MEDICAL WARNINGS SYSTEM
DATA DICTIONARY

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New Zealand Health Information Service

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Reporting environments

Reporting environments such as Business Objects and data extracts will not necessarily contain all data described in this Data Dictionary.

Publications

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Introduction

Basis
This revised dictionary builds on the information that was previously published in the Medical Warnings System (MWS) Data Dictionary and the Guide to Data Requirements.

Objectives
The objectives of the New Zealand Health Information Service (NZHIS) Data Dictionaries are to:

- describe the information available within the National Collections
- promote uniformity, availability and consistency across the National Collections
- support the use of nationally agreed protocols and standards wherever possible
- promote national standard definitions and make them available to users.

It is hoped that the greater level of detail along with clear definitions of the business rules around each element will assist with providing and using the data.

Audiences
The target audiences for NZHIS Data Dictionaries are data providers, software developers, and data users.

New format
All data element definitions in the NZHIS Data Dictionaries are presented in a format based on the Australian Institute of Health and Welfare National Health Data Dictionary. This dictionary is based on the ISO/IEC Standard 11179 Specification and Standardization of Data Elements—the international standard for defining data elements issued by the International Organization for Standardization and the International Electrotechnical Commission.

The format is described in detail in Appendix A of this dictionary.

Changes to dictionary format
A more rigorous approach to recording changes in the data elements has been introduced in these dictionaries along with background material on the features of time-series data for each element.

In summary, the changes to the data dictionaries include:

- standardisation of the element names so that, for instance, a healthcare user’s NHI number is referred to as NHI number in all collections
- elements are listed alphabetically within each table, and the tables are organised alphabetically
- each table is described
- verification rules, historical information, and data quality information are included
- alternative names for the elements are listed
- information about how the data is collected is given
- related data, and references to source documents and source organisations are included
- an alphabetical index is included
- code tables are included with the element, or a reference given to the NZHIS web site (for large or dynamic code tables).
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**Medical Warnings System (MWS)**

**Scope**

<table>
<thead>
<tr>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Medical Warnings System is a value-added service closely aligned with the National Health Index. It is designed to warn healthcare providers of the presence of any known risk factors that may be important when making clinical decisions about patient care.</td>
</tr>
</tbody>
</table>

**Content**

<table>
<thead>
<tr>
<th>The MWS comprises the following features:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• medical warnings incorporating adverse medical reactions and significant medical conditions</td>
</tr>
<tr>
<td>• event summaries incorporating identification of the facility where the patient’s medical record is located</td>
</tr>
<tr>
<td>• donor information incorporating donor summaries and healthcare user contact details.</td>
</tr>
</tbody>
</table>

**Start date**

| The MWS was initially part of the National Master Patient Index, implemented in 1977. |

**Guide for use**

| Specifically aimed at healthcare providers. |
| Classification codes are not fully reported and are not validated. Generally, the description of the drug and the reaction is of most interest to users. |

**Collection methods – guide for providers**

| The responsibility for maintaining the content of the MWS rests primarily with its users, the healthcare providers. |
| The codes for Adverse Medical Reactions and Significant Medical Conditions are taken from the International Classification of Diseases manual currently in use nationally in New Zealand. |
| For Adverse Medical Reactions, external cause codes from the ICD-9-CM-A range E930-E949 are used. |
| For Significant Medical Conditions, diagnosis codes from the ICD-9-CM-A range 001-999 are used. |

**Frequency of updates**

| Ongoing, as required. |

**Security of data**

| Access to the MWS is restricted to healthcare providers approved by the NZHIS. |
| Access to the MWS features is dependent upon a valid NHI number (also known as HCU identifier) for the healthcare user being provided. |

**Privacy issues**

| Under the Health Information Privacy Code 1994, healthcare users must be advised that information may be entered on the MWS and that they have the right to refuse permission for this to be entered. |

**National reports and publications**

| The Centre for Adverse Reactions Monitoring (CARM) receives information from GPs and hospitals. Eventually this will be provided directly from MWS. CARM aims to determine which adverse reactions are life-threatening to patients. |

**Data provision**

| None. |
Contact and Donor Information table

**Table name:** Contact and Donor Information table

**Name in database:** hcu_contact_tab

**Definition:** Donor summary information plus an individual or organisation identified by a healthcare user as the contact in case of an emergency or other event necessitating the involvement of that person or organisation.

**Guide for Use:** Data originally sourced from lifetime driver's licences from 1976 onwards: copies were sent to the nearest hospital. Data was collected inconsistently and some information was not entered into the system.

Some DHBs store information locally and do not update the national database.

