Medicines Intelligence Data Platform

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Data source Human Administrative healthcare records (e.g., claims)

Hospital inpatient records Other Pharmacy dispensing records

Administrative details

Administrative details

PURI

https://redirect.ema.europa.eu/resource/1111154

Data source ID

1111154

Data source acronym

MedIntel

Data holder

University of New South Wales (UNSW Sydney)

Data source type

Administrative healthcare records (e.g., claims)

Hospital inpatient records

Other

Pharmacy dispensing records

Data source type, other

Emergency Department records, cancer registry, death registry

Main financial support

Funding by own institution

National, regional, or municipal public funding

Care setting

Hospital inpatient care

Other

Primary care – GP, community pharmacist level

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

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

MedIntel Data Platform

Contact details

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Data source regions and languages

Data source countries

Australia

Data source languages

English

Data source regions

New South Wales

Data source establishment

Data source established

15/06/2022

Data source time span

First collection: 01/01/2002

The date when data started to be collected or extracted.

Publications

Data source publications

The Medicines Intelligence Data Platform: A population-based data resource from New South Wales, Australia

Geographic variation in sodium-glucose cotransporter 2 inhibitor and glucagon-like peptide-1 receptor agonist use in people with type 2 diabetes in New South

Wales, Australia

Long-term prescribed opioid use after hospitalization or emergency department presentation among opioid naïve adults (2014–2020)—A population-based descriptive cohort study

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.

Yes

Disease details (other)

Cancer registration including date of diagnosis, ICD9, ICD10 & ICDO3 Topography codes, ICDO3 Morphology codes and cancer staging at diagnosis.

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)?

No

Hospital admission and/or discharge

Yes

ICU admission

Is information on intensive care unit admission available?

No

Cause of death

Captured

Cause of death vocabulary

ICD-10

Prescriptions of medicines

Not Captured

Dispensing of medicines

Captured

Dispensing vocabulary

other

Dispensing vocabulary, other

Australian Pharmaceutical Benefits Scheme (can be mapped to the AMT)

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?

Not Captured

Medical devices

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

No

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

Australian Classification of Health Interventions

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.

Not 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

Other

Diagnosis / medical event vocabulary, other

ICD-10-AM

Medicinal product information

Captured

Medicinal product information collected

Active ingredient(s)

Formulation

Package size

Route of administration

Strength

Medicinal product vocabulary

Other

If 'other,' what vocabulary is used?

Australian Pharmaceutical Benefits Scheme (can be mapped to the AMT)

Quality of life measurements

Not Captured

Lifestyle factors

Not Captured

Sociodemographic information

Captured

Sociodemographic information collected

Age

Deprivation index

Gender

Health area

Living in rural area

Pharmaceutical copayment

Quantitative descriptors

Population Qualitative Data

Population age groups

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

100% of NSW resident population with a valid Medicare Card (Australia's universal health care system) aged 18 and over during the period 1/1/2005-31/12/2020

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)

Residents of other Australian States and Territories receiving care within NSW.

Population

Population size

7400000

Active population size

6524478

Population by age group

Age group	Population size	Active population size
Adults (18 to < 46 years)	3100662	3061765
Adults (46 to < 65 years)	2093932	1966332

Age group	Population size	Active population size
Elderly (≥ 65 years)	2337765	1496381
Adults (65 to < 75 years)	951369	793878
Adults (75 to < 85 years)	781400	497546
Adults (85 years and over)	604996	204957

Median observation time

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

20.00

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

20.00

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).

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?

No

Description of data collection

This project utilises the linkage of administrative health records from the Commonwealth of Australia, linked with administrative health records from the New South Wales Ministry of Health.

Event triggering registration

Event triggering registration of a person in the data source

Birth

Other

Residency obtained

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

Enrolment in Medicare (Australia's universal healthcare system). Includes birth and immigration.

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

Death

Emigration

Other

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

Medicare enrolment address updated to be out of NSW (interstate or international emigration).

Event triggering creation of a record in the data source

Hospital separation, medicine dispensing at community pharmacy, death notification, cancer notification, claim for Medicare funded service (e.g. GP or specialist consultation; pathology test)

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 linkage was conducted by the Australian Institute of Health and Welfare (AIHW) and the NSW Centre for Health Record Linkage (CHeReL). Deterministic linkage of the Commonwealth MCD, PBS, MBS and HP datasets was combined with probabilistic linkage to the NSW datasets APDC, EDDC and NSWCR. The separation principle was applied throughout in that no health/content data are used in this process.

