Emergency Department Data Collection

*ACT Government Health Directorate*

# Background

The primary purpose of collecting Emergency Department data in ACT is to:

* Assist clinicians in the management of patients; and
* Enable comparisons of performance in respect to access to services, quality clinical outcomes, patient management, customer satisfaction and cost effectiveness.

Each record in the collection represents a presentation to an emergency department.

# ED coverage

* The Emergency Department Data Collection (EDDC) commenced in 2000, but is only available through the Master Linkage Key from July 2005.

There are two participating Emergency Departments in the ACT, one at each public hospital (Canberra and Calvary).

# Diagnosis coding

The ACT Admitted Patient Data Collection has diagnoses coded by trained clinical information managers who choose diagnoses from the Australian clinical version of the International Classification of Diseases (ICD). The EDDC, on the other hand, has diagnoses recorded by medical, nursing or clerical personnel at the point of care. These personnel are not trained in clinical coding. The diagnoses are selected by keyword searching or tables of a limited set of diagnoses. The codes are assigned to the chosen diagnosis using tables built into the computer database program.

Other points to note are:

* There are two different computer programs used in ACT EDs. Different programs use different classifications to record the diagnosis, including ICD-9, ICD-10, or SNOMED CT (see <https://nehta.org.au/aht/>). If you intend analysing ED diagnoses, you need to determine the codes from each of these classifications that relate to the disease or symptom grouping to be studied.
* Variation in computer programs and management practices at EDs may lead to variation in diagnosis coding practices. Some disease categories are not available in some programs but may be in others.
* Symptoms can be, and often are, selected as diagnoses.
* Diagnoses can be very specific or very broad. For example, someone with the same symptoms might be assigned a diagnosis of "influenza" or "viral infection".

# Other limitations

* The other main source of primary care in Australia is general practice services. Because of variability in GP service availability, limited consultation hours and variation in bulk billing practices, ED activity may be very sensitive to availability of GP services.
* Emergency Departments have different visit types, the most common being an "Emergency Visit".

# Tips for using Emergency Department data in linkage studies

* The EDDC has substantial limitations. These limitations must be considered when planning a study using ED data, and in particular, when interpreting and presenting the data
* Data are available from all public hospitals in the ACT.
* Access to data from Canberra and Calvary hospitals needs to be sought separately. Please see the CHeReL website ‘Apply for linked data’ page for more information (<http://www.cherel.org.au/apply-for-linked-data>) or speak to the CHeReL Research Project Manager ([MOH-CHeReL@health.nsw.gov.au](mailto:MOH-CHeReL@health.nsw.gov.au)).

# General Enquiries

Population Health Informatics

Epidemiology Section

Data Analytics Branch

ACT Health Directorate

Email: [healthinfo@act.gov.au](mailto:healthinfo@act.gov.au)

Please submit Data Linkage Request via:

[Data Analytics Branch - Jira Service Management (atlassian.net)](https://act-health.atlassian.net/servicedesk/customer/portal/20)

**Variable information**

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| **Variable** | **Description/Notes** | **Codes** |
| **Date of birth** | Full date of birth will only be supplied if sufficient justification is  supplied that age is insufficient. Date of birth may otherwise be supplied as MMYYYY. |  |
| **Age** | The age of the patient in years |  |
| **Sex** | Gender of the patient | 1 = Male  2 = Female  3 = Indeterminate  9 = Not stated/inadequately described |
| **Indigenous status** | Whether the person is Aboriginal or Torres Strait Islander, based on the person’s own self-report | 1 = Aboriginal but not Torres Strait Islander origin 2 = Torres Strait Islander but not Aboriginal origin 3 = Both Aboriginal and Torres Strait Islander origin  4 = Neither Aboriginal nor Torres Strait Islander origin 9 = Unknown or not stated |
| **Country of birth** | The country in which the patient was born | Codes are according to the Standard Australian Classification of Countries (SACC) issued by the Australian  Bureau of Statistics [http://www.abs.gov.au/ausstats/abs@.nsf/mf/1269.0](http://www.abs.gov.au/ausstats/abs%40.nsf/mf/1269.0) |
| **Marital status** | Current marital status of the patient | 1 = Never married 2 = Widowed  3 = Divorced  4 = Separated  5 = Married (including de facto)  6 = Not stated/inadequately described |