**Primary Key:** NHI number

**Business Key:** Information last updated

**Relational Rules:** Uniquely linked to Healthcare User.

Contact after-hours phone

**Administrative status**

**Reference ID:** A0041

**Version:** 1.0

**Version date:** 01-Jan-2003

**Identifying and defining attributes**

- **Name:** Contact after-hours phone
- **Name in database:** phone
- **Element type:** Data element
- **Definition:** The telephone number most likely to reach the designated contact person outside the normal working hours of 8 am to 5 pm, Monday to Friday.

**Context:**

**Relational and representational attributes**

- **Data type:** varchar
- **Field size:** 25
- **Layout:** Free text

**Data domain:**

**Guide for use:**

**Verification rules:**

**Collection method:** STD codes should always be included, and country codes if appropriate.

**Related data:**

**Administrative attributes**

- **Source document:**
- **Source organisation:**
Contact family name

Administrative status

Reference ID: A0037
Version: 1.0
Version date: 01-Jan-2003

Identifying and defining attributes

Name: Contact family name
Name in database: family_name
Other names:
Element type: Data element
Definition: The family name (surname) of the healthcare user's contact.
Context:

Relational and representational attributes

Data type: varchar
Field size: 25
Layout:
Data domain:
Guide for use:
Verification rules:
Collection method: May only include upper- and lower-case alphabetic characters, spaces, hyphens and apostrophes.
Related data:

Administrative attributes

Source document:
Source organisation:
Contact first given name

Administrative status

Reference ID: A0053  Version: 1.0  Version date: 01-Jan-2003

Identifying and defining attributes

Name: Contact first given name
Name in database: first_name
Other names:
Element type: Data element
Definition: The first given name of the healthcare user's contact.
Context:

Relational and representational attributes

Data type: varchar  Field size: 20  Layout:
Data domain:
Guide for use:
Verification rules:
Collection method: May only include upper- and lower-case alphabetic characters, spaces, hyphens and apostrophes.
Related data:

Administrative attributes

Source document:
Source organisation:
Contact relationship code

Administrative status

Reference ID: A0042
Version: 1.0
Version date: 01-Jan-2003

Identifying and defining attributes

Name: Contact relationship code
Name in database: relationship_code
Other names:
Element type: Data element
Definition: A code defining the relationship of the designated contact person to the healthcare user.
Context:

Relational and representational attributes

Data type: char
Field size: 2
Layout: NN
Data domain:
01 Mother
02 Father
03 Sister
04 Brother
05 Son
06 Daughter
07 Uncle
08 Aunt
09 Nephew
10 Niece
11 Cousin
12 Grandfather
13 Grandmother
14 Employer
15 Other
16 Spouse

Guide for use:
Verification rules:
Collection method:
Related data:

Administrative attributes

Source document:
Source organisation:
Contact residential address city/town

Administrative status

Reference ID: A0057  Version: 1.0  Version date: 01-Jan-2003

Identifying and defining attributes

Name: Contact residential address city/town
Name in database: address_line_4
Other names:
Element type: Data element
Definition: The fourth line of the address of the healthcare user's contact, representing the city, town or region.
Context:

Relational and representational attributes

Data type: varchar  Field size: 30  Layout: Free text
Data domain:
Guide for use:
Verification rules:
Collection method:
Related data:

Administrative attributes

Source document:
Source organisation:
Contact residential address line 1

Administrative status

Reference ID: A0038
Version: 1.0
Version date: 01-Jan-2003

Identifying and defining attributes

Name: Contact residential address line 1
Name in database: address_line_1
Other names: 
Element type: Data element
Definition: The first line of the address at which the healthcare user's contact lives.
Context:

Relational and representational attributes

Data type: varchar
Field size: 35
Layout: Free text
Data domain:
Guide for use: A contact address is mandatory if a contact name has been entered.
Verification rules:
Collection method:
Related data:

Administrative attributes

Source document:
Source organisation:
Contact residential address line 2

Administrative status

Reference ID: A0039  Version: 1.0  Version date: 01-Jan-2003

Identifying and defining attributes

Name: Contact residential address line 2
Name in database: address_line_2
Other names:
Element type: Data element
Definition: The second line of the address at which the healthcare user's contact lives.
Context:

Relational and representational attributes

Data type: varchar  Field size: 30  Layout: Free text
Data domain:
Guide for use:
Verification rules:
Collection method:
Related data:

Administrative attributes

Source document:
Source organisation:
Contact residential address region/country

Administrative status

Reference ID: A0058
Version: 1.0
Version date: 01-Jan-2003

Identifying and defining attributes

Name: Contact residential address region/country
Name in database: address_line_5
Other names:
Element type: Data element
Definition: The fifth line of the address of the healthcare user’s contact, representing the external region or country.

