
National Minimum Dataset (NMDS)

File Specification for File Version V014.0

Document Version	14.0
Date	27 June 2011
Owner	National Health Board Business Unit, Solutions Delivery Group
Status	Final

Citation: National Health Board Business Unit. 2011. National Minimum Dataset File Specification. Wellington: Ministry of Health.

Published in 2011 by the
Ministry of Health
PO Box 5013, Wellington, New Zealand

This document is available on the Ministry of Health's website:
<http://www.moh.govt.nz>



MANATŪ HAUORA

Table of contents

1.	Front Matter	5
1.1.	Reproduction of material	5
1.2.	Disclaimer	5
1.3.	Publications	5
2.	Introduction	6
2.1.	Purpose of this document	6
2.2.	Intended audience	6
2.3.	Related documents	6
2.4.	National Health Information Principles	6
2.5.	Compliance with standards	6
2.6.	Date standards	7
2.7.	Connection to national systems	7
2.8.	Authority for collection of health information	7
2.9.	Contact	7
3.	Changes to Previous Versions of the Specification.....	8
3.1.	Changes to the specification from document version 13.0 to 14.0	8
3.2.	Changes to the specification from document version 12.0 to 13.0	8
3.3.	Changes to the specification from document version 11.8 to 12.0	8
3.4.	Changes to the specification from document version 11.7 to 11.8	9
3.5.	Changes to the specification from document version 11.5 to 11.7	9
3.6.	Changes to the specification from document version 11.4 to 11.5	9
3.7.	Changes to the specification from document version 11.3 to 11.4	10
3.8.	Changes to the specification from document version 11.2 to 11.3	10
3.9.	Changes to the specification from document version 11.1 to 11.2	10
4.	Overview of National Collection	11
5.	Batch Processing.....	13
5.1.	Batch Process Overview	13
5.2.	Batch Process Flow Diagram	13
5.3.	Batch send process	13
5.3.1	Create Patient Management System batch (input) file.....	13
5.3.2	Send Batch to Ministry of Health	14
5.4.	Ministry of Health Batch Pre-processing	14
5.4.1	Pre-processing	14
5.4.2	Batch passes pre-processing	14
5.4.3	Batch fails pre-processing	14
5.5.	Batch receive process (pre-processing failed)	15
5.6.	Load into the NMDS/Validate (pre-processing passed)	15
5.6.1	Sorting	15
5.6.2	Validation and errors	15
5.6.3	Edit checks	15
5.6.4	WIES and DRG values	15
5.6.5	Loading	16
5.7.	NMDS output files.....	16
5.7.1	Acknowledgement File	16
5.7.2	Costweight Transaction Report	17
5.7.3	Formatted Error Report	17
5.8.	Batch receive process (pre-processing passed)	17
5.8.1	Corrections and deletes.....	17
6.	Key Relationships	18
6.1.	Data keys	18
7.	National Minimum Dataset Data Model.....	19
8.	Extract File Requirements.....	23

8.1.	Batch File Name	23
8.2.	Batch File Format	23
8.2.1	Mandatory/Optional Fields.....	23
8.2.2	Dates, partial dates and datetimes.....	24
8.2.3	Code Table Values	24
8.3.	Valid records.....	25
8.3.1	Input File (eg, CCH00001.ndm)	25
8.3.2	Acknowledgement File (eg, CCH00001.ndr).....	25
8.3.3	Costweight File (eg, CCH00001.ndw)	25
8.3.4	Error File (eg, CCH00001.err)	25
8.3.5	Formatted Error Report (eg, CCH00001.sqr).....	26
9.	Extract File (.ndm).....	27
9.1.	Input File Header (HR) Record.....	27
9.2.	Input File Event Details (HE) Record.....	28
9.3.	Input File Diagnosis (HD) Record.....	39
9.4.	Input File Psychiatric Data (HC) Record.....	42
10.	Acknowledgement File (.ndr).....	45
10.1.	Acknowledgement File Header (AH) Record	45
10.2.	Acknowledgement File Transaction (AK) Record.....	46
11.	Costweight File (.ndw).....	47
11.1.	Costweight Header (WH) Record	47
11.2.	Costweight Transaction (WT) Record	48
12.	Error File (.err).....	49
12.1.	Error File Header Record	49
12.2.	File Failure Record	49
13.	Error Messages	50
13.1.	Fields	50
13.2.	List of NMDS errors	51
14.	Guidelines for Coding Events.....	57
14.1.	Event Start Time (Admission).....	57
14.2.	Event End Time (Discharge)	57
Appendix A: Enhanced Event Type/Event Diagnosis Type Table.....		59
Appendix B: Duplicate and overlapping event checking rules		60
Appendix C: Diagnosis and Clinical Code Combinations.....		61
Appendix D: Sample Error Report (.sqr file).....		63

1. Front Matter

1.1. Reproduction of material

The Ministry of Health (the Ministry) permits the reproduction of material from this publication without prior notification, providing all the following conditions are met: the information must not be used for commercial gain, must not be distorted or changed, and the Ministry must be acknowledged as the source.

1.2. Disclaimer

The Ministry of Health gives no indemnity as to the correctness of the information or data supplied. The Ministry of Health shall not be liable for any loss or damage arising directly or indirectly from the supply of this publication.

All care has been taken in the preparation of this publication. The data presented was deemed to be accurate at the time of publication, but may be subject to change. It is advisable to check for updates to this publication on the Ministry's web site at <http://www.moh.govt.nz>.

1.3. Publications

A complete list of Ministry of Health's publications is available from Ministry of Health, PO Box 5013, Wellington, or on the Ministry's web site at <http://www.moh.govt.nz/publications/publications.htm>.

Any enquiries about or comments on this publication should be directed to:

Analytical Services
Ministry of Health
PO Box 5013
Wellington
Phone: (04) 922 1800 Fax: (04) 922-1899
Email: data-enquiries@moh.govt.nz

Published by Ministry of Health

© 2011, Ministry of Health

2. Introduction

2.1. Purpose of this document

The Ministry of Health File Specification defines the file format used to send information to the ministry for inclusion in the National Minimum Dataset (NMDS) national collection. This includes the file layout and, to a lesser extent, the business rules used for validating the data items within the file.

2.2. Intended audience

There are two audiences for this document:

- Software developers designing, implementing and altering provider systems to ensure they export information in a format suitable for loading into the national collection.
- Business analysts verifying that all required data elements are present and specified correctly.

2.3. Related documents

This document should be read in conjunction with the National Minimum Dataset Data Dictionary.

2.4. National Health Information Principles

The guiding principles for national health information are the need to:

- Protect patient confidentiality and privacy
- Collect data once, as close to the source as possible, and use it as many times as required to meet different information requirements, in keeping with the purpose for which it was collected
- Validate data at source
- Maintain standard data definitions, classifications and coding systems
- Store national health data that includes only that data which is used, valued and validated at the local level
- Provide connectivity between health information systems to promote communication and integrity

2.5. Compliance with standards

All health and disability service providers, agencies and organisations, as defined in the Health Information Privacy Code 1994, accessing or providing national data are required to adhere to and comply with national information standards, definitions and guidelines. Maintaining the integrity and security of the databases and the transmission or exchange of data between health and disability service organisations is essential. This is a shared obligation of all health and disability service agencies.

National data definitions, terms (such as 'ethnicity'), and health information standards are developed and reviewed in consultation with health sector representatives.

2.6. Date standards

In order to comply with BSI DISC PD2000-1 1998, which the Ministry has adopted as the required metric for Y2K compliance, all dates submitted in these files must conform in format to ISO 8601 (CCYYMMDD). Dates will normally be required to be provided to day level. Any exception to this will be noted where appropriate. All abbreviated dates must also comply with ISO 8601.

2.7. Connection to national systems

Health and disability service providers are required to use the national systems, standards and protocols where reasonable. For this reason, providers are encouraged to connect directly to the national systems.

Direct access provides:

- secure communication protocols that meet the privacy requirements
- improved timeliness of data reporting for monitoring purposes
- reduced costs for processing and transmitting data supplied to the national systems.

2.8. Authority for collection of health information

The Ministry of Health may collect health information where this is necessary to carry to lawful purposes connected with its functions and activities. These purposes, functions and activities may be set out in legislation, such as the Health Act 1956, or may be derived from lawful instructions from the Minister. The collection, storage and use of health information is also governed by the Privacy Act 1993 and the Health Information Privacy Code 1994.

2.9. Contact

If you have any queries regarding this file layout or the NMDS load process, please contact the Ministry of Health Helpdesk on 0800 505 125 or e-mail operations@moh.govt.nz.

3. Changes to Previous Versions of the Specification

3.1. Changes to the specification from document version 13.0 to 14.0

The following changes have been made for NMDS File Specification document version 14.0:

- Change the File Version to V014.0
- Add changes for WIESNZ11 and AR-DRG v6.0
- Change Event start date and Event end date fields to datetime fields ie. Event start datetime and Event end datetime. Note that in the validation process when date fields are checked against datetime fields only the date part of the datetime field is used. Until further notice calculated fields that involve the datetime fields will only use the date part of the datetime fields.
Events from older versions of the input file that have date fields instead of the new datetime fields will automatically have the date populated into the date portion of the datetime field and 00:00 populated into the time portion of the datetime field by NMDS.
When events prior to 1 July 2011 are submitted on this new version of the file, the time portion of the datetime field must be populated with '00:00' if the time has not been collected for those events.
- Add sample file layouts in Appendices

MOH will no longer map ICD-10-AM 6th edition codes supplied by DHBs to ICD-10-AM 3rd edition codes. The 6th edition codes will be used to assign an AR-DRG v6.0 DRG.

3.2. Changes to the specification from document version 12.0 to 13.0

The following changes have been made for NMDS File Specification document version 13.0:

- Change the File Version to V013.0
- Add Total Noninvasive Ventilation Hours
- Retire Principal Health Service Purchaser 15 (BreastScreen Aotearoa)
- Add validation of facility open status
- Document validation on new fields
- Add changes for WIES version NZ09
- Changes to the ethnicity Level 2 codeset

3.3. Changes to the specification from document version 11.8 to 12.0

The following changes have been made for NMDS File Specification document version 12.0:

- Change the File Version to V012.0
- Add Mother's NHI field
- Add Total ICU Hours field

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

- Add Facility Transfer From and Facility Transfer To fields
- Increase the length of Diagnosis/Procedure Description field to 100 characters
- Document validation on new fields
- Add changes for WIES version NZ08

New Zealand upgraded to the sixth edition of the International Classification of Diseases and Health Related Problems 10th revision – Australian Modification (ICD-10-AM 6th Edition) as the standard for clinical diagnosis and procedure coding from 1 July 2008. The clinical coding system code for ICD-10-AM 6th Edition is '13'.

MOH will map 6th edition codes supplied by DHBs to 3rd edition codes and use these to assign an AR-DRG v5.0 code. The Casemix Exclusion Rules (CER) associated with WIESNZ08 will apply to the NMDS load process at MOH for the 2008/09 financial year.

3.4. Changes to the specification from document version 11.7 to 11.8

The following changes have been made for NMDS File Specification document version 11.8:

- Add and retire Health Specialty Codes
- Introduce validation on Health Specialty Code Start and End dates
- Add and retire Principal Health Service Purchaser Codes
- Introduce validation on Principal Health Service Purchaser Code Start and End dates
- Add new Event End Type Codes
- Add changes for WIES version 11C

The input file version number remains at V011.5.

3.5. Changes to the specification from document version 11.5 to 11.7

The following changes have been made for NMDS File Specification document version 11.7:

- update 12.2 List of NMDS Errors
- update Appendix C: Diagnosis and Clinical Code Combinations

The input file version number remains at V011.5.

3.6. Changes to the specification from document version 11.4 to 11.5

The AR-DRG v5.0 Grouper will be used to produce the NMDS Cost Weight file during the NMDS load process at MOH from 1 July 2005. The AR-DRG v5.0 Grouper accepts ICD-10-AM 3rd Edition codes. There is no mapping involved in the grouping process.

The following changes have been made for NMDS File Specification document version 11.5:

- change the File Version to V011.5

- add the details for the new WIES11a and AR-DRG 5.0
- update Event and Diagnosis record structures to remove identified fields
- add the Appendix C: Diagnosis and Clinical Code Combinations

3.7. Changes to the specification from document version 11.3 to 11.4

The change to NMDS File Specification document version 11.3 was to add the names of two new legal acts that came into force in September 2004.

The input file version number remains at V011.0

3.8. Changes to the specification from document version 11.2 to 11.3

The changes to NMDS File Specification document version 11.2 included adding the names of two new legal acts that come into force in 2004, and which will result in changes to the legal status codes used within NMDS.

As there is still uncertainty around the introduction of new legal status codes, these legal acts have been removed, until this matter has been finalised (likely until September 2004).

The input file version number remains at V011.0

3.9. Changes to the specification from document version 11.1 to 11.2

New Zealand upgraded to the third edition of the International Classification of Diseases – Australian Modification (ICD-10-AM 3rd Edition) as the standard for clinical diagnosis and procedure coding from 1 July 2004. The coding system code for ICD-10-AM 3rd Edition is '12'.

The AR-DRG 4.2 grouper will continue to be used to produce the NMDS Cost Weight file and thus only applies to the NMDS load process at MOH. MOH will map 3rd edition codes supplied by DHBs to 2nd edition codes and use these to assign an AR-DRG 4.2 code. The Casemix Exclusion Rules (CER) associated with WIES8C will continue to apply to the NMDS load process at MOH for the 2004-2005 financial year.