Linkage description, possible linkage

The linkage was conducted by the Australian Institute of Health and Welfare (AIHW) and the NSW Centre for Health Record Linkage (CHeReL). Deterministic linkage of the Commonwealth MCD, PBS, MBS and HP datasets was combined

with probablistic linkage to the NSW datasets APDC, EDDC and NSWCR. The separation principle was applied throughout in that no health/content data are used in this process.

Linked data sources

Pre linked

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

Yes

Data source, other

Medicare Consumer Directory (MCD)

Linkage strategy

Deterministic

Linkage variable

Statistical linkage keys as part of the Master Linkage Keys held by the AIHW and the NSW CHeReL data linkage units. For more information on these linkage keys see https://www.aihw.gov.au/our-services/data-linkage and https://www.cherel.org.au/datasets

Linkage completeness

This project makes use of the National Master Linkage Key, a map between Commonwealth and NSW datasets. This linkage was conducted by the AIHW and obtained a 95% linkage rate (around 10.5 of 11 million persons). (False positive rate of 5/1,000 people)

Pre linked

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

Yes

Data source, other

Pharmaceutical Benefits Scheme (PBS)

Linkage strategy

Deterministic

Linkage completeness

This project makes use of the National Master Linkage Key, a map between Commonwealth and NSW datasets. This linkage was conducted by the AIHW and obtained a 95% linkage rate (around 10.5 of 11 million persons). (False positive rate of 5/1,000 people)

Pre linked

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

Yes

Data source, other

Medicare Benefits Schedule (MBS)

Linkage strategy

Deterministic

Linkage completeness

This project makes use of the National Master Linkage Key, a map between Commonwealth and NSW datasets. This linkage was conducted by the AIHW and obtained a 95% linkage rate (around 10.5 of 11 million persons). (False positive rate of 5/1,000 people)

Pre linked

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

Yes

Data source, other

National Death Index (NDI)

Linkage strategy

Deterministic

Linkage completeness

This project makes use of the National Master Linkage Key, a map between Commonwealth and NSW datasets. This linkage was conducted by the AIHW and obtained a 95% linkage rate (around 10.5 of 11 million persons). (False positive rate of 5/1,000 people)

Pre linked

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

Yes

Data source, other

NSW Admitted Patient Data Collection (APDC)

Linkage strategy

Probabilistic

Linkage completeness

This project makes use of the National Master Linkage Key, a map between Commonwealth and NSW datasets. This linkage was conducted by the AIHW and obtained a 95% linkage rate (around 10.5 of 11 million persons). (False positive rate of 5/1,000 people)

Pre linked

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

Yes

Data source, other

NSW Cancer Registry (NSWCR)

Linkage strategy

Probabilistic

Linkage completeness

This project makes use of the National Master Linkage Key, a map between Commonwealth and NSW datasets. This linkage was conducted by the AIHW and obtained a 95% linkage rate (around 10.5 of 11 million persons). (False positive rate of 5/1,000 people)

Pre linked

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

Yes

Data source, other

NSW Emergency Department Data Collection (EDDC)

Linkage strategy

Probabilistic

Linkage completeness

This project makes use of the National Master Linkage Key, a map between Commonwealth and NSW datasets. This linkage was conducted by the AIHW and obtained a 95% linkage rate (around 10.5 of 11 million persons). (False positive rate of 5/1,000 people)

Pre linked

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

Yes

Data source, other

Herceptin Program (HP)

Linkage strategy

Deterministic

Linkage completeness

This project makes use of the National Master Linkage Key, a map between Commonwealth and NSW datasets. This linkage was conducted by the AIHW and obtained a 95% linkage rate (around 10.5 of 11 million persons). (False positive rate of 5/1,000 people)

Pre linked

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

No

Data source, other

Other data sources available through the NSW Data Linkage Unit (CHEREL) or AIHW

Linkage strategy

Deterministic

Linkage variable

Statistical linkage keys as part of the Master Linkage Keys held by the AIHW and the NSW CHeReL data linkage units. For more information on these linkage keys see https://www.aihw.gov.au/our-services/data-linkage and https://www.cherel.org.au/datasets

Linkage completeness

This project makes use of the National Master Linkage Key, a map between Commonwealth and NSW datasets. This linkage was conducted by the AIHW and obtained a 95% linkage rate (around 10.5 of 11 million persons). (False positive rate of 5/1,000 people)

Data management specifications that apply for the data source

Data source refresh

Yearly

Informed consent for use of data for research

Waiver

Possibility of data validation

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

No

Data source preservation

Are records preserved in the data source indefinitely?

No

Data source preservation length (years)

5 years

Approval for publication

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

Yes

Data source last refresh

01/05/2022

Common Data Model (CDM) mapping

CDM mapping

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

No