Context:

Relational and representational attributes

Data type: varchar
Field size: 30
Layout: Free text
Data domain:
Guide for use:
Verification rules:
Collection method:
Related data:

Administrative attributes

Source document:
Source organisation:
Contact residential address suburb

Administrative status

Reference ID: A0056  Version: 1.0  Version date: 01-Jan-2003

Identifying and defining attributes

Name: Contact residential address suburb
Name in database: address_line_3
Other names:
Element type: Data element
Definition: The third line of the address of the healthcare user’s contact, representing the suburb.
Context:

Relational and representational attributes

Data type: varchar  Field size: 30  Layout: Free text
Data domain:
Guide for use:
Verification rules:
Collection method:
Related data:

Administrative attributes

Source document:
Source organisation:
Contact second given name

Administrative status

Reference ID: A0054  Version: 1.0  Version date: 01-Jan-2003

Identifying and defining attributes

Name: Contact second given name
Name in database: second_name
Other names:
Element type: Data element
Definition: The second given name of the healthcare user's contact.
Context:

Relational and representational attributes

Data type: varchar  Field size: 20  Layout:
Data domain:
Guide for use:
Verification rules:
Collection method: May only include upper- and lower-case alphabetic characters, spaces, hyphens and apostrophes.
Related data:

Administrative attributes

Source document:
Source organisation:
Contact third given name

Administrative status

Reference ID: A0055
Version: 1.0
Version date: 01-Jan-2003

Identifying and defining attributes

Name: Contact third given name
Name in database: third_name
Other names:
Element type: Data element
Definition: The third given name of the healthcare user's contact.
Context:

Relational and representational attributes

Data type: varchar
Field size: 20
Layout:
Data domain:
Guide for use:
Verification rules:
Collection method: May only include upper- and lower-case alphabetic characters, spaces, hyphens and apostrophes.
Related data:

Administrative attributes

Source document:
Source organisation:
Contact work-hours phone

Administrative status

Reference ID: A0040
Version: 1.0
Version date: 01-Jan-2003

Identifying and defining attributes

Name: Contact work-hours phone
Name in database: business_phone
Other names:
Element type: Data element
Definition: The telephone number most likely to reach the designated contact person during the normal working hours of 8 am to 5 pm, Monday to Friday.

Context:

Relational and representational attributes

Data type: varchar
Field size: 25
Layout: Free text
Data domain:
Guide for use:
Verification rules:
Collection method: STD codes should always be included, and country codes if appropriate.
Related data:

Administrative attributes

Source document:
Source organisation:
Donor summary

Administrative status

Reference ID: A0030
Version: 1.0
Version date: 01-Jan-2003

Identifying and defining attributes

Name: Donor summary
Name in database: n/a
Other names: 
Element type: Data element
Definition: A code denoting which organs, if any, the healthcare user wishes to donate.
Context: 

Relational and representational attributes

Data type: char
Field size: 1
Layout: A
Data domain: 'blank' No information
A All organs
B Body
E Eye
H Heart
K Kidney
L Lung
M Marrow
N Bone
S Skin
V Liver
X Not a donor

Guide for use: Any one or combination of valid donor summary codes, as governed by edit rules.

Verification rules: A summary of the hcu_donor_tab. This is generally how the information from the hcu_donor_tab displays on screen. All rows with the same NHI number in that table will display in this field.

If a record has 'A', 'B' or 'X', then there should be no other records for that healthcare user; otherwise the healthcare user can have any combination of the other codes (codes 'E' to 'V').

Collection method:
Related data:

Administrative attributes

Source document:
Source organisation:
Information last updated

Administrative status

Reference ID: A0043

Version: 1.0

Version date: 01-Jan-2003

Identifying and defining attributes

Name: Information last updated

Name in database: date_last_updated

Other names:

Element type: Derived data element

Definition: The date of last update to a healthcare user's donor summary or contact details.

Context:

Relational and representational attributes

Data type: datetime

Field size:

Layout:

Data domain:

Guide for use:

Verification rules: NZHIS system-generated at time of update.

Collection method:

Related data:

Administrative attributes

Source document:

Source organisation:
NHI number

**Administrative status**

**Reference ID:** A0012  **Version:** 1.0  **Version date:** 17-Jul-2003

**Identifying and defining attributes**

**Name:** NHI number

**Name in database:** hcu_id

**Other names:** Reported as hcu_identifier.

**Element type:** Data element

**Definition:** The NHI number is the cornerstone of NZHIS's data collections. It is a unique 7-character identification number assigned to a healthcare user by the National Health Index (NHI) database. NHI numbers uniquely identify healthcare users, and allow linking between different data collections.