New NMDS business rules are being implemented on 1 July 2004, to:

- ensure collection of valid purchaser codes.
- ensure collection of valid admission type codes.
- generate a warning for records that have an accident flag set to Y and no ACC claim number.
- ensure collection of valid legal status codes.

The input file version number remains at V011.0

4. Overview of National Collection

Scope

Purpose

The National Minimum Dataset is used for policy formation, performance monitoring, research, and review. It provides statistical information, reports, and analyses about the trends in the delivery of hospital inpatient and day patient health services both nationally and on a provider basis. It is also used for funding purposes.

Content

The NMDS is a national collection of public and private hospital discharge information, including clinical information, for inpatients and day patients. Unit record data is collected and stored. All records must have a valid NHI number.

Data has been submitted electronically in an agreed format by public hospitals since 1993.

The private hospital discharge information for publicly funded events, eg, birth events and geriatric care, has been collected since 1997. Other data is being added as it becomes available electronically.

Start date

The current NMDS was introduced in 1999. The original NMDS was implemented in 1993 and back-loaded with public hospital discharge information from 1988.

Guide for use

The NMDS has undergone many changes over the years. Some data subsets have been removed and are now held in separate collections (Cancer Register and the Mortality Collection). In other cases, additional fields have been included and events are reported in more detail than in the past. For further details refer to the NMDS Data Dictionary.

Private hospital information is also stored in the NMDS. Publicly funded events (primarily maternity and geriatric) and surgical events from some hospitals are up-to-date. Privately funded events may be delayed.

Contact information

For further information about this collection or to request specific datasets or reports, contact the Ministry of Health Analytical Services team on ph (04) 922 1800, fax (04) 922 1899, or e-mail, data-enquiries,@moh.govt.nz or visit the Ministry of Health web site www.moh.govt.nz.

Collection methods – guide for providers

Data is provided by public and the larger private hospitals in an agreed electronic file format. Paper forms and a cut-down electronic file format are also forwarded by other private hospitals.

Frequency of updates	<p>Publicly funded hospital events are required to be loaded into the NMDS within 21 days after the month of discharge. Electronic files are received and processed almost every day at MOH.</p> <p>MOH has a team of staff who manually process private hospital electronic and paper reports.</p>
Security of data	<p>The NMDS is accessed by authorised MOH staff for maintenance, data quality, audit and analytical purposes.</p> <p>Authorised members of the Ministry of Health and DHBs have access to the NMDS for analytical purposes, via the Business Objects reporting tool and the secure Health Information Network. Business Objects contains a subset of the data described in the Data Dictionary</p>
Privacy issues	<p>The Ministry of Health is required to ensure that the release of information recognises any legislation related to the privacy of health information, in particular the Official Information Act 1982, the Privacy Act 1993 and the Health Information Privacy Code 1994.</p> <p>Information available to the general public is of a statistical and non-identifiable nature. Researchers requiring identifiable data will usually need approval from an Ethics Committee.</p>
National reports and publications	<p>MOH publishes an annual report <i>Selected Morbidity Data for Publicly Funded Hospitals</i> in hard copy and on the MOH web site www.moh.govt.nz. This publication contains summary NMDS information for a financial year.</p>
Data provision	<p>Customised datasets or summary reports are available on request, either electronically or on paper. Staff from the Ministry of Health Analytical Services team can help to define the specifications for a request and are familiar with the strengths and weaknesses of the data. New fields have been added to the collection since 1988, but wherever possible consistent time-series data will be provided.</p> <p>The Ministry of Health Analytical Services team also offers a peer review service to ensure that Ministry data is reported appropriately when published by other organisations.</p> <p>There may be charges associated with data extracts.</p>

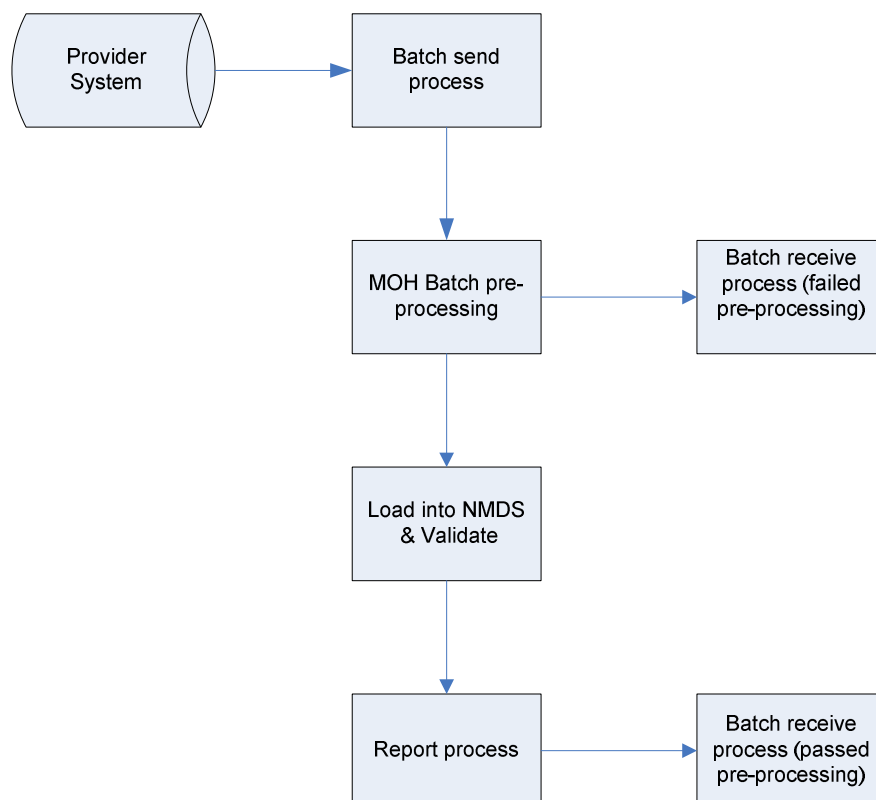
5. Batch Processing

5.1. Batch Process Overview

The NMDS processes are carried out by data providers and MOH. Providers set up and maintain batch send and batch receive processes to supply the data. They record health events, send the data to MOH, and receive acknowledgement of the data processing. MOH validates and loads data, and reports from the database.

5.2. Batch Process Flow Diagram

The process flow is shown below along with high-level descriptions of each process.



5.3. Batch send process

This section describes batch reporting, which may be carried out on a daily, weekly, fortnightly, monthly or other basis (by prior arrangement with the Ministry of Health), providing the data reaches the Ministry within 21 days after the month of discharge.

5.3.1 Create Patient Management System batch (input) file

The provider extracts data from their Patient Management System into a batch file (also known as the input file) for sending to MOH. Each input file must contain a header record and an unlimited number of Event Details records. For each Event Detail record, the file can contain from 1 to 99 Diagnosis records, and from 0 to 99 Psychiatric Data records.

The extract file requirements are set out in section 8 and the layout specifications for the input file are set out in section 9 Extract File. The Business Rules for the fields (both coded and non-coded) are described in the NMDS (Hospital Events) Data Dictionary.

5.3.1.1 Event Detail Records

Each Event Detail record in an input file has a message function of 'A1', 'A2' or 'D1'. The effect of these functions on the NMDS is outlined in the following table.

Code	Function	Effect
A1	Add	Creates a new health event if no existing record with the same key is found on the NMDS. If an existing or overlapping record exists, or errors or warnings are generated, the record is rejected.
A2	Add ignoring any warnings	Creates a new health event if no existing record with the same key is found on the NMDS, regardless of any warnings generated. If an existing or overlapping record exists, or errors are generated, the record is rejected.
D1	Delete	Deletes the record from the NMDS.

An audit trail is kept in the audit tables.

5.3.2 Send Batch to Ministry of Health

The batch file is sent to the Ministry of Health via FTP or other means.

5.4. Ministry of Health Batch Pre-processing

5.4.1 Pre-processing

The input file is initially pre-processed. This checks that the:

- batch is in sequence
- header record's count of number of records equals the actual number of records in the file
- field data types and the number of fields per record comply with NMDS requirements.

5.4.2 Batch passes pre-processing

If the batch passes pre-processing, no error file is generated. The data is loaded into the NMDS (see 5.6 Load into the NMDS/Validate below).

5.4.3 Batch fails pre-processing

If the input file fails pre-processing, an error file (with the same name prefix as the input batch and an extension of '.ERR') is generated containing error messages indicating the cause of failure. The error file consists of:

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

- the header record followed by any error messages relating to the header
- each input data record in error followed by one or more error messages

The Ministry sends the error file to the data provider.

5.5. Batch receive process (pre-processing failed)

If the input file fails pre-processing, the provider must use the error file to correct the input file and resubmit it with the same file name. No further input files will be processed until it passes the pre-processing stage.

5.6. Load into the NMDS/Validate (pre-processing passed)

The batch is then edited and loaded.

5.6.1 Sorting

Incoming transactions are sorted by:

- the message function (eg D1 then A1 or A2).
- record type (eg, HE, HD, or HC), and
- business key (see 6.1 Data keys).

5.6.2 Validation and errors

Validation continues until all records in the event have been processed. If any record in an event is found to contain an error, the error is identified with the appropriate error message and the whole event is rejected. (Other events in the same input file will be accepted if they are validated.)

5.6.3 Edit checks

Edit checks performed include:

- Field value checks – code tables and range checks.
- Record referential checks – checking for duplicate and overlapping events. See *Appendix B: Duplicate and overlapping event checking rules*.
- Data integrity checks – warning or rejecting if the value is inconsistent with values in other fields. Records that have generated a warning message are loaded into the database if the message function is A2. Demographic data supplied (eg, Sex, Date of birth) must be consistent with the Clinical codes, as specified by the editing flags held against each Clinical code on the Clinical Code table.

5.6.4 WIES and DRG values

WIES values and DRG values are calculated at this stage.

WIES

The Ministry of Health currently purchases a range of inpatient events (principally Medical/Surgical Events) from publicly funded hospitals using a casemix methodology known as WIES (Weighted Inlier Equivalent Separations).

The WIES costweight calculator and extract routine are run to derive a Costweight and a Purchase Unit value for a health event based on its allocated AR-DRG, using detailed health event inclusion/exclusion rules specific to New Zealand. It is the financial year that the Health Event End Date falls in which determines which WIES rules are to be applied.

The NMDS load process will apply WIESNZ11 for the 2011-2012 financial year.

DRG

The Ministry uses version AR-DRG 6.0 of the grouper. The grouper is used to derive DRG 'group' values for similar health events for DRG 6.0, 5.0, 4.2, 4.1 & 3.1 levels.

AR-DRG v6.0 applies for all events where the date portion of Event end datetime is on or after 1 July 2011.

5.6.5 Loading

If all the events in a batch are valid i.e. the batch passes the Pre Processing Validation, each delete transaction (D1) is applied to the existing database record it is deleting and each new record (A1 or A2) is added to the database if it doesn't have data validation errors.

5.7. NMDS output files

Editing and loading the input files into the NMDS results in an Acknowledgement file, a Costweight Transaction Report and a formatted Error report.

5.7.1 Acknowledgement File

NMDS produces an acknowledgement file that has the same name prefix as the input batch with an extension of '.ndr'. It is supplied by MOH to the provider, and reports on all events submitted by the provider to the NMDS.

5.7.1.1 Values calculated for header

The NMDS load process calculates the:

- number of records processed
- number of records deleted
- number of records inserted
- number of records in error
- date the file was loaded into NMDS.

These values are supplied back to the provider in the acknowledgement file header record.

5.7.1.2 Error messages in acknowledgement file

If an event is rejected by the NMDS, an error number and error description are provided for each error detected. If the event loaded successfully, an error number of '0' plus 'Data Processed Successfully' will be returned for that event. The acknowledgement file will report all errors generated for an event.

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

The fields *error number*, *error text*, *diagnosis number*, *legal status date* and *legal status* will be repeated as appropriate for each error message generated by the NMDS load process.

See the layout specifications of the acknowledgement file in section 10 and the error messages in section 13.

5.7.2 Costweight Transaction Report

The NMDS program produces a file, which has the same name prefix as the input batch and an extension of 'ndw'. It is supplied by MOH to the provider, and reports the results of the WIES calculation process for each file loaded, giving a subset of information relating to purchase units, and WIES costweights, values, and the variables that are used to calculate them for each record. The file comprises a header record containing file information, and a costweight transaction record for each record loaded.

Key variables within the Costweight Transaction report identifying WIESNZ11 and AR-DRG 6.0 related data include:

- Costweight version (the WIES version used) = '12'
- Release Number (the software release version used to calculate the DRG code) = '6.0'
- DRG Grouper Type (the clinical version of the DRG calculation used) = '06'.

5.7.3 Formatted Error Report

A formatted file containing errors only is produced for each file loaded. The report has the same name as the input batch file and an extension of '.sqr'. The provider may print this report. If there are no errors or warnings in the file, the report will still be produced but will contain a count of successful transactions only.

See Appendix D for a sample formatted error report.

5.8. Batch receive process (pre-processing passed)

The acknowledgement file, error report and the costweight transaction report are sent to the data provider for review.

To resubmit events with errors, data providers must correct the records and resubmit them as part of a new batch.

Records with warning messages may either be updated, or the data confirmed as correct. In the case of confirmations, the event should be resubmitted with a message function of 'A2'.

