

Unidade Local de Saúde de Matosinhos

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Data source

Human

Administrative healthcare records (e.g., claims)

Emergency care discharge records

Hospital discharge records

Hospital inpatient records

Hospital outpatient visit records

Pharmacy dispensing records

Primary care medical records

Specialist ambulatory care records

Administrative details

Administrative details

Data source ID

1111171

Data source acronym

ULSM

Data holder

[Unidade Local de Saúde de Matosinhos \(ULSM\)](#)

Data source type

Administrative healthcare records (e.g., claims)

Emergency care discharge records

Hospital discharge records

Hospital inpatient records

Hospital outpatient visit records

Pharmacy dispensing records

Primary care medical records

Specialist ambulatory care records

Main financial support

Funding by own institution

National, regional, or municipal public funding

Care setting

Hospital inpatient care

Hospital outpatient care

Primary care – GP, community pharmacist level

Primary care – specialist level (e.g. paediatricians)

Secondary care – specialist level (ambulatory)

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

ISO 9001:2015

NP 4552:2016

Data source website

[Institutional Website](#)

Contact details

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Data source regions and languages

Data source countries

Portugal

Data source languages

Portuguese

Data source establishment

Data source established

01/01/2000

Data source time span

First collection: 01/01/2000

The date when data started to be collected or extracted.

Publications

Data source publications

Prevalence, outcomes, and cost of chronic kidney disease in a contemporary population of 2.4 million patients from 11 countries: The CaReMe CKD study

Twenty years of real-world data to estimate chronic kidney disease prevalence and staging in an unselected population

Cost of healthcare utilization associated with incident cardiovascular and renal disease in individuals with type 2 diabetes: A multinational, observational study across 12 countries

Prevalence, outcomes and costs of a contemporary, multinational population with heart failure

Cardiovascular Risk Profile and Lipid Management in the Population-Based Cohort Study LATINO: 20 Years of Real-World Data

Prevalence of statin intolerance in a selected population from integrated care units: An emulation of the clear outcomes trial

Lipid-lowering prescription patterns after a non-fatal acute coronary syndrome: A retrospective cohort study

Studies

List of studies that have been conducted using the data source

DARWIN EU® Monitoring prescription of essential medicines administered in ICU

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

Captured

Cause of death vocabulary

ICD-10

SNOMED CT

Prescriptions of medicines

Captured

Prescriptions vocabulary

ATC

RxNorm

Dispensing of medicines

Captured

Dispensing vocabulary

ATC

other

RxNorm

Dispensing vocabulary, other

Only for inpatient prescriptions

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

Not coded (Free text)

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

ICD-10

ICPC-2

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?

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

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-CM

ICD-9-CM

SNOMED CT

Medicinal product information

Captured

Medicinal product information collected

Active ingredient(s)

Dose

Formulation

Package size

Route of administration

Medicinal product vocabulary

ATC

RxNorm

Quality of life measurements

Captured

Quality of life measurements vocabulary

Not coded (Free text)

Lifestyle factors

Captured

Lifestyle factors

Alcohol use

Diet

Frequency of exercise

Other

Tobacco use

Sociodemographic information

Captured

Sociodemographic information collected

Age

Country of origin

Education level

Gender

Health area

Marital status

Sex

Socioeconomic status

Type of residency

Quantitative descriptors

Population Qualitative Data

Population age groups

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 (\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

100%

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)

The information available is collected from the Pedro Hispano Hospital and 17 primary healthcare centers that together form the Unidade Local de Saúde de Matosinhos and are responsible for public healthcare coverage for the region of Matosinhos. These institutions are part of the National Health System.

Family linkage

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

Permanently

Family linkage available between the following persons

Father-child

Mother-child

Sibling

Population

Population size

619978

Active population size

576862

Population by age group

Age group	Population size	Active population size
Paediatric Population (< 18 years)	51807	51778
Infants and toddlers (28 days - 23 months)	2795	2791
Children (2 to < 12 years)	29426	29414
Adolescents (12 to < 18 years)	19586	19573
Adults (18 to < 46 years)	184821	184448
Adults (46 to < 65 years)	172484	169478
Elderly (\geq 65 years)	210866	171158
Adults (65 to < 75 years)	73967	69557
Adults (75 to < 85 years)	58753	51216
Adults (85 years and over)	78146	50385

Median observation time

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

8.00

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).

[Serviços Partilhados do Ministério da Saúde](#)

Biospecimen access

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

No

Biospecimen access conditions

Upon request and approval by the local Ethics Committee

Access to subject details

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

Yes

Description of data collection

This dataset consists of EHR data routinely generated by healthcare professionals at ULSM during the provision of standard care. The data are entered by physicians, nurses, and other clinical staff. Most EHR systems used are official national public platforms (such as SONHO and SINUS), complemented by additional systems from third-party vendors. The complete set of data recorded within ULSM's EHR systems is available for research purposes under appropriate governance procedures.

Event triggering registration

Event triggering registration of a person in the data source

Birth

Disease diagnosis

Immigration

Practice registration

Start of treatment

Event triggering creation of a record in the data source

Provision of care, for the first time, inside the hospital. The record is created by the administrative support staff when the patient does the check-in.

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

Patient code is unique and created on birth or immigration. Codes are non overlapping and there guaranteed to be unique.

Linkage description, possible linkage

Patient code is unique and created on birth or immigration. Codes are non overlapping and there guaranteed to be unique.

Linked data sources

Pre linked

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

No

Data source, other

National Death Registry

Linkage variable

cod_utente

Linkage completeness

100%

Pre linked

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

No

Data source, other

National Drug Prescription and Dispensation Registry

Linkage variable

cod_utente

Linkage completeness

100%

Pre linked

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

No

Data source, other

National Vaccination Registry

Linkage variable

cod_utente

Linkage completeness

100%

Pre linked

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

No

Data source, other

Other quality registers

Linkage variable

cod_utente

Linkage completeness

100%

Pre linked

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

Yes

Data source, other

The totality of data is automatically linked by default because all EHR systems use the same national patient code to register patient data.

Linkage variable

cod_utente

Linkage completeness

100% in ULSM, and can be used to cross against the totality of national healthcare information available

Data management specifications that apply for the data source

Data source refresh

Monthly

Informed consent for use of data for research

Required for all 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?

No

Data source preservation length (years)

50 years

Approval for publication

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

Yes

Data source last refresh

22/10/2025

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

1,00 month

Data source ETL status

In progress