**Context:**

**Data type:** char  **Field size:** 7  **Layout:** AAANNNN

**Data domain:**

**Guide for use:** THE NHI NUMBER

When duplicate records for a healthcare user are merged, one of their NHI numbers will be deemed to be the master (or primary), and the others become event (or secondary) NHI numbers. This does not affect which NHI numbers are used in local systems.

For the analysis of healthcare information relating to a unique individual, the master NHI number should be used.

The Privacy Commissioner considers the NHI number to be personally identifying information (such as name and address) so, if it is linked to clinical information, it must be held securely and the healthcare user’s privacy protected.

**VALIDATION**

The first three characters of an NHI number must be alpha (but not 'I' or 'O'). The 4th to 6th characters must be numeric. The 7th character is a check digit modulus 11.

**Verification rules:** There is a verification algorithm which ensures that the NHI number is in the correct format and is valid.

**Collection method:** NHI numbers are often included on patient notes and other patient documentation. New numbers can be allocated by health providers who have direct access to the NHI Register. New NHI numbers are also allocated by HealthPAC for GPs and other primary care providers.

**Related data:**

**Source document:** http://www.nzhis.govt.nz/nhi for more information on the NHI number

**Source organisation:** NZHIS
Event Summaries

Table name: Event Summaries

Name in database: n/a  Version: 1.0  Version date: 26-May-2003

Definition: Event summary records are generated automatically from the NMDS and posted to this feature of the MWS.

Guide for Use: This is how the information from the GHE database is extracted for display in the MWS. If the Event Summary Suppress flag is 'Y' in the NMDS, this record is suppressed.

For every discharge loaded into the NMDS, a subset of the information is automatically uploaded into the GHE database for use by the MWS. Contains the facility, dates and primary diagnosis for inpatient events and some cancer registrations.

Primary Key:

Business Key:

Relational Rules: Uniquely linked to Healthcare User.

Diagnosis details

Administrative status

Reference ID: A0010  Version: 1.0  Version date: 01-Jan-2003

Identifying and defining attributes

Name: Diagnosis details

Name in database: n/a

Other names:

Element type: Data element

Definition: Diagnosis details extracted from the NMDS and formatted according to NZHIS criteria.

Context:

Relational and representational attributes

Data type: char  Field size: 70  Layout: Free text

Data domain:

Guide for use: NZHIS-generated text.

Includes the following data from the NMDS, with each data element separated by an underline character:

- Event type (eg, IP for inpatient event)
- Diagnosis type (value A)
- Diagnosis/procedure description
- Clinical code (ICD-9-CM-A or ICD-10-AM).

Presents a summary of the event, detail of diagnosis, or reason for the visit for one (usually primary) diagnosis.

Subject to privacy and confidentiality constraints.

Verification rules:

Collection method: Sourced from the first diagnosis in the NMDS diagnosis_procedure_tab.

Related data:

Administrative attributes

Source document:

Source organisation:
Event end date

Identifying and defining attributes

Name: Event end date
Name in database: event_end_date
Other names:
Element type: Data element
Definition: The date on which a healthcare user is discharged from a facility (ie, the date the healthcare event ended) or the date on which a sectioned mental health patient is discharged to leave.
Context: Hospital inpatient or day patient health event. Used in the NMDS.

Relational and representational attributes

Data type: datetime
Field size: 
Layout: CCYYMMDD
Data domain: Valid dates
Guide for use:
Verification rules:
Collection method: Sourced from event_end_date in the NMDS health_event_tab.
Related data:

Administrative attributes

Source document:
Source organisation:
Event start date

Administrative status

Reference ID: A0008

Version: 1.0

Version date: 01-Jan-2003

Identifying and defining attributes

Name: Event start date

Name in database: event_start_date

Other names:

Element type: Data element

Definition: The admission date on which a healthcare event began.

Context: Hospital inpatient or day patient health event. Used in the NMDS.

Relational and representational attributes

Data type: datetime

Field size:

Layout: CCYYMMDD

Data domain: Valid date

Guide for use:

Verification rules:

Collection method: Sourced from event_start_date in the NMDS health_event_tab.

Related data:

Administrative attributes

Source document:

Source organisation:
Facility

Administrative status

**Reference ID:** A0011

**Version:** 1.0

**Version date:** 01-Jan-2003

## Identifying and defining attributes

**Name:** Facility

**Name in database:** Health_agency_facility

**Other names:** Health agency facility

**Element type:** Data element

**Definition:** Details of the health provider facility in which the health event took place.

**Context:**

## Relational and representational attributes

**Data type:** char

**Field size:** 20

**Layout:** Free text

**Data domain:**

**Guide for use:** Comprises the 4-character Facility code and the first 16 characters of the Facility name, e.g., 3211 Auckland.