5.8.1 Corrections and deletes

Each record must be corrected or deleted individually.

To update a health event that has already been loaded into the NMDS, provider systems must send a 'D1' (Delete) record followed by an 'A1' (Add) or 'A2' (Add ignoring any warnings) record. If more than one update has been performed on an event on the provider system during the period covered by the data transfer, then only the latest update should be sent.

To delete a record, only the values in the key fields (see 6.1 Data keys) need be present, but the values must be identical to the existing record in the NMDS.

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

6. Key Relationships

The National Minimum Dataset database has 3 data tables, and a series of lookup tables to hold standard information. The complete data model can be found in section 7.

The most significant relationships are shown in the data model in section 7.

6.1. Data keys

Each record has a unique primary key consisting of:

- NHI number
- Event type code
- Event start datetime
- Facility code
- Event local identifier.

The primary key is used to check for duplicates on insert, or check for existence on delete. During the load process, the NMDS checks that the data key is unique.

For Diagnosis (HD) records, the key also includes Diagnosis number.

_diag_tmp_tab	
conversion_type	char(4)
clinical_code_type_from	char(1)
clinical_code_from	varchar(8)
clinical_code_type_to	char(1)
clinical_code_to	varchar(8)
comments	varchar(100)

agency_type_tab	
agency_type	char(2) <pk>
agency_type_description	varchar(70)

cancer_load_tab	
event_id	int <pk>
basis_code	char(1)
stage_code	char(1)
melanoma_invasion_level	char(1)
melanoma_thickness	char(6)
laboratory_code	char(4)
diagnosis_sequence	smallint <pk>

census_tab	
census_year	smallint
census_start_date	datetime
census_end_date	datetime

diagnosis_conversion_pair_meta	
conversion_type	char(4) <pk>
clinical_code_type_from1	char(1) <pk>
clinical_code_from1	varchar(8) <pk>
clinical_code_type_from2	char(1) <pk>
clinical_code_from2	varchar(8) <pk>
clinical_code_to1	varchar(8)
clinical_code_to2	varchar(8)

diagnosis_conversion_rule_meta	
conversion_type	char(4)
clinical_code_type	char(1)
clinical_code	varchar(8)
modifier_group	smallint
modified_by_group	smallint
subgroup	varchar(50)

diagnosis_procedure_tab	
event_id	int <pk>
diagnosis_sequence	smallint <pk>
clinical_code_system	char(2) <pk>
clinical_code_type	char(1) <pk>
clinical_code	varchar(8) <pk>
submitted_system_id	char(2)
diagnosis_number	int
batch_id	int
transaction_id	int
diagnosis_description	varchar(70)
diagnosis_type	char(1)
procedure_acc_date	datetime
procedure_acc_date_flag	char(1)

dhhb_tab	
dhhb_code	char(3)
dhhb_name	varchar(40)

domicile_code_conversion_tab	
domicile_code_new	char(4) <pk>
description_new	varchar(50)
domicile_code_old	char(4)
description_old	varchar(50)

drg_code_tab	
drg_group_type	varchar(2) <pk>
drg_code	varchar(4) <pk>
drg_code_description	varchar(110)
mdc_code	char(2)
drg_category_code	char(1)

event_legal_status_tab	
event_id	int <pk>
legal_status_code	char(2) <pk>
legal_status_date	datetime <pk>
batch_id	int
transaction_id	int

event_to_diagnosis_type_tab	
event_type	char(2) <pk>
diagnosis_type	char(1) <pk>
cardinality	char(1)
optionality	char(1)

legal_status_tab	
legal_status_code	char(2) <pk>
legal_status_description	varchar(70)
legal_status_start_date	datetime
legal_status_end_date	datetime

nmlds_batch_tab	
batch_id	int <pk>
filename	varchar(12)
source_type	char(1)
directory	varchar(128)
batch_status	char(1)
agency_code	char(4)
date_file_sent	datetime
processing_environment	char(4)
date_processed	datetime
date_received	datetime
date_gathered	datetime
date_loaded	datetime
date_returned	datetime
date_site_notified	datetime
processing_time	int
filename_received	varchar(12)
predecessor	int
mask_id	int
edit_sequence	int
returned_by_operator	char(4)
error_file_generated	bit
expected	int
processed	int
valid	int
errors	int
warnings	int
deleted	int
events_processed	int
events_accepted	int
events_inserted	int
events_deleted	int
events_updated	int
error_summary	varchar(255)
notes	varchar(255)

nmlds_cost_weight_load	
event_id	int <pk>
batch_id	int
cost_weight	numeric(9,4)
cost_weight_code	char(2)
nz_drg_code	char(4)
purchase_unit	varchar(10)

nmlds_diagnosis_procedure_load	
event_id	int <pk>
diagnosis_sequence	smallint <pk>
clinical_code_system	char(2) <pk>
clinical_code_type	char(1) <pk>
clinical_code	varchar(8) <pk>
submitted_system_id	char(2)
diagnosis_number	int
batch_id	int
transaction_id	int
diagnosis_description	varchar(70)
diagnosis_type	char(1)
procedure_acc_date	datetime
procedure_acc_date_flag	char(1)

nmlds_error_tab	
error_id	int <pk>
application_code	varchar(4)
error_message	varchar(255)
source	varchar(128)
description	varchar(255)
error_type	char(1)
last_updated	datetime
updated_by	varchar(30)
reason	varchar(255)

nmlds_error_tab_proxy	
error_id	int
application_code	varchar(3)
error_message	varchar(255)
source	varchar(128)
description	varchar(255)
error_type	char(1)
last_updated	datetime
updated_by	varchar(30)
reason	varchar(255)

nmlds_event_delete_load	
event_id	int <pk>
batch_id	int

nmlds_event_id_meta	
event_id	int <pk>

nmlds_event_legal_status_load	
event_id	int <pk>
legal_status_code	char(2) <pk>
legal_status_date	datetime <pk>
transaction_id	int

nmlds_hcu_delete_load	
hcu_id	char(7)

nmlds_health_event_load	
event_id	int <pk>
encrypted_hcu_id	char(11)
domicile_code	char(4)
gender_code	char(1)
occupation_code	char(4)
prioritysed_ethnic_code	char(2)
ethnic_code	char(2)
ethnic_code_2	char(2)
ethnic_code_3	char(2)
nz_resident_status	char(1)
country_code	char(3)
date_of_birth	datetime
date_of_birth_flag	char(1)
event_type	char(2)
event_local_id	char(1)
event_start_date	datetime
event_end_date	datetime
event_end_type	char(2)
surgical_priority	char(1)
facility_code	char(4)
facility_type	char(2)
health_specialty_code	char(3)
admission_source_code	char(1)
admission_type	char(2)
drg_group_type	varchar(2)
drg_code_v30	char(3)
drg_code_v31	char(3)
mdc_type	char(1)
mdc_code	char(2)
referral_date	datetime
referral_date_flag	char(1)
first_consult_date	datetime
first_consult_date_flag	char(1)
date_surgery_decided	datetime
event_leave_days	char(3)
event_extra_information	varchar(90)
suppression_flag	char(1)
transaction_id	int
batch_id	int
filename	varchar(32)
last_updated_date	datetime
purchase_code	char(2)
agency_code	char(4)
weight_on_admission	int
month_of_data	char(2)
year_of_data	char(2)
length_of_stay	char(5)
age_at_admission	int
age_at_discharge	char(3)
financial_year_bad	char(4)
client_system_identifier	varchar(14)
hours_on_ventilation	char(5)
fla	char(3)
not_used_1	char(1)
private	char(1)
not_used_2	char(1)
not_used_3	char(1)
not_used_4	char(1)
not_used_5	char(1)
public_birth	char(1)
accident_flag	char(1)
acc_claim_number	char(12)
not_used_6	char(1)
birth_weight	char(4)
gestation_period	char(2)
birth_status	char(1)
age_of_mother	char(2)
location_code	char(1)
psychiatric_leave_end_type	char(1)
date_psychiatric_leave_ends	datetime
not_used_7	char(1)
not_used_8	int
occupation_free_text	varchar(70)
cost_weight	numeric(9,4)
cost_weight_code	char(2)
ccl	char(1)
purchase_unit	varchar(10)
financial_year	char(8)
not_used_9	char(1)
not_used_10	char(1)
pms_unique_identifier	varchar(14)
hours_on_cpap	char(5)
drg_code_current	char(4)
pccl	char(1)
nz_drg_code_current	char(4)

nmlds_non_public_purchaser_meta	
start_date	datetime
end_date	datetime
purchaser_code	char(2)

nmlds_operator_meta	
operator_id	char(3)
operator_name	varchar(50)

nmlds_provider_tab	
file_acronym	char(3) <pk>
application_code	varchar(4) <pk>
agency_code	char(4)
facility_code	char(4)
transfer_method	char(2)
active_flag	char(1)

nmlds_public_facility_type_meta	
start_date	datetime
end_date	datetime
facility_type	char(2)

operational_totals_tab	
program_name	varchar(30)
object_name	varchar(30)
filename	varchar(100)
deletes_unloaded	int
updates_unloaded	int
inserts_unloaded	int
deletes_loaded	int
updates_loaded	int
inserts_loaded	int
run_time	datetime

purchase_unit_tab	
purchase_unit	varchar(10) <pk>
purchase_unit_description	varchar(70)

rollforward_delete_load	
event_id	int
event_diag_num	int
lgl_sts	char(2)
event_lgl_sts_date	datetime

admission_source_aud	
admission_source_code	char(1)
admission_source_description	varchar(70)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

admission_type_aud	
admission_type	char(2)
admission_type_description	varchar(70)
admission_type_start_date	datetime
admission_type_end_date	datetime
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

agency_aud	
agency_code	char(4)
agency_name	varchar(50)
agency_address	varchar(85)
agency_type	char(2)
agency_open_date	datetime
agency_close_date	datetime
region	char(2)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

agency_type_aud	
agency_type	char(2)
agency_type_description	varchar(70)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

cost_weight_aud	
cost_weight_code	char(2)
cost_weight_description	varchar(70)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

country_code_aud	
country_code	char(3)
country_code_description	varchar(70)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

diagnosis_procedure_aud	
event_id	int
diagnosis_sequence	smallint
clinical_code_system	char(2)
clinical_code_type	char(1)
clinical_code	varchar(8)
submitted_system_id	char(2)
diagnosis_number	int
batch_id	int
transaction_id	int
diagnosis_description	varchar(70)
diagnosis_type	char(1)
procedure_acc_date	datetime
procedure_acc_date_flag	char(1)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

domicile_code_aud	
domicile_code	char(4)
domicile_code_description	char(70)
ita	char(3)
domicile_code_status	char(1)
year_of_census	int
area_unit_code	int
retired_year	smallint
dhb_code	char(3)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

domicile_code_conversion_aud	
domicile_code_new	char(4)
description_new	varchar(50)
domicile_code_old	char(4)
description_old	varchar(50)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

drg_code_aud	
drg_group_type	varchar(2)
drg_code	char(3)
drg_code_description	varchar(110)
mdc_code	char(2)
drg_category_code	char(1)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

drg_group_type_aud	
drg_group_type	varchar(2)
drg_group_type_description	varchar(70)
mdc_type	char(1)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

ethnic_code_aud	
ethnic_code	char(2)
ethnic_code_description	varchar(70)
priority	smallint
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

event_end_type_aud	
event_end_type	char(2)
event_end_description	varchar(70)
separation_mode	char(2)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

event_legal_status_aud	
event_id	int
legal_status_code	char(2)
legal_status_date	datetime
batch_id	int
transaction_id	int
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

event_to_diagnosis_type_aud	
event_type	char(2)
diagnosis_type	char(1)
cardinality	char(1)
optionality	char(1)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

event_type_aud	
event_type	char(2)
event_type_description	varchar(70)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

facility_aud	
agency_code	char(4)
facility_code	char(4)
facility_name	varchar(50)
facility_type	char(2)
facility_address	varchar(85)
facility_open_date	datetime
facility_close_date	datetime
domicile_code	char(4)
region	char(2)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

facility_type_aud	
facility_type	char(2)
facility_type_description	varchar(70)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

gender_aud	
gender_code	char(1)
gender_description	varchar(70)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