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| **Variable** | **Description/Notes** | **Codes** |
| **State of residence** | The Australian state in which the patient usually resides | 0 = not applicable, o/s, at sea. no fixed address  1 = NSW  2 = Vic  3 = Qld  4 = SA  5 = WA  6 = Tas  7 = NT  8 = ACT  9 = Other/Territories |
| **Postcode of residence** | The postcode of the patient’s usual place of residence | The following codes are also valid:  9999 = No Further Information Available (NFIA)  ACT - 2600-2620; 2900-2915. Postcodes 2600, 2611,  2618, 2619, 2620 are shared with NSW  NSW - 2000 - 2599; 2618 – 2899  VIC - 3000 - 3999  QLD – 4000-4999  SA – 5000-5999  WA – 6000-6999  TAS – 7000-7999  NT – 0800-0899  O/S – null or 9999 |
| **Statistical Local Area of residence** | The geographical boundary assigned to the patient’s area of residence | Codes are according to the Australian Standard Geographical Classification (ASGC) issued by the  Australian Bureau of Statistics [http://www.abs.gov.au/ausstats/abs@.nsf/mf/1216.0](http://www.abs.gov.au/ausstats/abs%40.nsf/mf/1216.0) |
| **Hospital Identifier** | The specific hospital reporting the ED episode of care. | 82 = Canberra Hospital  83 = Calvary Public Hospital -Bruce |
| **Insurance status** | Indicates whether the person receiving the service is insured or not insured at the time. This variable is not intended to indicate whether or not the person utilises hospital benefit  entitlements. | 1 = Hospital insurance  2 = No hospital insurance 9 = Unknown |

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| **Variable** | **Description/Notes** | **Codes** |
| **Arrival date and time** | Date and time at which the person presents for the service | DDMMYYY and HH:MM (24 hour format) |
| **Triage date and time** | Date and time at which the person is assessed by a Triage nurse | DDMMYYY and HH:MM (24 hour format) |
| **Mode of arrival** | Mode of transport by which the person arrives | 01 = ACT Ambulance  02 = Ambulance (Services) 03 = Air Ambulance  04 = NSW Ambulance 05 = Bicycle  06 = Clinic car  07 = Community / public transport 08 = Hospital transport  09 = Motor bike  10 = Other including undertakers 11 = Private car  12 = Police vehicle 13 = Taxi  14 = Walk  15 = Correctional services vehicle 99 = Other/unknown |
| **Type of visit** | The reason the person presents to the Emergency Department | 01 = Emergency presentation 02 = Return visit  03 = Pre-arranged admission 04 = Patient in transit  05 = Dead on arrival |

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| **Variable** | **Description/Notes** | **Codes** |
| **Referral source** | Source from which the person was referred to this service | 01 = Self, family, friends  02 = Community based specialist 03 = Outpatients  04 = Community based GP  05 = Residential Aged Care facility 06 = Other ACT hospital  07 = Non-ACT hospital 08 = Mental health team  09 = Community health centre or service 10 = Other community services  11 = Prison  12 = Police  13 = Ambulance  14 = Health First call centre 17 = Defence hospital  18 = Canberra Hospital  19 = Calvary Public hospital 98 = Unspecified  99 = Other/unknown |
| **ICD-10-AM Edition** | International Classification of Diseases Edition and Version of diagnosis codes | 1 = ICD-10-AM Ed 1  2 = ICD-10-AM Ed 2  3 = ICD-10-AM Ed 3  4 = ICD-10-AM Ed 4  5 = ICD-10-AM Ed 5  6 = ICD-10-AM Ed 6  7 = ICD-10-AM Ed 7 |
| **Ready date** | Date and time at which person is ready for departure | DDMMYYY and HH:MM (24 hour format) |
| **Diagnosis** | The diagnosis or condition established after assessment to be responsible for the person presenting to the Emergency Department.  If the person is admitted as an inpatient it is the equivalent of the admission diagnosis. | ICD Edition and Version as noted in “ICD-10-AM Edition” variable |