**Verification rules:**

**Collection method:** Sourced from facility_code in the NMDS health_event_tab.

**Related data:**

## Administrative attributes

**Source document:**

**Source organisation:**
NHI number

Administrative status

Reference ID: A0012
Version: 1.0
Version date: 17-Jul-2003

Identifying and defining attributes

Name: NHI number
Name in database: hcu_id
Other names: Reported as hcu_identifier.
Element type: Data element
Definition: The NHI number is the cornerstone of NZHIS's data collections. It is a unique 7-character identification number assigned to a healthcare user by the National Health Index (NHI) database. NHI numbers uniquely identify healthcare users, and allow linking between different data collections.

Context:

Data type: char
Field size: 7
Layout: AAANNNN

Guid for use: THE NHI NUMBER
When duplicate records for a healthcare user are merged, one of their NHI numbers will be deemed to be the master (or primary), and the others become event (or secondary) NHI numbers. This does not affect which NHI numbers are used in local systems.

For the analysis of healthcare information relating to a unique individual, the master NHI number should be used.

The Privacy Commissioner considers the NHI number to be personally identifying information (such as name and address) so, if it is linked to clinical information, it must be held securely and the healthcare user’s privacy protected.

VALIDATION
The first three characters of an NHI number must be alpha (but not ‘I’ or ‘O’). The 4th to 6th characters must be numeric. The 7th character is a check digit modulus 11.

Verification rules: There is a verification algorithm which ensures that the NHI number is in the correct format and is valid.

Collection method: NHI numbers are often included on patient notes and other patient documentation. New numbers can be allocated by health providers who have direct access to the NHI Register. New NHI numbers are also allocated by HealthPAC for GPs and other primary care providers.

Related data:

Administrative attributes

Source document: http://www.nzhis.govt.nz/nhi for more information on the NHI number
Source organisation: NZHIS
Medical Warnings table

Table name: Medical Warnings table
Name in database: medical_warning_tab Version: 1.0 Version date: 26-May-2003

Definition:
Medical Warnings comprise two types of information:

- Adverse Medical Reactions (AMR), which provide a mechanism for alerting healthcare providers to a range of potential danger and/or warning situations for a healthcare user, concerned primarily with drugs and medicines.
- Significant Medical Conditions (SMC) - usually non-drug-related - for a healthcare user that may exist or may need to be brought to the practitioner's attention (eg, diabetes, chronic dialysis, cancer chemotherapy, renal failure, allergies).

Guide for Use:
Originally loaded from the NMPI, so some information was migrated that is neither AMR nor SMC, eg, historical notes.

Data is entered by hospitals and by CARM (who receive information from doctors and some hospitals).

Contains historical information. Not consistently maintained.

Primary Key:
Business Key:
Relational Rules: Uniquely linked to Healthcare User.

Medical warning code

Administrative status
Reference ID: A0004 Version: 1.0 Version date: 01-Jan-2003

Identifying and defining attributes
Name: Medical warning code
Name in database: medical_warning_code
Other names:
Element type: Data element
Definition: A code representing the adverse reaction or significant medical condition.
Context:

Relational and representational attributes
Data type: char Field size: 6 Layout: Free text
Data domain:
Guide for use: Not used by NZHIS but passed to CARM as additional information.
This field contains a variety of codes, some from local systems.
Verification rules: Not validated by NZHIS. Should be validated by the healthcare provider system and its description included in the MW text description.
If present, there must also be a MW coding system code.
Collection method: Can contain ICD-9-CM-A codes or codes from other systems.
Related data:

Administrative attributes
Source document:
Source organisation:
MW coding system ID

Administrative status

Reference ID: A0003
Version: 1.0
Version date: 01-Jan-2003

Identifying and defining attributes

Name: MW coding system ID
Name in database: clinical_system_code
Other names:
Element type: Data element
Definition: A code identifying the MW coding system used for providing the MW code.
Context:

Relational and representational attributes

Data type: char
Field size: 2
Layout: NN

Data domain:
blank No coding system being used
01 ICD-9
02 ICD-9-CM
03 RCC5 (Read)
04 ICPC
05 Continuum AMR codes
06 ICD-9-CM-A

Guide for use: No code table is held for the AMR codes.
Blank may also display as '00'.

Verification rules: If present, there must also be a Medical warning code.

Collection method:

Related data:

Administrative attributes

Source document:
Source organisation:
MW date of CARM approval

Administrative status

Reference ID: A0007

Version: 1.0

Version date: 01-Jan-2003

Identifying and defining attributes

Name: MW date of CARM approval

Name in database: marc_approval_date

Other names:

Element type: Data element

Definition: The date on which the MW was upgraded to a danger by the Centre for Adverse Reactions Monitoring (CARM).

