languages

Hungarian

Data source establishment

Data source established

01/01/2022

Data source time span

First collection: 01/01/2014

The date when data started to be collected or extracted.

Publications

Data source publications

[Mapping Hungarian procedure codes to SNOMED CT](#)

[Human cystic echinococcosis in Hungary \(2000–2014\): a retrospective case series analysis from a single-center study](#)

[Patterns of erythropoiesis-stimulating agent use for chemotherapy-induced anemia in lung cancer: results of a retrospective Hungarian real-life clinical data analysis](#)

[Mid-term results and predictors of restenosis in patients undergoing endovascular therapy for isolated popliteal artery steno-occlusive disease](#)

[Restenosis rates in patients with ipsilateral carotid endarterectomy and contralateral carotid artery stenting](#)

[Incidence of and predisposing factors for pseudoaneurysm formation in a high-volume cardiovascular center](#)

Studies

List of studies that have been conducted using the data source

DARWIN EU® - Monitoring prescription of essential medicines administered in ICU

DARWIN EU® - RR2 Drug utilisation study of prescription opioids

DARWIN EU® - Drug Utilisation Study on Antibiotics in the 'Reserve' category of the WHO AWaRe classification of antibiotics for evaluation and monitoring of use

DARWIN EU® - Drug Utilisation Study on Antibiotics in the 'Watch' category of the WHO AWaRe classification of antibiotics for evaluation and monitoring of use

DARWIN EU® - RR Characterisation of individuals with cystic fibrosis in Europe

DARWIN EU® - RR Childhood hypertension and sartans prescribing in children

DARWIN EU® - Feasibility of studies on early (pre-symptomatic) stages of type 1 diabetes mellitus in the DARWIN EU® network

DARWIN EU® - Neonatal seizures: Incidence, prevalence, patient characterisation, and treatments in European countries

DARWIN EU® - Capturing suicidality and depression related variables in databases

DARWIN EU® - Population demographics and disease frequency across the DARWIN EU® network

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

RxNorm

Dispensing of medicines

Captured

Dispensing vocabulary

ATC

RxNorm

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)].

No

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

Yes

Procedures

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

Captured

Procedures vocabulary

SNOMED CT

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?

No

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

LOINC

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

SNOMED CT

Medicinal product information

Captured

Medicinal product information collected

Active ingredient(s)

Brand name

Dose

Formulation

Package size

Route of administration

Strength

Medicinal product vocabulary

RxNorm

Quality of life measurements

Not Captured

Lifestyle factors

Not Captured

Sociodemographic information

Captured

Sociodemographic information collected

Age

Country of origin

Living in rural area

Sex

Quantitative descriptors

Population Qualitative Data

Population age groups

All

Paediatric Population (< 18 years)

Neonate

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)

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

20%

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)

Semmelweis University is the largest provider of health care services in Hungary. Most of the departments cater for the most serious cases and patients requiring complex treatment, thus making the university a national health care provider. The overwhelming majority of patient data originates from Hungary, mainly from central region of the country: Budapest and Pest County.

Family linkage

Family linkage available in the data source permanently or can be created on an ad hoc basis

Ad hoc

Population

Population size

2492035

Population by age group

Age group	Population size
Paediatric Population (< 18 years)	326347
Neonate	10279
Children (2 to < 12 years)	181270
Adolescents (12 to < 18 years)	134798
Adult and elderly population (≥ 18 years)	2165688
Adults (18 to < 65 years)	1362609
Elderly (≥ 65 years)	803079
Adults (85 years and over)	196449

Median observation time

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

Data flows and management

Access and validation

Governance details

Documents or webpages that describe the overall governance of the data source and processes and procedures for data capture and management, data quality check and validation results (governing data access or utilisation for research purposes).

[Webiste of the governance approval board](#)

Biospecimen access

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

No

Access to subject details

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

Yes

Description of data collection

Entries in the hospital information system (eMedSolution)

Event triggering registration

Event triggering registration of a person in the data source

Birth

Other

Practice registration

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

First visit in a university clinic

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

Death

Other

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

We only know if a patient died if they die in one of Semmelweis University clinics, and for research purposes the death status could be queried from the Hungarian National Insurance Fund. We do not have otherwise de-registration.

Event triggering creation of a record in the data source

Visit in a university clinic

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, possible linkage

By the unique identifiers (Hungarian social security number), it would be possible to link the databases

Linked data sources

Pre linked

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

No

Data source, other

National Health Insurance Fund of Hungary

Linkage strategy

Deterministic

Linkage variable

Hungarian social security number: 9 digit number

Linkage completeness

Complete

Data management specifications that apply for the data source

Data source refresh

Every 6 months

Informed consent for use of data for research

Required for intervention studies

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

Data source last refresh

31/03/2025

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

6,00 months

Data source ETL status

Completed