health_event_aud	
event_id	int
encrypted_hcu_id	char(11)
domicile_code	char(4)
gender_code	char(1)
occupation_code	char(4)
prioritised_ethnic_code	char(2)
ethnic_code	char(2)
ethnic_code_2	char(2)
ethnic_code_3	char(2)
nz_resident_status	char(1)
country_code	char(3)
date_of_birth	datetime
date_of_birth_flag	char(1)
event_type	char(2)
event_local_id	char(1)
event_start_date	datetime
event_end_date	datetime
event_end_type	char(2)
survival_priority	char(1)
facility_code	char(4)
facility_type	char(2)
health_specialty_code	char(3)
admission_source_code	char(1)
admission_type	char(2)
drg_group_type	varchar(2)
drg_code_v30	char(3)
drg_code_v31	char(3)
mdc_type	char(1)
mdc_code	char(2)
referral_date	datetime
referral_date_flag	char(1)
first_consult_date	datetime
first_consult_date_flag	char(1)
date_surgery_decided	datetime
event_leave_days	char(3)
event_extra_information	varchar(30)
suppression_flag	char(1)
transaction_id	int
batch_id	int
last_updated_date	datetime
purchaser_code	char(2)
agency_code	char(4)
weight_on_admission	int
month_of_data	char(2)
year_of_data	char(4)
length_of_stay	char(5)
age_at_admission	char(3)
age_at_discharge	char(3)
financial_year	char(8)
client_system_identifier	varchar(14)
hours_on_ventilation	char(5)
ita	char(3)
not_used_1	char(1)
private	char(1)
not_used_2	char(1)
not_used_3	char(1)
not_used_4	char(1)
not_used_5	char(1)
public_birth	char(1)
accident_flag	char(1)
acc_claim_number	char(12)
not_used_6	char(1)
birth_weight	char(4)
gestation_period	char(2)
birth_status	char(1)
age_of_mother	char(2)
location_code	char(1)
psychiatric_leave_end_type	char(1)
date_psychiatric_leave_ends	datetime
not_used_7	char(1)
not_used_8	int
occupation_free_text	varchar(70)
cost_weight	numeric(9,4)
cost_weight_code	char(2)
cci	char(1)
purchase_unit	varchar(10)
pms_unique_identifier	varchar(14)
hours_on_cpap	char(5)
drg_code_current	char(4)
pci	char(1)
nz_drg_code_current	char(4)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

health_specialty_aud	
health_specialty_code	char(3)
health_specialty_description	varchar(70)
specialty_full_description	varchar(255)
mental_health_inpatient_flag	char(1)
health_specialty_start_date	datetime
health_specialty_end_date	datetime
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

legal_status_aud	
legal_status_code	char(2)
legal_status_description	varchar(70)
legal_status_start_date	datetime
legal_status_end_date	datetime
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

location_aud	
location_code	char(1)
location_description	varchar(70)
facility_type	char(2)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

mdc_code_aud	
drg_group_type	varchar(2)
mdc_code	char(2)
mdc_description	varchar(70)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

mdc_type_aud	
mdc_type	char(1)
mdc_type_description	varchar(70)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

nmdds_batch_aud	
batch_id	int
filename	varchar(12)
source_type	char(1)
directory	varchar(128)
batch_status	char(1)
agency_code	char(4)
date_file_sent	datetime
processing_environment	char(4)
date_processed	datetime
date_received	datetime
date_gathered	datetime
date_loaded	datetime
date_returned	datetime
date_site_notified	datetime
processing_time	int
filename_received	varchar(12)
predecessor	int
mask_id	int
edit_sequence	int
returned_by_operator	char(4)
error_file_generated	bit
expected	int
processed	int
valid	int
errors	int
warnings	int
deleted	int
events_processed	int
events_accepted	int
events_inserted	int
events_deleted	int
events_updated	int
error_summary	varchar(255)
notes	varchar(255)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

nmdds_error_aud	
error_id	int
application_code	char(3)
error_message	varchar(255)
source	varchar(128)
description	varchar(255)
error_type	char(1)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

nmdds_provider_aud	
file_acronym	char(3)
application_code	varchar(4)
agency_code	char(4)
facility_code	char(4)
transfer_method	char(2)
active_flag	char(1)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

occupation_aud	
occupation_code	char(4)
occupation_code_description	varchar(70)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

operational_totals_aud	
program_name	varchar(30)
object_name	varchar(30)
filename	varchar(100)
deletes_unloaded	int
updates_unloaded	int
inserts_unloaded	int
deletes_loaded	int
updates_loaded	int
inserts_loaded	int
run_time	datetime
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

purchaser_code_aud	
purchaser_code	char(2)
purchaser_code_description	varchar(70)
purchaser_address	varchar(85)
purchaser_start_date	datetime
purchaser_end_date	datetime
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

psychiatric_leave_end_type_aud	
psychiatric_leave_end_type	char(1)
psychiatric_leave_description	varchar(70)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

surgical_priority_aud	
surgical_priority	char(1)
surgical_priority_description	varchar(70)
image_type	char(1)
transaction_type	char(1)
user_id	varchar(30)
audit_date	datetime

<p>clinical_code_chapter_tab</p> <p>clinical_code_system chapter chapter_description</p> <p><input type="checkbox"/> shared_obj.clinical_code_chapter_tab</p>	<p>clinical_code_type_tab</p> <p>clinical_code_type clinical_code_type_description</p> <p><input type="checkbox"/> shared_obj.clinical_code_type_tab</p>	<p>public_health_event_tab</p> <p>event_id encrypted_hcu_id domicile_code gender_code occupation_code prioritised_ethnic_code ethnic_code ethnic_code_2 ethnic_code_3 nz_resident_status country_code date_of_birth date_of_birth_flag event_type event_local_id event_start_date event_end_date event_end_type surgical_priority facility_code facility_type health_specialty_code admission_source_code admission_type drg_grouper_type drg_code_v30 drg_code_v31 mdc_type mdc_code referral_date referral_date_flag first_consult_date first_consult_date_flag date_surgery_decided event_leave_days event_extra_information suppression_flag transaction_id batch_id last_updated_date purchaser_code agency_code weight_on_admission month_of_data year_of_data length_of_stay age_at_admission age_at_discharge financial_year client_system_identifier hours_on_ventilation tia not_used_1 private not_used_2 not_used_3 not_used_4 not_used_5 public_birth accident_flag acc_claim_number not_used_6 birth_weight gestation_period birth_status age_of_mother location_code psychiatric_leave_end_type date_psychiatric_leave_ends not_used_7 not_used_8</p> <p><input type="checkbox"/> health_event_tab</p>
<p>clinical_coding_system_tab</p> <p>clinical_code_system clinical_system_description sys_start_date sys_end_date</p> <p><input type="checkbox"/> shared_obj.clinical_coding_system_tab</p>	<p>cps_vic1_vw</p> <p>e.event_id e.hp_event_id 'drg'</p> <p><input type="checkbox"/> nmms_health_event_load <input type="checkbox"/> nmms_diagnosis_procedure_load</p>	
<p>clinical_code_tab</p> <p>clinical_code clinical_code_type clinical_code_system clinical_code_description death_flag gender_flag low_age high_age normal_nz_flag external_cause_flag unacceptable_diagnosis_flag nonspecific_diagnosis_flag operation_flag collection_type dagger_asterisk category sub_category block chapter sub_chapter code_start_date code_end_date eligible_cancer_status</p> <p><input type="checkbox"/> shared_obj.clinical_code_tab</p>	<p>cps_vic2_vw</p> <p>v.* g31.andrg_code g31.mdc_code g31.result_code</p> <p><input type="checkbox"/> cps_vic1_vw <input type="checkbox"/> nmms_grouper31_output_load</p>	
<p>clinical_code_sub_chapter_tab</p> <p>clinical_code_system sub_chapter sub_chapter_description</p> <p><input type="checkbox"/> shared_obj.clinical_code_sub_chapter_tab</p>	<p>diagnosis_conversion_tab</p> <p>conversion_type clinical_code_type_from clinical_code_from clinical_code_type_to clinical_code_to comments last_updated updated_by reason</p> <p><input type="checkbox"/> shared_obj.diagnosis_conversion_tab</p>	
<p>clinical_code_block</p> <p>block block_short_description block_long_description block_publication_description clinical_code_system</p> <p><input type="checkbox"/> shared_obj.clinical_code_block</p>	<p>diagnosis_to_clinical_type_tab</p> <p>clinical_code_system clinical_code_type diagnosis_type from_range to_range</p> <p><input type="checkbox"/> shared_obj.diagnosis_to_clinical_type_tab</p>	
<p>clinical_code_category</p> <p>category category_short_description category_long_description category_publication clinical_code_system</p> <p><input type="checkbox"/> shared_obj.clinical_code_category</p>	<p>diagnosis_type_tab</p> <p>diagnosis_type diagnosis_type_description</p> <p><input type="checkbox"/> shared_obj.diagnosis_type_tab</p>	
	<p>hcu_tab</p> <p>hcu_id master_hcu_id encrypted_hcu_id master_encrypted_hcu_id date_of_death</p> <p><input type="checkbox"/> shared_obj.dbo.hcu_tab</p>	

8. Extract File Requirements

8.1. Batch File Name

The file naming convention used to supply batches to the NMDS consists of the following elements:

- a three-letter acronym allocated to each sending agency by the Ministry of Health
- a sequential number to uniquely identify each batch
- a file extension allocated by the Ministry (‘.nmd’ for NMDS upload files).

For example, a typical file name for Capital Coast District Health Board would be ‘CCH00001.nmd’.

File name checking is case sensitive.

8.2. Batch File Format

The file is in ASCII format, where:

- records are delimited by carriage return and line feed (ASCII 13 and ASCII 10)
- fields are variable in length and delimited by commas, with text fields enclosed in quotation marks
- if no data is supplied for a field (a null field), this should be represented by a delimiter followed by another delimiter.

Fields are typed as:

- Character – contains alphabetic characters (excluding commas)
- Numeric – contains numeric characters
- Text – contains alphabetic characters (including commas) enclosed within double quotes.

Definition	Data	Interpretation
varchar(4)	,1,	“1”
char(4)	,1,	“1”
char(4)	,1234567,	“1234”
char(3)	,a12,	“a12”
num(3)	,1,	1
text(16)	,”some text ”,	“some text”
text(16)	,”punctuated, text”,	“punctuated, text”

8.2.1 Mandatory/Optional Fields

Please note that the M/O column in the record specifications indicates whether a field has to be populated or may be null. All fields are mandatory and where no data is being sent a field delimiter must be present.

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

8.2.2 Dates, partial dates and datetimes

Dates are CCYYMMDD unless otherwise specified. For fields where partial dates are permitted, CCYY0000 is the minimum value (stored as CCYY0101 with date flag set to 'M') and CCYYMM00 is acceptable (stored as CCYYMM01 with date flag set to 'D'), but CCYY00DD will be rejected. For dates provided as CCYYMMDD, the date flag is set to null.

Dates are sent as char and stored as datetime.

Datetime fields are CCYYMMDDhhmm where

- hours (hh) is in the range 00 to 23
- minutes (mm) is in the range 00 to 59
- midnight is the **beginning** of the calendar day ie. 201101280000 (which equates to 24:00 of 27/01/2011)

Partial dates or times are not permitted for datetime fields.

Datetime fields are sent as char and stored as datetime.

Events from older versions of the input file that have date fields instead of the new datetime fields will automatically have the date populated into the date portion of the datetime field and 00:00 populated into the time portion of the datetime field by NMDS.

Note that in the validation process when date fields are checked against datetime fields only the date portion of the datetime field is used. Until further notice calculated fields that involve the datetime fields will only use the date portion of the datetime fields.

See also 2.5 Compliance with standards.

8.2.3 Code Table Values

Allowable values for the code fields are listed in the National Minimum Dataset Data Dictionary.

8.3. Valid records

This section provides a summary of the types of records that can be submitted to or are produced by NMDS.

8.3.1 Input File (eg, CCH00001.ndm)

Level	Record type (logical/physical)	Record name	Physical record identifier	Occurrence	Format (fixed / variable)	Length (fixed/variable)	Length (bytes)
02	P	Header record	HR	1	F	F	42
02	L	Transaction record		1–n	V	V	
03	L	Insert transaction		0–1			
04	P	Health event record	HE	1	F	V	
04	L	Event details record		1–n			
05	P	Diagnoses record	HD	1–99	F	V	
05	P	Psychiatric data record	HC	0–99	F	F	43
03	P	Delete transaction	HE	0–1	F	V	

8.3.2 Acknowledgement File (eg, CCH00001.ndr)

Level	Record type (logical/physical)	Record name	Physical record identifier	Occurrence	Format (fixed / variable)	Length (fixed/variable)	Length (bytes)
02	P	Acknowledgement header record	AH	1	F	F	75
02	P	Acknowledgement record	AK	1–n	F	V	

8.3.3 Costweight File (eg, CCH00001.ndw)

The costweight file is an output of the WIES calculation which uses a combination of elements including DRG, specialty code and purchase units.

Level	Record type (logical/physical)	Record name	Physical record identifier	Occurrence	Format (fixed / variable)	Length (fixed/variable)	Length (bytes)
02	P	Header record	WH	1	F	F	42
02	P	Transaction record	WT	1–n	F	V	121

8.3.4 Error File (eg, CCH00001.err)

This file is generated only if the input file is rejected.

Level	Record type (logical/physical)	Record name	Physical record identifier	Occurrence	Format (fixed / variable)	Length (fixed/variable)	Length (bytes)
02	P	Return header	FH	1	F	F	42
02	P	File failure	FF	1–n	F	V	

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

8.3.5 Formatted Error Report (eg, CCH00001.sqr)

This file is always generated. It is a formatted report containing records with errors or warnings. Refer to Appendix D for a sample report.

Level	Record type (logical/ physical)	Record name	Physical record identifier	Occurrence	Format (fixed / variable)	Length (fixed/ variable)	Length (bytes)
02	P	Error report	-	1-n	V	V	

9. Extract File (.ndm)

9.1. Input File Header (HR) Record

An input file header record is mandatory for all files. This contains control information from the data provider's system.