Context:

Relational and representational attributes

Data type: datetime

Field size:

Layout: CCYYMMDD

Data domain:

Guide for use: Only applies to reactions that CARM have evaluated and deemed life-threatening.

Details of patients with adverse reactions should also be sent to CARM (Centre for Adverse Reactions Monitoring, University of Otago Medical School, PO Box 913, Dunedin). A reply-paid card (No.H1574) available from CARM can be used for this purpose.

Verification rules:

Collection method: Security protected. Maintained and updated only by CARM.

Related data:

Administrative attributes

Source document:

Source organisation:
MW date of onset

Administrative status

Reference ID: A0002

Version: 1.0

Version date: 01-Jan-2003

Identifying and defining attributes

Name: MW date of onset

Name in database: date_of_onset

Other names:

Element type: Data element

Definition: The date on which the healthcare user first experienced the adverse reaction or significant medical condition for which there is a medical warning.

Context:

Relational and representational attributes

Mandatory

Data type: datetime

Field size: 

Layout: CCYYMMDD

Data domain: Valid dates

Partial dates are permissible. At a minimum the century and year must be supplied. If day is provided but month is omitted then the day will not be recorded. Incomplete dates are stored as 'ccyy0101' or 'ccyymm01' and a partial date flag associated with the date is set to the appropriate value.

Guide for use: If a partial date is supplied, the date should be updated as soon as possible after accurate information becomes available.

Verification rules: Mandatory.

Collection method:

Related data:

Administrative attributes

Source document:

Source organisation:
MW details last updated

Administrative status

Reference ID: A0059  
Version: 1.0  
Version date: 01-Jan-2003

Identifying and defining attributes

Name: MW details last updated  
Name in database: date_last_updated  
Other names:  
Element type: Data element  
Definition: The date of last update to this MW record for the healthcare user.  
Context:  

Relational and representational attributes

Data type: datetime  
Field size:  
Layout:  
Data domain:  
Guide for use:  
Verification rules: Generated by the NZHIS system at time of update.  
Collection method:  
Related data:  

Administrative attributes

Source document:  
Source organisation:  

MW Data Dictionary
Medical Warnings table
MW doctor number

Administrative status

Reference ID: A0006
Version: 1.0
Version date: 01-Jan-2003

Identifying and defining attributes

Name: MW doctor number
Name in database: doctor_id
Other names:

Element type: Data element
Definition: Identification number of the healthcare professional responsible for the most recent change to an MW. Not used by NZHIS but passed to CARM as additional information.

Context:

Relational and representational attributes

Data type: char
Field size: 5
Layout: Free text

Data domain:

Guide for use: Historical information. Some of this information has been loaded up from old systems, and would have previously been validated against the Doctor database, which was hospital-specific.

Verification rules: Optional. Not validated by NZHIS at time of entry.

Suggested codes are the Continuum doctor numbers or the Register of Medical Practitioners doctor ID numbers.

Collection method:
Related data:

Administrative attributes

Source document:
Source organisation:
MW Facility code

Administrative status

Reference ID: A0143
Version: 1.0
Version date: 01-Jan-2003

Identifying and defining attributes

Name: MW Facility code
Name in database: facility_code
Other names:
Element type: Data element
Definition: The facility reporting the medical warning.
Context:

Relational and representational attributes

Data type: char
Field size: 4
Layout:

Data domain:

Guide for use:
Verification rules: Optional.
Collection method:
Related data:

Administrative attributes

Source document:
Source organisation:
MW severity code

Identifying and defining attributes

Name: MW severity code
Name in database: severity_code
Other names:

Element type: Data element
Definition: A code defining the level of severity of the medical warning for all AMRs and SMCs.

Context:

Relational and representational attributes

Data type: char
Field size: 1
Layout: A

Data domain:
D  Danger
W  Warning
R  Other Warning (to retain historical 'memo' information from the former Continuum NMPI system)

Guide for use: Most data entered as 'W' (Warning). Only CARM can enter a 'D' (Danger) code.

'R' was used for migrated data that is not Medical Warning information.

Verification rules:
Collection method:
Related data:

Administrative attributes

Source document:
Source organisation:
MW text description

Administrative status

Reference ID: A0005
Version: 1.0
Version date: 01-Jan-2003

Identifying and defining attributes

Name:  MW text description
Name in database:  description
Other names:
Element type:  Data element
Definition:  Description of the adverse reaction or significant medical condition.
Context:

Relational and representational attributes

Data type:  varchar
Field size:  70
Layout:  Free text

Data domain:

Guide for use:  Contains information about drugs causing adverse reactions, or text relating to allergies and significant medical conditions.

The field may contain notes or memos loaded from the NMPI.