Field name	Definition	Size	Data type	Format	M/O	Notes
Record type	Code identifying the type of input record.	2	char	AA	M	'HR' (header record)
Agency code	A code that uniquely identifies an agency. An agency is an organisation, institution or group of institutions that contracts directly with the principal health service purchaser to deliver healthcare services to the community.	4	char	XXXX	M	Agency code is assigned by MOH on request. Must be a valid code in the Agency code table. The organisation contracted to provide the service or treatment.
File name of input file						Refer section 8.1 Batch File Name.
Acronym		3	char	AAA	M	Acronym of the sending agency as assigned by MOH.
batch number		5	char	NNNNN	M	A sequential number uniquely identifying each transmission.
Extension		4	char	.AAA	M	'.ndm' (ASCII hex string 2E 6E 64 6D)
Number of records		5	char	NNNNN	M	Count of physical records. Includes the header record. Must contain the exact number of records in the file. Left-padded with zeroes.
Date sent		8	char	CCYYMMDD	M	Date in ISO 8601 format to day level. Partial dates not allowed.
MOH processing environment	This field determines which environment the data is loaded into.	4	char	AAAA	M	'PROD' for the Production Environment or 'TEST' for the Compliance Testing Environment.
File version		6	char	ANNN.N	M	'V014.0' for files submitted in this layout.

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

9.2. Input File Event Details (HE) Record

This is the main record and is stored in the Health Event table.

Field name	Definition	Size	Data type	Format	M/O	Notes
Record type	Code identifying the type of input record.	2	char	AA	M	'HE' (hospital health event)
NHI number	The unique identification number assigned to a healthcare user by the National Health Index (NHI) database.	7	char	AAANNNN	M	The NHI number is the cornerstone of MOH data collections. It is a unique 7 character identification number assigned to a healthcare user by the National Health Index (NHI) database. It is stored in the NMDS in an encrypted form. The format of the NHI number is 3 alpha plus 4 numeric, the last of which is a check digit. Must be registered on the NHI before use.
Event type code	Code identifying the type of health event.	2	char	AA	M	Must be a valid code in the Event Type code table. Only one birth event (Event type 'BT') is allowed for each NHI number. Babies born before the mother's admission to hospital or transferred from the hospital of birth are recorded as 'IP'. The presence of some fields depends on the Event type code. See Appendix A: Enhanced Event Type/Event Diagnosis Type Table.
Event start datetime	The admission date and time on which a healthcare event began.	12	char	CCYYMMDD hhmm	M	Must be on or before Event end datetime. The date portion must be <ul style="list-style-type: none"> on or before the date of load the same as the Date of birth for birth events (Event type 'BT'). When events prior to 1 July 2011 are submitted, the time portion of the datetime field must be populated with '00:00' if the time has not been collected for those events. Partial dates not allowed. Refer to 8.2.2 <i>Dates, partial dates and datetimes</i> and 14.1 <i>Event Start Time (Admission)</i>

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

Field name	Definition	Size	Data type	Format	M/O	Notes
Facility code	<p>A code that uniquely identifies a healthcare facility.</p> <p>A healthcare facility is a place, which may be a permanent, temporary, or mobile structure, that healthcare users attend or are resident in for the primary purpose of receiving healthcare or disability support services. This definition excludes supervised hostels, halfway houses, staff residences, and rest homes where the rest home is the patient's usual place of residence.</p>	4	char	XXXX	M	<p>The facility that provided the service or treatment.</p> <p>Must be a valid code in the Facility code table.</p>
Event local identifier	Local system-generated number to distinguish two or more events of the same type occurring on the same day at the same facility.	1	char	N	M	<p>The NHI number, Event type code, Event start datetime, Facility code and Event local identifier for a unique key for checking duplicates on insert or checking for existence on delete.</p> <p>Use 9 first then '8,6...1'.</p>
Message function	Code to indicate what action to take with this HE input record.	2	char	AN	M	<p>All events should initially be sent as A1. If warning messages are returned then event may be resubmitted as A2. The A2 record cannot be used to override error messages.</p> <p>D1 records may contain only key fields and control information. No mandatory field checking will be done for other fields in D1 records.</p> <p>Refer 5.3.1.1 <i>Event Detail Records</i>.</p>

Field name	Definition	Size	Data type	Format	M/O	Notes
Domicile code	<p>Statistics NZ Health Domicile Code representing a person's usual residential address. Also used for facility addresses.</p> <p>Usual residential address is defined as the address at which the person has been, or plans to be, living for 3 months or more. (Statistics NZ definition of 'usually resident'.)</p> <p>If a person usually lives in a rest home or a hospital, that is considered their usual residential address.</p>	4	char	XXXX	M	<p>Must be a valid code in the Domicile code table.</p> <p>Where the date portion of Event end datetime is:</p> <ul style="list-style-type: none"> - before 1 July 1998, the 1991 codes apply - between 1 July 1998 and 30 June 2003, the 1996 codes apply - on or after 1 July 2003, the 2001 codes apply. <p>If the Event end datetime is blank, check the date portion of Event start datetime and the status of the code is current. If not current, an error message is generated.</p> <p>If the date portion of Event end datetime (or, if the Event end datetime is blank, the date portion of Event start datetime) is less than 1 July 1998 and Year of census is 1996 or 2001 then convert new domicile back to the 1991 code. If the date portion of Event end datetime (or, if the Event end datetime is blank, the date portion of Event start datetime) is between 1 July 1998 and 30 July 2003 and Year of census is 2001, then convert new domicile back to the 1996 code.</p>
Sex	The person's biological sex.	1	char	A	M	<p>Must be a valid code in the Gender code table.</p> <p>Generates warning if Sex code is 'U'.</p> <p>Must be consistent with the diagnosis and procedure codes for the record to be loaded. Otherwise results in a warning.</p>
Date of birth	The date on which the person was born.	8	char	CCYYMMDD	M	<p>Must be on or before the date portion of Event start datetime and the date of load.</p> <p>Must equal the date portion of Event start datetime if Birth event (Event type 'BT').</p> <p>Must be consistent with the diagnosis and procedure codes for the record to be loaded. Otherwise results in a warning.</p> <p>Used to calculate age (normally using the date portion of Event end datetime).</p> <p>Partial dates allowed.</p>

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

Field name	Definition	Size	Data type	Format	M/O	Notes
Ethnic group code 1	A social group whose members have one or more of the following four characteristics: - they share a sense of common origins - they claim a common and distinctive history and destiny - they possess one or more dimensions of collective cultural individuality - they feel a sense of unique collective solidarity.	2	char	NN	M	From 1 July 1996, healthcare users can select multiple values for ethnicity. The Statistics NZ prioritisation algorithm is to be used by healthcare providers if more than three values are selected; only up to three values should be reported to the NMDS. At least one value must be supplied. If two further values are available, then these must also be supplied. Each Ethnic group code in a record must be different. Must be a valid code in the Ethnic code table.
Ethnic group code 2	As above.	2	char	NN	O	As above.
Ethnic group code 3	As above.	2	char	NN	O	As above. If supplied, Ethnic group code 2 must not be null.
NZ resident status	A code identifying resident status at the time of this event. A permanent resident is defined as a person who: - resides in New Zealand and - is not a person to whom Section 7 of the Immigration Act 1987 applies or a person obliged by or pursuant to that Act to leave New Zealand immediately or within a specified time or deemed for the purposes of that Act to be in New Zealand unlawfully.	1	char	A	M	Y Permanent resident N Temporary (not a NZ citizen; does not have NZ permanent resident status)
Admission source code	A code used to describe the nature of admission (routine or transfer) for a hospital inpatient health event.	1	char	A	M	Must be a valid code in the Admission Source code table. R Routine T Transfer from another hospital facility
Health specialty code	A classification describing the specialty or service to which a healthcare user has been assigned, which reflects the nature of the services being provided.	3	char	ANN	M	Must be a valid code in the Health Specialty code table. The Health Specialty code must be current i.e. the date portion of Event end datetime must be within the range of the Health Specialty Code's start and end date. For event type IM where End datetime is null, the date portion of Event start datetime is used when validating against the Health Specialty code's start and end dates.

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

Field name	Definition	Size	Data type	Format	M/O	Notes
Admission type code	A code used to describe the type of admission for a hospital healthcare health event.	2	char	AA	M	Must be a valid code in the Admission Type code table. The Admission Type end date for the Admission Type code provided must be greater than the date portion of Event end datetime.
Event end type code	A code identifying how a healthcare event ended.	2	char	AA	O	Must be a valid code in the Event End Type code table. Optional for psychiatric inpatient events (Event type 'IM'). Mandatory for all other event types.
Event end datetime	The date and time 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.	12	char	CCYYMMDD hhmm	O	Must be on or after the Event start datetime, The date portion must be on or after the Date of birth, the Operation/procedure date and the External cause date of occurrence. The date portion must be on or before the date of load and the Psychiatric leave end date. When events prior to 1 July 2011 are submitted, the time portion of the datetime field must be populated with '00:00' if the time has not been collected for those events. Optional for psychiatric inpatient events (Event type 'IM'). Mandatory for all other event types. Paired field with Event end type code. Partial dates not allowed. Refer to <i>8.2.2 Dates, partial dates and datetimes</i> and <i>14.2 Event End Time (Discharge)</i>
Country of birth code	Coded value for the country of birth as assigned from the Statistics NZ Country Code list (NZSCC86).	3	char	NNN	O	Must be a valid code in the Country code table. 004 – 999
Occupation code	The current occupation of a healthcare user, classified according to the Statistics NZ Standard Classification of Occupations (NZSCO90).	4	char	NNNN	O	Must be a valid code in the Occupation code table. 0111 – 9900

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

Field name	Definition	Size	Data type	Format	M/O	Notes
Occupation free-text	Free-text description of the patient's occupation.	70	varchar	Any	O	Free text enclosed in quotation marks ("""). For internal MOH use. It may be used to supply a description of the patient's occupation for all events at the discretion of the provider. The Injury Prevention Unit (of the Otago Medical School) has also identified this information as useful for events for which an accident is reported.
Birth location	The location of the birth delivery of a healthcare user.	1	char	N	O	Mandatory for birth events (Event type 'BT'). Must not be supplied for other event types. Must be a valid code in the Location code table. Must match the Facility type code on the Facility table for the Facility supplied with this event.
Birthweight	Weight of infant at time of birth, in grams.	4	char	NNNN	O	Mandatory for birth events (Event type 'BT'). Must not be supplied for other event types. 0001 – 9999 (default is '9000'). Records reporting 0001 to 0399 grams will only be accepted on confirmation (Message function 'A2'). Must contain 4 characters. For infants under 1000 grams, the field must be supplied with a leading zero. No negative numbers.
Gestation period	Time measured from the date of mother's last menstrual period to the date of birth and expressed in completed weeks.	2	char	NN or XX	O	Mandatory for birth events (Event type 'BT'). Must not be supplied for other event types. If outside 17 to 45 completed weeks, will only be accepted on confirmation (Message function 'A2'). 10 – 50 completed weeks ('XX' = Not stated)
Birth status	Field which records whether an infant was still or liveborn.	1	char	A	O	Mandatory for birth events (Event type 'BT'). Must not be supplied for other event types. L Liveborn S Stillborn

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

Field name	Definition	Size	Data type	Format	M/O	Notes
Age of mother	Age of mother in years at time of birth of infant.	2	char	NN	O	Mandatory for birth events (Event type 'BT'). Must not be supplied for other event types. 00 – 99 (defaults is '00') If outside 12 to 54 years, will only be accepted on confirmation (Message function 'A2').
Event leave days	The number of days an inpatient on leave is absent from the hospital at midnight, up to a maximum of three days (midnights) for non-psychiatric hospital inpatients for any one leave episode. Where there is more than one period of leave during an episode, accumulated leave days should be reported.	3	char	NNN	O	Must be null or greater than zero. Must not be greater than the difference in days between the date portions of Event start datetime and Event end datetime. No negative numbers.
Event supplementary information	Enables extra information concerning an event to be recorded in a free-text format.	90	vvarchar	Any	O	Free text enclosed in quotation marks ("").
Event summary suppress flag	A flag signifying that the healthcare user has requested that details of this event not be passed to the event summary extract for display in the MWS system.	1	char	A	M	Y suppress this event summary N allow this event summary to be displayed
Psychiatric leave end date	The date on which a committed mental health patient's period of leave ended.	8	char	CCYYMMDD	O	Must only be present when Event end type is 'DL'. Must be on or before the date of load. Must be on or after <ul style="list-style-type: none"> the date portion of Event start datetime the Date of birth. the date portion of Event end datetime (and the Event end datetime must not be null). Paired with Psychiatric leave end code. Partial dates not allowed.
Psychiatric leave end code	A code describing how a period of leave ended for a committed mental health patient.	1	char	A	O	Must only be present if Event end type is 'DL'. Paired with Psychiatric leave end date.

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

Field name	Definition	Size	Data type	Format	M/O	Notes
Principal health service purchaser	The organisation or body that purchased the healthcare service provided. In the case of more than one purchaser, the one who paid the most.	2	char	NN or AN	M	<p>Must be a valid code in the Purchaser code table.</p> <p>The Principal health service purchaser code must be current ie. the date portion of Event end datetime must be within the range of the Principal health service purchaser code's start and end date. For event type IM where End datetime is null, the date portion of Event start datetime is used when validating against the Principal health service purchaser code's start and end dates..</p> <p>If the Principal Health Service Purchaser Code is between 'A0' and 'A7', the Accident Flag should be set to 'Y' and the ACC Claim Number field should not be blank.</p>
Agency code	A code that uniquely identifies an agency. An agency is an organisation, institution or group of institutions that contracts directly with the principal health service purchaser to deliver healthcare services to the community.	4	char	XXXX	M	<p>Agency code is assigned by MOH on request.</p> <p>Must be a valid code in the Agency code table.</p> <p>The organisation contracted to provide the service or treatment.</p>
Weight on admission	The weight in grams at time of admission for infants less than 29 days old.	4	integer	NNNN	O	<p>Mandatory for all events including birth events (Event type 'BT') if age at admission is less than 29 days.</p> <p>Optional for event types IP, BT, ID if the date portion of Event start datetime is on or before 1 July 1995 and the number of days between the date portion of Event start datetime and Date of birth are less than or equal to 28 days. Optional if more than 28 and less than or equal to 366 days.</p> <p>Optional for all babies between 29 and 365 days old (inclusive) who weigh less than 2500g.</p> <p>0001 – 9999 (default is '9000')</p> <p>Records reporting 0001 to 0399 grams will only be accepted on confirmation (Message function 'A2').</p> <p>Must contain 4 characters. For infants under 1000 grams, the field must be supplied with a leading zero.</p> <p>No negative numbers.</p>

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

Field name	Definition	Size	Data type	Format	M/O	Notes
Accident flag	A flag that denotes whether a person is receiving care or treatment as the result of an accident.	1	char	A	O	If the first character of the Principal health service purchaser code is 'A' (eg, 'A0', 'A1', etc) then the Accident flag should be set to 'Y' and the ACC Claim Number field should not be blank.
ACC claim number	This is a separate field to record the M46/45, ACC45 or AITC claim number for the event.	12	char	Any	O	Should not be blank where the Accident flag = 'Y' Accident records where the ACC Claim number is blank will only be accepted on confirmation (Message function 'A2').
Total hours on mechanical ventilation	The total number of hours on mechanical ventilation.	5	char	NNNNN	O	Should be provided for procedures that involve mechanical ventilation. Generates warnings if: - not present when a Mechanical Ventilation procedure is present (ie, ICD-10-AM 1 st , 2 nd 3 rd or 6 th Edition Clinical Code = 1388200 or 1388201 or 1388202 (Clinical Code Type = 'O'); or ICD-9 or ICD-9-CM-A Clinical Code = 96.70 or 96.71 or 96.72 (Clinical Code Type = 'O')), and/or - greater than the difference (calculated in hours) between the date portions of Event start datetime and Event end datetime
Total hours on continuous positive airway pressure	The total number of hours a neonate (less than 29 days, or more than 29 days and less than 2500 g) is on CPAP during a perinatal episode of care.	5	char	NNNNN	O	Total CPAP hours should not be reported in the total CPAP hours field for records where the date portion of Event end datetime is on or after 1 July 2009. CPAP is a noninvasive ventilation and should be reported in the total NIV hours field instead. Should be provided for procedures that involve CPAP. Generate warning if infant is: - more than 364 days old based on the date portion of Event end datetime, or - between 28 and 364 days old and Weight on admission is more than 2500 g based on the date portion of Event end datetime. Generate warning if: - more than 100, or - more than the difference (calculated in hours) between the

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

Field name	Definition	Size	Data type	Format	M/O	Notes
						<p>date portions of Event start datetime and Event end datetime.</p> <p><u>Where the date portion of Event end datetime is before 1 July 2008</u></p> <p>Generate warning if present and a CPAP procedure is not present.</p> <p>Generate warning if not present when a CPAP procedure is present, unless:</p> <ul style="list-style-type: none"> - Total hours on mechanical ventilation is present, or - age based on the date portion of Event end datetime is more than 364 days, or - age is between 28 days and 364 days and Weight on admission is more than 2500 g. <p>Generate warning if present and Health specialty code not in the P30 and P40 ranges.</p> <p><u>Where the date portion of Event end datetime is on or after 1 July 2008</u></p> <p>Generate error if present and a NIV procedure is not present.</p> <p>Records can be reported with an NIV procedure and no hours present if IPPB or BiPAP has been administered.</p> <p>Generate warning if present and Health specialty code is not P61, P71 or in the P40 range.</p> <p>Generate an error if CPAP hours is submitted with events ending on or after 1 July 2009 if the file version is 013.0.</p>
PMS unique identifier	A unique local PMS identifier for a particular health event.	14	varchar	Any	M	Used to identify a database level link to a health event within the provider's system, independent of any business key. This field is stored and included in all acknowledgement and notification files.
File control reference number	Batch number.	14	char	Numeric	O	File number. Must be unique.
Client system identifier	An identifier for the corresponding record stored within the health provider's system.	14	varchar	Any	O	May be used to store any record level identification that a provider's system may require in addition to the PMS unique identifier.

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

Field name	Definition	Size	Data type	Format	M/O	Notes
Mother's NHI	For birth events, the NHI number assigned to the baby's birth mother.	7	char	AAANNN	O	Mandatory for Birth events (Event Type = BT). Must be registered on the NHI. See the Notes for NHI number.
Total ICU Hours	The total hours spent in an Intensive Care Unit (ICU)	5	char	NNNNN	O	Total duration of stay (hours) in an Intensive Care Unit (ICU) during this episode of care. Round incomplete hours up to the next hour. If the patient has more than one period in ICU during this hospital episode, the total duration of all such periods is reported. Hours in a High Dependency Unit (HDU) and in a Neonatal Intensive Care Unit (NICU) are not to be included.
Facility Transfer from	The facility code for the facility the healthcare user is being transferred from.	4	char	XXXX	O	Mandatory for transfers from another facility. (Admission Source = T). Must be a valid facility code. Cannot be the same as the submitting facility. For a transfer from an overseas facility, use '9990'.
Facility Transfer to	The facility code for the facility the healthcare user is being transferred to.	4	char	XXXX	O	Mandatory for transfers to another facility (Event End Type = DA, DP, DT, EA, ET). Must be a valid facility code. Cannot be the same as the submitting facility. For a transfer to an overseas facility, use '9990'.
Total noninvasive ventilation hours	The total number of hours on noninvasive ventilation during an episode of care.	5	Char	NNNNN	O	Should be provided for procedures that involve NIV where the date portion of Event end datetime is on or after 1 July 2009. Generate warning if: - not present when a noninvasive ventilation procedure is present (ie, ICD-10-AM 6th Edition Clinical Code = 9220900 or 9220901 or 9220902 (Clinical Code Type = 'O'), and/or - present and noninvasive procedure is not present (ie, ICD-10-AM 6th Edition Clinical Code = 9220900 or 9220901 or 9220902 (Clinical Code Type = 'O'), and/or - more than the difference (calculated in hours) between the date portions of Event start datetime and Event end datetime.

9.3. Input File Diagnosis (HD) Record

The Diagnosis Record contains clinical information. Between one and 99 HD records may be sent per HE record, to describe the healthcare user's stay in hospital. This is stored in the Diagnosis Procedure table

Field name	Definition	Size	Data type	Format	M/O	Notes
Record type	Code identifying the type of input record.	2	char	AA	M	'HD' (hospital event diagnosis)
NHI number	The unique identification number assigned to a healthcare user by the National Health Index (NHI) database.	7	char	AAANNNN	M	The NHI number is the cornerstone of MOH data collections. It is a unique 7 character identification number assigned to a healthcare user by the National Health Index (NHI) database. It is stored in the NMDS in an encrypted form. The format of the NHI number is 3 alpha plus 4 numeric, the last of which is a check digit. Must be registered on the NHI before use.
Event type code	Code identifying the type of health event.	2	char	AA	M	Must be a valid code in the Event Type code table. Only one birth event (Event type 'BT') is allowed for each NHI number. Babies born before the mother's admission to hospital or transferred from the hospital of birth are recorded as 'IP'. The presence of some fields depends on the Event type code. See Appendix A: Enhanced Event Type/Event Diagnosis Type Table.
Event start datetime	The admission date and time on which a healthcare event began.	12	char	CCYYMMDD hhmm	M	Must be the same as Event start datetime on the HE record.

Field name	Definition	Size	Data type	Format	M/O	Notes
Facility code	<p>A code that uniquely identifies a healthcare facility.</p> <p>A healthcare facility is a place, which may be a permanent, temporary, or mobile structure, that healthcare users attend or are resident in for the primary purpose of receiving healthcare or disability support services. This definition excludes supervised hostels, halfway houses, staff residences, and rest homes where the rest home is the patient's usual place of residence.</p>	4	char	XXXX	M	<p>The facility that provided the service or treatment.</p> <p>Must be a valid code in the Facility code table.</p>
Event local identifier	Local system-generated number to distinguish two or more events of the same type occurring on the same day at the same facility.	1	char	N	M	<p>The NHI number, Event type code, Event start datetime, Facility code and Event local identifier for a unique key for checking duplicates on insert or checking for existence on delete.</p> <p>Use 9 first then '8,7,6...1'.</p>
Diagnosis number	Sequential number for each clinical code in each event record to assist in unique identification.	2	char	NN	M	Valid values are 01 to 99. Up to 99 clinical codes may be provided with each event.
Clinical coding system ID	A code identifying the clinical coding system used for diagnoses and procedures.	2	char	NN	M	<p>Must be a valid code in the Clinical Coding System code table.</p> <p>Must form part of a valid combination of Clinical code, Clinical code type, and Clinical coding system ID.</p>
Diagnosis type	A code that groups clinical codes, or indicates the priority of a diagnosis.	1	char	A	M	<p>Must be a valid code in the Diagnosis Type code table.</p> <p>There must be one and only one type 'A' for each event.</p> <p>Validation rules are held in the Event to Diagnosis Type table. Cardinality and optionality have been added. See Appendix A: Enhanced Event Type/Event Diagnosis Type Table.</p>
Clinical code type	A code denoting which section of the clinical code table the clinical code falls within.	1	char	A	M	<p>Must be a valid code in the Clinical Code Type code table.</p> <p>Must form part of a valid combination of Clinical code, Clinical code type, and Clinical coding system ID.</p>

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

Field name	Definition	Size	Data type	Format	M/O	Notes
Clinical code	A code used to classify the clinical description of a condition.	8	varchar	See Collection method.	M	<p>From 1 July 2008, ICD-10-AM 6th Edition clinical codes should be supplied. Must be a valid code in the Clinical code table. Earlier edition codes, such as ICD-10-AM 2nd Edition and 3rd Editions, are still acceptable.</p> <p>Must form part of a valid combination of Clinical code, Clinical code type, and Clinical coding system ID.</p> <p>Demographic and administrative data (eg, Sex, Date of birth, Event end type) is checked to ensure it is consistent with the Clinical code, as specified by the editing flags held against each Clinical code on the Clinical Code table.</p>
Diagnosis/procedure description	A free-text description of the diagnoses, injuries, external causes, and procedures performed. This should not be the standard description associated with the clinical code.	100	varchar	Any	M	Free text enclosed in quotation marks ("").
Operation/procedure date	The date on which an operation/procedure was performed.	8	char	CCYYMMDD	O	<p><i>Required for surgical procedures; optional for non-surgical procedures.</i></p> <p>Mandatory if diagnosis type is 'O' unless Operation flag in Clinical Code table is set to 'Y'.</p> <p>Must be on or before the date of load, the date portion of Event end datetime, and the Psychiatric leave end date.</p> <p>Must be on or after the date portion of Event start datetime, the Date of birth.</p> <p>Only permitted if the diagnosis type is 'O'.</p>
External cause date of occurrence	The date when the accident/injury occurred.	8	char	CCYYMMDD	O	<p>Must be on or before the date of load, the date portion of Event end datetime, and the Psychiatric leave end date.</p> <p>Must be on or after the Date of birth.</p> <p>Only permitted if Diagnosis type is 'E'.</p> <p>Required for external cause of occurrence codes, but optional if Operation flag is set to 'Y'.</p> <p>Partial dates allowed.</p>

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

9.4. Input File Psychiatric Data (HC) Record

The HC record is mandatory for IM events and optional for IP and ID events. If present it must include all mandatory fields. Legal status is stored in the Event Legal Status table.

Note: Many providers do not have a mental health module on their local computer system but do treat mental health inpatients. Those providers recording legal status electronically have the option to supply legal status records with ID or IP events as well as IM events

Field name	Definition	Size	Data type	Format	M/O	Notes
Record type	Code identifying the type of input record.	2	char	AA	M	'HC' (legal status details)
NHI number	The unique identification number assigned to a healthcare user by the National Health Index (NHI) database.	7	char	AAANNNN	M	The NHI number is the cornerstone of MOH data collections. It is a unique 7 character identification number assigned to a healthcare user by the National Health Index (NHI) database. It is stored in the NMDS in an encrypted form. The format of the NHI number is 3 alpha plus 4 numeric, the last of which is a check digit. Must be registered on the NHI before use.
Event type code	Code identifying the type of health event.	2	char	AA	M	Must be a valid code in the Event Type code table. The presence of some fields depends on the Event type code. See Appendix A: Enhanced Event Type/Event Diagnosis Type Table.
Event start datetime	The admission date and time on which a healthcare event began.	12	char	CCYYMMDD hhmm	M	Must be the same as Event start datetime on the HE record

Field name	Definition	Size	Data type	Format	M/O	Notes
Facility code	<p>A code that uniquely identifies a healthcare facility.</p> <p>A healthcare facility is a place, which may be a permanent, temporary, or mobile structure, that healthcare users attend or are resident in for the primary purpose of receiving healthcare or disability support services. This definition excludes supervised hostels, halfway houses, staff residences, and rest homes where the rest home is the patient's usual place of residence.</p>	4	char	XXXX	M	<p>The facility that provided the service or treatment.</p> <p>Must be a valid code in the Facility code table.</p>
Event local identifier	Local system-generated number to distinguish two or more events of the same type occurring on the same day at the same facility.	1	char	N	M	<p>The NHI number, Event type code, Event start datetime, Facility code and Event local identifier for a unique key for checking duplicates on insert or checking for existence on delete.</p> <p>Use 9 first then '8,7,6...1'.</p>
Legal status date	The date from which a healthcare user's legal status applies.	8	char	CCYYMMDD	M	<p>Partial dates not allowed.</p> <p>At least one mandatory for psychiatric inpatient events (Event type 'IM').</p> <p>Must be after the Date of birth.</p> <p>Must be on or before the date portion of Event end datetime.</p> <p>May be before the date portion of Event start datetime.</p> <p>Must be on or after the Legal Status Start Date for the legal status code provided.</p> <p>Must be on or before the Legal Status End Date for the legal status code provided.</p>

Field name	Definition	Size	Data type	Format	M/O	Notes
Legal status code	Code describing a healthcare user's legal status under the appropriate section of the Mental Health (Compulsory Assessment and Treatment) Act 1992, the Alcoholism and Drug Addiction Act 1966, the Intellectual Disability (Compulsory Care and Rehabilitation) Act 2003, or the Criminal Procedure (Mentally Impaired Persons) Act 2003.	2	char	AA	M	At least one mandatory for psychiatric inpatient events (Event type 'IM'). Left justified, ie, the second character can be a space. Code must be present in the Legal Status code table.