Verification rules:  Not validated by NZHIS at time of entry, but may be qualified by CARM.

Collection method:  In the case of an adverse reaction, identify the drug and provide a concise statement describing the type of reaction, eg, Amoxycillin - headaches/angioedema.

Related data:

Administrative attributes

Source document:
Source organisation:
NHI number

Administrative status

Reference ID: A0012
Version: 1.0
Version date: 17-Jul-2003

Identifying and defining attributes

Name: NHI number
Name in database: hcu_id
Other names: Reported as hcu_identifier.
Element type: Data element
Definition: The NHI number is the cornerstone of NZHIS's data collections. It is a unique 7-character identification number assigned to a healthcare user by the National Health Index (NHI) database. NHI numbers uniquely identify healthcare users, and allow linking between different data collections.

Context:

Data type: char
Field size: 7
Layout: AAANNNN

Relational and representational attributes

Mandatory

Data domain:

Guide for use: THE NHI NUMBER
When duplicate records for a healthcare user are merged, one of their NHI numbers will be deemed to be the master (or primary), and the others become event (or secondary) NHI numbers. This does not affect which NHI numbers are used in local systems.

For the analysis of healthcare information relating to a unique individual, the master NHI number should be used.

The Privacy Commissioner considers the NHI number to be personally identifying information (such as name and address) so, if it is linked to clinical information, it must be held securely and the healthcare user’s privacy protected.

VALIDATION
The first three characters of an NHI number must be alpha (but not 'I' or 'O'). The 4th to 6th characters must be numeric. The 7th character is a check digit modulus 11.

Verification rules: There is a verification algorithm which ensures that the NHI number is in the correct format and is valid.

Collection method: NHI numbers are often included on patient notes and other patient documentation. New numbers can be allocated by health providers who have direct access to the NHI Register. New NHI numbers are also allocated by HealthPAC for GPs and other primary care providers.

Related data:

Source document: http://www.nzhis.govt.nz/nhi for more information on the NHI number
Source organisation: NZHIS
Partial onset date flag

Administrative status

Reference ID: Version: 1.0 Version date: 07-Aug-2003

Identifying and defining attributes

Name: Partial onset date flag
Name in database: partial_onset_date
Other names:
Element type: DATA ELEMENT
Definition: Indicates whether the MW date of onset stored is a partial date.
Context:

Relational and representational attributes

Data type: char Field size: 1 Layout: A
Data domain: Y only the year is supplied
M the month and year were supplied
Guide for use: A partial date flag, set automatically.
Verification rules:
Collection method:
Related data: MW date of onset

Administrative attributes

Source document:
Source organisation:
Warning entry time

Administrative status

Reference ID:  
Version: 1.0  Version date: 07-Aug-2003

Identifying and defining attributes

Name: Warning entry time
Name in database: warning_entry_time
Other names:
Element type: DATA ELEMENT
Definition: The time at which the warning is saved into the database.
Context:

Relational and representational attributes

Data type: datetime  Field size:  
Layout: 
Data domain:
Guide for use: Forms part of the primary key.
Verification rules: System-generated.
Collection method:
Related data:

Administrative attributes

Source document:
Source organisation:
# Appendix A: Data Dictionary Template

## Introduction
This appendix explains how data element attributes are organised in the data dictionary template.

## Order of elements
Within the dictionary, elements are organised by table, and then alphabetically. An alphabetical index at the back of the data dictionary is provided to assist the user in finding specific elements.

## Template:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative status</td>
<td>The operational status (e.g., CURRENT, SUPERSEDED) of the data element. No SUPERSEDED data elements will be included in the Dictionaries.</td>
</tr>
<tr>
<td>Reference ID</td>
<td>A code that uniquely identifies the data element. If the data element is used in more than one collection, it should retain its Reference ID wherever it appears.</td>
</tr>
<tr>
<td>Version number</td>
<td>A version number for each data element. A new version number is allocated to a data element/concept when changes have been made to one or more of the following attributes of the definition:</td>
</tr>
<tr>
<td></td>
<td>– name</td>
</tr>
<tr>
<td></td>
<td>– definition</td>
</tr>
<tr>
<td></td>
<td>– data domain, e.g., adding a new value to the field.</td>
</tr>
<tr>
<td></td>
<td>Elements with frequently updated code tables, such as the Facility code table, will not be assigned a new version for changes to data domain.</td>
</tr>
<tr>
<td>Version date</td>
<td>The date the new version number was assigned.</td>
</tr>
</tbody>
</table>