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

10. Acknowledgement File (.ndr)

10.1. Acknowledgement File Header (AH) Record

Contains a summary of the complete processing history of the file.

Field name	Size	Data type	Format	M/O	Notes
Record type	2	char	AA	M	'AH'
Agency code	4	char	XXXX	M	Copied from equivalent field in input file header
File name of input file					
acronym	3	char	AAA	M	Copied from equivalent field in input file header
batch number	5	char	NNNNN	M	Copied from equivalent field in input file header
extension	4	char	.AAA	M	' .ndm' (hex string 2E 6E 64 6D)
Number of records	5	char	NNNNN	M	Number of physical records received. Count includes the header record.
Date sent	8	char	CCYYMMDD	M	Date in ISO 8601 format to day level Partial dates not allowed.
MOH processing environment	4	char	AAAA	M	'PROD' or 'COMP'
File layout version	6	char	ANNN.N	M	Copied from equivalent field in input file header
Number of transactions processed	5	char	NNNNN	M	The number of logical records processed
Number of transactions deleted	5	char	NNNNN	M	The number of logical transactions successfully deleted from the NMDS
Number of transaction inserted	5	char	NNNNN	M	The number of logical transactions successfully inserted into the NMDS
Number of transactions rejected	5	char	NNNNN	M	The number of logical transactions rejected by the validation process
Date file loaded to NMDS	8	char	CCYYMMDD	M	Date in ISO 8601 format to day level. Partial dates not allowed.

10.2. Acknowledgement File Transaction (AK) Record

Contains the result of the load process for each record in the input file. Refer 4.7.3 *Acknowledgement File*.

Field name	Size	Data type	Format	M/O	Notes
Record type	2	char	AA	M	'AK'
NHI number	7	char	AAANNNN	M	
Event type code	2	char	AA	M	
Event start datetime	12	char	CCYYMMDD hhmm	M	
Facility code	4	char	XXXX	M	
Event local identifier	1	char	N	M	
File control reference number	14	char	Any	M	
PMS unique identifier	14	char	Any	M	Used by some agencies for reconciliation between the return files and their patient management system.
Client system identifier	14	char	Any	O	
*Error number	8	char	AAANNNA	M	'0' if no error
*Error text	70	varchar	Any	M	Description of the error message returned by the NMDS
Diagnosis number	2	char	NN	M	
Legal status date	8	char	CCYYMMDD	O	Mandatory when an HC record is included.
Legal status code	2	char	AA	O	Mandatory when an HC record is included.

* These two fields are repeated for each error found in an event record

11. Costweight File (.ndw)

The costweight file is sent back with the acknowledgement file for each file loaded.

11.1. Costweight Header (WH) Record

The costweight header is the first record in each costweight file and contains the file information.

Field name	Size	Data type	Format	M/O	Notes
Record type	2	char	AA	M	'WH'
Agency code	4	char	XXXX	M	
Input file name					
acronym	3	char	AAA	M	Assigned by MOH
batch number	5	char	NNNNN	M	
extension	4	char	.AAA	M	' .ndw'
Number of records	5	char	NNNNN	M	Count includes the header record
Date sent	8	char	CCYYMMDD	M	Date in ISO 8601 format to day level. Partial dates not allowed.
MOH processing environment	4	char	AAAA	M	'PROD' or 'COMP'

11.2. Costweight Transaction (WT) Record

Field name	Size	Data type	Format	M/O	Notes
Record type	2	char	AA	M	'WT'
PMS unique identifier	14	char	Any	M	Copied from health event record
Client system identifier	14	char	Any	O	Copied from health event record
MOH transaction key					
NHI number	7	char	AAANNNN	M	Copied from health event record
Facility code	4	char	XXXX	M	Copied from health event record
Event local identifier	1	char	N	M	Copied from health event record
Event type code	2	char	AA	M	Copied from health event record
Principal health service purchaser	2	char	NN or AN	M	Copied from health event record
Purchase unit	10	char	Any	O	This field will be set to null if the discharge date does not fall within a year for which a costweight algorithm exists
Health specialty code	3	char	ANN	M	Copied from the health event record
DRG grouper type	2	char	NN	M	Identifies the clinical version of the DRG calculation used
Release number	3	char	N.N	M	Constant – identifies the software release used to calculate the DRG
Event start datetime	12	char	CCYYMMDD HHMM	M	Copied from health event record.
Length of stay	5	char	NNNNN	M	Calculated by MOH from the admission, discharge and leave dates provided in the health event record
DRG code	4	char	A/N	M	DRG value for this health event. Left-aligned, zero-padded.
NZ DRG code	4	char	A/N	M	DRG value (as reported in DRG code) modified by the current costweight calculation. Left-aligned, zero-padded.
Costweight version	2	char	NN	M	
CCL	1	char	N	M	Complication/co-morbidity level, as output from the grouper software
Total hours on mechanical ventilation	5	char	NNNNN	M	Copied from health event record
WIES	14	char	Numeric	M	Costweight value for the health event Formatted NNNNNNNNN.NNNN
Unadjusted costweight	14	char	Numeric	M	Costweight as calculated by the grouper software Formatted NNNNNNNNN.NNNN
Excluded Purchase Unit	10	Char	X(10)	M	Assigned by MOH

12. Error File (.err)

An error file is generated only if the file fails the pre-processing checks. If generated, it is sent instead of the Acknowledgement File. It consists of one header record and a file failure record for each of the records in the input file that have failed the pre-processing checks

12.1. Error File Header Record

Contains details of the input file and pre-processing.

Field name	Size	Data type	Format	M/O	Notes
Record type	2	char	AA	M	'FH'
Agency code	4	char	XXXX	M	Copied from equivalent field in input file header or blanks
File name of input file					
acronym	3	char	AAA	M	
batch number	5	char	NNNNN	M	
extension	4	char	.AAA	M	'ndm' (hex string 2E 6E 64 6D)
Number of records	5	char	NNNNN	M	Count of physical records received. Includes the header record.
Date sent	8	char	CCYYMMDD	M	Date in ISO 8601 format to day level. Partial dates not allowed.
MOH processing environment	4	char	AAAA	M	'PROD' or 'COMP'

12.2. File Failure Record

Contains the error for each failed record in the input file. Errors are listed in section 13.2

Field name	Size	Data type	Format	M/O	Notes
Record type	2	char	AA	M	'FF'
Error number	8	char	AAANNNA	M	
Error text	70	char	Any	M	Error message returned by the NMDS

13. Error Messages

The table below describes errors that can be reported from the file loading at MOH. The following information is given for each code:

13.1. Fields

Field	Definition
Error number	<p>This number consists of three parts:</p> <ul style="list-style-type: none"> • Application_code: A three-letter code assigned by MOH to identify each software application (eg, MHS = mental health, NMS = NMDS). For the standard error message that applies to more than one software application, the application code is NZS (= MOH). • Error_ID: This is a unique number (eg, 1003). • Error_type: Severity of message (E = error, W = warning).
Error type description	A detailed description of the error and suggestions for why it may have arisen.
Error message	This is the message that is sent back to providers. It may contain substitution parameters (prefixed with '%'), which the program fills in with the particular value (eg, the value '%2' is not a valid value for the field '%1'). Where the error message is listed as 'to be assigned', this error number is not currently used.

13.2. List of NMDS errors

Field name	Error type description	Error Message
NZS1001 E	The NMDS looks at the record type to determine the number of fields (commas) to expect in the record. Where these do not match, the record is rejected.	Wrong number of fields: expected %1, found %2
NZS1002 E	A null value or blank has been reported for a field where it is compulsory to report a value.	%1 is a mandatory field
NZS1003 E	The value reported for this field is not included in the NMDS code table and is therefore not valid.	contains an invalid value – %2
NZS1004 E	The value reported for this field is not in the correct format. Refer to the appropriate Data Dictionary for the correct format.	%1 should be in format %3, entered as %2
NZS1005 E	The date in this field is not the correct format. It needs to be ccyymmdd.	Invalid date in field %1
NZS1006 E	The date in this field is in the future.	Field %1 cannot be a future date (%2)
NZS1007 E	The date in this field is in the past.	Field %1 cannot have a date in the past
NZS1008 E	The value reported in this field is outside the range of values that are valid.	%2 is outside the valid range for %1
NZS1009 E	This error is only valid for MHINC and NBSD records where a hospital is sending additional diagnosis information for a record that has already been sent in. The error indicates that the first health event (parent record) for this patient could not be found in the database. If the parent record should already be in the database, the most likely problem is an error somewhere in the five business key fields.	No parent record (%1) can be found
NZS1010 E	The record type that has been reported is not HD, HC, HE or HR. These are the only valid record type codes.	This value (%1) is not a valid record type
NZS1011 E	There is something wrong with the header record for this batch. Every batch must have a header record as the first record in the batch.	%1 is not a valid header record (HR)
NZS1012 E	The header record includes the total number of records in this file. However, when the pre-processor checked the file the total found did not match the total reported in the header.	Wrong number of fields: expected %1 found %2
NZS1013 E	The header record includes the file name of the file. However, this does not match the name of the file which arrived. This is a check that the file has not been renamed, which might affect the order of processing.	HR file name and file sent did not match
NZS1014 E	The file had more than one header record. The NMDS is expecting only one header record for each file.	Only one header record is allowed
NZS1015 E	The code in the message function field (also called transaction type field in MHINC and NBSD) is incorrect. The valid values are A1 (Add), A2 (Add ignoring warnings) and D1 (Delete).	This value '%1' is not a valid transaction type
NZS1016 E	This is only valid for mental health (MHINC) and Breast Cancer Screening (NBSD) records. A delete record transaction was received for a health event that also has one or more diagnosis records. These must be deleted first before the health event can be deleted.	Cannot delete parent record as dependent records exist

Note: The MHINC collection closed in 2010; however error messages are recorded in this document for historical purposes.

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

Field name	Error type description	Error Message
NZS1017 E	There is a field in the header record that reports if this file is a TEST file or a PROD file. This error indicates that a test file has been sent to the production environment, or a production file to the test environment, or the header record does not include this field.	Incorrect processing environment, file intended for %1
NZS1018 E	This is only valid for mental health (MHINC) and Breast Cancer Screening (NBSD) records. A pair of records has been received for the same patient – the first was to delete the health event record and the second was to update the diagnosis information.	Cannot insert/update record (%1) after attempting to delete parent (%2)
NZS1019 E	The file sent in has no data records in it – just a header record.	A file with no data records after the header is invalid
NZS1020 E	The code used in this field is no longer valid – it has been retired. Suggest you refer to the Data Dictionary for valid codes. For example, this error will be generated if a record includes a 1991 domicile code that was replaced in the 1996 rewrite.	%2 is no longer valid for %1 at date %3
NZS1021 E	Each agency sending data to the NMDS has an abbreviation that is reported as part of the header record. There is also an agency code in each record within the batch. This error indicates that the agency code included in the file does not refer to the same organisation as the abbreviation in the header record.	Agency code %3 does not match acronym %1 in header record
NZS1022 E	Each agency sending data to the NMDS has an abbreviation that is reported as part of the header record. Associated with this abbreviation is an indicator showing whether the agency is actively sending data to MOH. In this case the agency referred to in the heading is noted as inactive. Check that the agency abbreviation is correct, then contact the Help Desk and ask them to make this agency active.	The provider with acronym %1 is marked inactive
NZS1023 E	The NMDS was not able to find the record you want to delete. Suggest you check the business key fields, as these have to be exactly the same in both the delete record and the NMDS record.	Record cannot be deleted – key fields not found
NZS1024 E	The NMDS is not expecting this field to have spaces or tabs in it. Refer to the Data Dictionary for the required format.	Field %1 contains tabs or spaces
NZS1025 W	This is a warning that the value entered in this field is outside the range that was expected. Please check that the value is correct. If it is correct, then re-send the record with an A2 in the message function field.	Value in field %1 is outside the normal range
NZS1026 E	The NMDS checks on several date sequences within the patient record. This error indicates that one or more of the dates are out of sequence. Each error message is tailored to reflect the date details involved.	Date in field %1 is before the date %3
NZS1027 E	The NMDS checks on several date sequences within the patient record. This error indicates that one or more of the dates are out of sequence. Each error message is tailored to reflect the date details involved.	Date in field %1 is after the date %3
NZS1028 E	The NMDS checks some pairs of codes to ensure that the record is correct. This error means that one of those checks failed. For example, a diagnosis (disease) code does not require an operation/procedure date.	Value %1 is inconsistent with the value in %3