## Identifying and defining attributes

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>A single or multi-word designation assigned to a data element. This appears in the heading for each unique data definition in the Dictionaries. Previous names for the data element are included in the Guide for Use section.</td>
</tr>
<tr>
<td>Data element type</td>
<td>DATA ELEMENT—a unit of data for which the definition, identification, representation and permissible values are specified by means of a set of attributes.</td>
</tr>
<tr>
<td></td>
<td>DERIVED DATA ELEMENT—a data element whose values are derived by calculation from the values of other data elements.</td>
</tr>
<tr>
<td></td>
<td>COMPOSITE DATA ELEMENT—a data element whose values represent a grouping of the values of other data elements in a specified order.</td>
</tr>
<tr>
<td>Definition</td>
<td>A statement that expresses the essential nature of a data element and its differentiation from all other data elements.</td>
</tr>
<tr>
<td>Context</td>
<td>A designation or description of the application environment or discipline in which a name is applied or from which it originates. This attribute may also include the justification for collecting the items and uses of the information.</td>
</tr>
</tbody>
</table>
Relational and representational attributes

**Data type**
The type of field in which a data element is held. For example, character, integer, or numeric.

**Field size**
The maximum number of storage units (of the corresponding data type) to represent the data element value. Field size does not generally include characters used to mark logical separations of values, eg, commas, hyphens or slashes.

**Layout**
The representational layout of characters in data element values expressed by a character string representation. For example:
- ‘CCYYMMDD’ for calendar date
- ‘N’ for a one-digit numeric field
- ‘A’ for a one-character field
- ‘X’ for a field that can hold either a character or a digit, and
- ‘$$,$$$,$$$’ for data elements about expenditure.

**Data domain**
The permissible values for the data element. The set of values can be listed or specified by referring to a code table or code tables, for example, ICD-10-AM 2nd Edition.

**Guide for use**
Additional comments or advice on the interpretation or application of the data element (this attribute has no direct counterpart in the ISO/IEC Standard 11179 but has been included to assist in clarification of issues relating to the classification of data elements). Includes historical information, advice regarding data quality, and alternative names for this data element.

**Verification rules**
The rules and/or instructions applied for validating and/or verifying elements, in addition to the formal edits.

**Collection method**
Comments and advice concerning the capture of data for the particular data element, including guidelines on the design of questions for use in collecting information, and treatment of ‘not stated’ or non-response (this attribute is not specified in the ISO/IEC Standard 11179 but has been added to cover important issues about the actual collection of data).

**Related data**
A reference between the data element and any related data element in the Dictionary, including the type of this relationship. Examples include: ‘has been superseded by the data element…’, ‘is calculated using the data element…’, and ‘supplements the data element…’.

Administrative attributes

**Source document**
The document from which definitional or representational attributes originate.

**Source organisation**
The organisation responsible for the source document and/or the development of the data definition (this attribute is not specified in the ISO/IEC Standard 11179 but has been added for completeness). The source organisation is not necessarily the organisation responsible for the ongoing development/maintenance of the data element definition. An example of a source organisation is the National Data Policy Group (NDPG).
Appendix B: Glossary

Note: See Appendix B: Glossary in separate document.
Appendix C: Logical Groups of Elements

**Contact Information**
- Contact after-hours phone
- Contact family name
- Contact first given name
- Contact preferred name indicator
- Contact relationship code
- Contact residential address city/town
- Contact residential address line 1
- Contact residential address line 2
- Contact residential address region/country
- Contact residential address suburb
- Contact second given name
- Contact third given name
- Contact work-hours phone

**Donor Information**
- Donor summary

**Event Summaries**
- Diagnosis details
- Event end date
- Event start date
- Facility

**Medical Warnings**
- Medical warning code
- MW coding system code
- MW date of CARM approval
- MW date of onset
- MW details last updated
- MW doctor number
- MW facility code
- MW severity code
- MW text description
## Appendix D: Code Table Index

<table>
<thead>
<tr>
<th>Code table</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMR Severity code table</td>
<td>See <em>MW severity code</em> on page 28.</td>
</tr>
<tr>
<td>Contact Relationship code table</td>
<td>See <em>Contact relationship code</em> on page 4.</td>
</tr>
<tr>
<td>Donor Summary code table</td>
<td>See <em>Donor summary</em> on page 13.</td>
</tr>
<tr>
<td>Facility code table</td>
<td>See the NZHIS web site.</td>
</tr>
<tr>
<td>MW Coding System code table</td>
<td>See <em>MW coding system ID</em> on page 22.</td>
</tr>
</tbody>
</table>

### Code tables on website

For code tables on the NZHIS web site go to http://www.nzhis.govt.nz/documentation/codetables.html. For further information or a printed copy of the code table, contact the Publications Officer. Contact details are listed at the front of this dictionary.
Appendix E: Alphabetical Index of Data Elements

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