Field name	Error type description	Error Message
NZS1029 E	The NMDS checks on sets of values to ensure that the record is correct. This error means that one of these checks failed. An example of this would be if the clinical coding system ID and the clinical code table type and the event clinical code type do not match with the diagnosis code.	Values %2 are not a valid combination for %1
NZS1030 E	Check the record type field – this is not a valid code.	Line %1: This value %2 is not a valid record type
NZS1031 E	The NMDS checks the number of fields that it expects to get for each record type. This error reports there were either too many or too few fields in the record.	Line %1: Wrong number of fields – expected %2, found %3
NZS1032 W	This batch has not been processed because of inconsistencies within the header record.	Line %1: Record ignored because of inconsistent file
NZS1034 E	The NMDS edit is expecting a specific range of values for this field and none of the valid values were found.	Value in field %1 is outside the expected range
NZS1035 E	The NMDS checks that there are no unprintable characters, such tabs or control characters, in any of the free text fields. This error indicates that these were present.	Unprintable characters were found in field %1
NZS1036 E	The NMDS uses the first record in each file to determine the file format. Critical to this is whether the third character in the first record is a comma or a tab. This error indicates that it was neither a comma nor a tab, and therefore the file format (version 7, 8 or 9) could not be determined.	Unable to determine file format version
NZS1045 W	One of the fields in an inter-field check for accident details does not contain the expected values. This check is between the purchaser code and the ACC form number.	%1 not consistent with %3
NZS1046 W	The HMV/NIV field is populated in this record but there is no procedure code for hours on mechanical/noninvasive ventilation.	%1 indicates %2 but %3 not present
NZS1048 E	Fields in an inter-field check contain the same value. This check is between the three ethnic code fields on a health event.	Fields '%1' and '%2' cannot contain duplicate values
NZS1053 E	The file version is not compatible with the date the file was sent.	Date file sent is not compatible with file version %2
NZS1054 E	A value should not be submitted for this field for this event end datetime.	A value should not be submitted for %1 where event end datetime is %2.
NZS1055 E	The datetime in field (%1) is not in the correct format. It needs to be CCYYMMDDHHMM.	Invalid datetime in field %1
NZS1056 E	The datetime in field (%1) is after the datetime in field (%2)	Datetime %1 is after datetime %2
NMS3006 E	This error message is not currently being used.	
NMS3007 E	This error message is not currently being used.	
NMS3008 E	This error message is not currently being used.	
NMS3009 E	This error message is not currently being used.	
NMS3010 E	This record includes information about a birth event but the event type code is not BT. Either re-submit the record as a BT event or remove the birth-specific details.	Birth detail field %1 is not valid for event type %2
NMS3012 E	The event leave days calculated for this patient are greater than the number of days that the patient stayed in hospital, using discharge date minus admission date. Correct or remove the event leave days field.	Event leave days may not be greater than or equal to length of stay
NMS3013 E	This error message is not currently being used.	

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

Field name	Error type description	Error Message
NMS3015 E	This field is mandatory for this type of event but has not been reported in this record.	Field %1 is mandatory for %2 events
NMS3016 E	Weight on admission is mandatory for neonates, but was not reported in this record.	Weight on admission is required for neonates aged 28 days or less
NMS3017 E	This error message is not currently being used.	
NMS3018 E	This error message is not currently being used.	
NMS3019 E	The field 'message function' has an invalid code. Valid codes are A1, A2 and D1.	%1 is not a valid value for message_function
NMS3020 E	The NMDS edit/error module checks all three parts of the health event record (HE, HD and HC). If there is a problem with any one of these then the whole event has to be returned. For example, if HE and HC pass but there is a problem with HD, then this error is generated. This error is not returned to hospitals.	Transaction failed
NMS3021 E	This is a HD or HC record but there is no HE record with the same business key fields in it. The NMDS could not load this information without a matching HE record.	HD or HC record without matching HE record
NMS3022 E	The NMDS is expecting a diagnosis code for this type of event, but none was reported. Usually generated when no event diagnosis type 'A' (primary diagnosis) is found.	A diagnosis of type %2 is mandatory for event type %1
NMS3023 E	There are too many principal diagnosis codes for this event type.	Too many diagnoses of type %2
NMS3024 E	The diagnosis code in this record is not valid for this type of event.	Diagnosis %2 is not legal for event type %1
NMS3025 E	There is another event in the NMDS for this patient which occurred at the same time as this one. The other event may be for this HCU or for another that has been merged with this HCU.	Event cannot overlap existing event
NMS3026 W	Some of the business key fields for this event match with another event in the NMDS. This indicates that a similar event for this patient has already been reported. The other event may be for this HCU or for another that has been merged with this HCU.	Warning: similar event already exists
NMS3027 E	The event type code field indicates that this is a psychiatric event, but the legal status record (HC) has not been supplied.	Psychiatric (IM) event must have a legal status (HC) record
NMS3028 E	The NMDS was expecting a health event record for this patient but could not find one.	No health event (HE) record present in transaction unit
NMS3029 W	It is unusual for anyone in New Zealand to have this diagnosis. Please check that the code has been entered accurately. If it is correct, the event may be re-sent with an action code of A2.	This diagnosis %1 is not normal for NZ
NMS3030 W	It is unusual for anyone in New Zealand who is so young to have this diagnosis. Please check that the code has been entered accurately. If it is correct, the event may be re-sent with an action code of A2.	Diagnosis %1 is not normal for ages below %2
NMS3031 W	It is unusual for anyone in New Zealand who is this old to have this diagnosis. Please check that the code has been entered accurately. If it is correct, the event may be re-sent with an action code of A2.	Diagnosis %1, is not normal for ages above %2
NMS3032 W	It is unusual for someone of this sex to have this diagnosis. Please check that the code has been entered accurately. If it is correct, the event may be re-sent with an action code of A2.	Diagnosis %1 is not normal for sex %2

Field name	Error type description	Error Message
NMS3033 W	This patient's sex has been reported as unknown. Please report the specific sex.	Patient sex is reported as unknown
NMS3034 W	The Australian Coding Standards do not allow this code to be reported as a principal diagnosis.	%1 is not acceptable as a principal diagnosis
NMS3035 E	The patient has an operating room procedure, but the date on which it happened has not been reported.	Operation date field may not be null for this procedure
NMS3036 W	The diagnosis in this record indicates that there was an accident, but no external cause code has been reported.	No external cause code provided
NMS3037 E	The health event for this diagnosis has been deleted.	The health event for this diagnosis has been deleted.
NMS3038 W	The event end type code indicates that the patient died, but there were no diagnosis codes that would have caused death.	No fatal diagnoses provided
NMS3039 E	This error can arise from two sources. Firstly, if there is one HE record for this event, but there are two HD records with the same diagnosis number. Secondly, if there is one HE record and two HC records with the same legal status date and legal status code.	Duplicate – %2 already used
NMS3040 E	This error arises when the pre-processor recognises that the same record has come in twice within the batch file. For example, there were two HE delete records that had the same business key fields, or there were two HE insert records with the same business keys.	Badly formed transaction unit %1
NMS3041 E	The NMDS is expecting the field date psychiatric leave ended to be reported only for patients with an event end type of DL (discharged on leave). This record includes a date in the field 'date psychiatric leave ended' but does not have a DL event end type code.	%1 can only be reported for end-type DL
NMS3042 W	The NMDS carries out a check between mechanical/noninvasive ventilation hours and mechanical/noninvasive ventilation procedure codes. This warning indicates that there are one or more mechanical/noninvasive ventilation procedure codes reported but the mechanical/noninvasive ventilation hours field is empty. If the hours are not available to report, send the record back with an A2 in the message function field.	Mechanical/noninvasive ventilation procedure code but no hours reported
NMS3043 W	The hours on CPAP, NIV or HMV are greater than the total hours spent in hospital.	%1 exceeds the total hours of the Health Event
NMS3044 W	CPAP hours should only be reported for babies aged less than 29 days. This record is for an older patient includes a value in the CPAP field.	%1 only required for perinatal conditions
NMS3045 W	Informal patients cannot be discharged to leave. DL can only be used for committed patients.	Latest Legal Status Code cannot be 'I' when end type = 'DL'
NMS3046 E	An end date check to ensure supplied codes are still valid for use. Generation of this error means that the key date provided is after the end date in the reference table for the code supplied in the collection file. An example of this is where a Purchaser code or an Admission Type code has been used on an event where the date in Event end date is after the end date for the code provided.	%1 %2 is retired from use

Field name	Error type description	Error Message
NMS3047 E	<p>A start date check to ensure supplied codes are valid for use. Generation of this error means that the key date provided is prior to the commencement date of the code supplied.</p> <p>An example of this is where a Legal Status code has been used on an event where the supplied Legal Status date is prior to the start date for the code provided.</p>	%1%2 is not yet active for use
NZS3048 E	The sex held in the NHI for the reported Mother's NHI field is not Female. Where this is not the case, the record is rejected.	%1 sex is not female in the NHI

14. Guidelines for Coding Events

This section provides additional guidelines for coding events.

14.1. Event Start Time (Admission)

For **acute events** meeting the three hour admission rule the event start time is when the patient is first seen by a clinician, nurse or other healthcare professional in the Emergency Department, Acute Assessment Unit, Admission Planning unit or the like. When determining the event start time exclude waiting time in a waiting room and triage time.

For acute patients admitted directly to a ward/unit eg direct admission to intensive care unit (ICU), admission via delivery suite then the admission time is the time the patient arrives in the ward/unit care setting.

For **non acute events** - (i.e. elective/arranged patients, same day or inpatient), the event start time will be when the patient physically arrives in the ward/unit or day stay clinical area. This will not include the time they spend in a waiting area before any nursing/clinical care starts.

For **birth events (BT events)** - the event start time will be the time of birth for in hospital births only. Babies born before mother's admission to hospital or transferred from the hospital of birth are recorded as IP (inpatient event) and the event start time will be the time the patient arrives in the ward/neonatal intensive care unit (NICU).

For **internal and external transfers** – the event start time is the time the patient physically arrives in the new health care setting. The event end time for a discharge to another service within the same facility (DW) or discharge to another facility (DT, DA) will be when the patient leaves the health care setting. There will be a gap between these events which is the time taken to transfer. We would not expect these events to be contiguous. This will also apply to **patient retrievals** where a retrieval team is sent to another hospital to retrieve and transport a patient back to their hospital.

14.2. Event End Time (Discharge)

The event end time will be the time the patient physically leaves the health care setting. The health care setting would include a ward based patient departure lounge (recliner chairs, cleared to be discharged but waiting for paperwork/clinical signoff). If a patient has all the relevant documentation and has been taken to a public waiting area to await their transport/relative etc the time they left the ward would be the event end as they are no longer under the direct responsibility of any clinical staff.

There needs to be consistency between the event end type and the end time. The definition above will apply to the following events end types:

- DA Discharge to an acute facility
- DC Psychiatric patient discharged to community care
- DI Self Discharge from hospital - Indemnity signed
- DL Committed psychiatric patient discharged to leave for more than 10 days

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

DN Psychiatric remand patient discharged without committal
DP Psychiatric patient transferred for further psychiatric care
DR Ended routinely
DS Self discharge from hospital - No Indemnity
DT Discharge of non-psychiatric patient to another healthcare facility
DW Discharge to another service within the same facility
EA Discharge from Emergency department acute facility to specialist facility for neonates and burns only
ED Died while still in Emergency department acute facility
EI Self discharge from treatment in an Emergency department acute facility with indemnity signed
ER Routine discharge from an Emergency department acute facility
ES Self discharge from treatment in an Emergency department acute facility without indemnity
ET Discharge from Emergency department acute facility to another healthcare facility

For the following event end types:

DD Died

ED Died while still in Emergency department acute facility

The event end date on an event with a DD or ED event end type is the date of death from the hospital record of the death certificate or the date of completion of organ procurement. The event end time will be sourced from the same documentation.

DO Discharge of a patient for organ donation

The event end date for a patient statistically discharged for organ donation is the date the patient is declared brain dead from the hospital record of the death certificate. The event end time will be sourced from the same document. All events with a DO event end type will be followed with another event for the organ procurement. The subsequent event will have an event end type of DD and the event end date and time is to be when the organ procurement is completed.

DF Statistical Discharge for change in funder

This may occur when an arranged or elective admission is being funded by a private insurer or ACC. Some complication arises and the patient requires further hospitalisation beyond the care required for the privately funded event. The event end date and time for the privately funded event is what the clinician reports as the end of the required hospitalisation for the privately funded episode of care.

Appendix A: Enhanced Event Type/Event Diagnosis Type Table

Event type	Event Type Description (not stored in table)	Diagnosis type	Diagnosis type description (not stored in table)	Cardinality	Optionality
BT	Birth event	A	Principal diagnosis	1	M
BT	Birth event	B	Other relevant diagnosis	N	O
BT	Birth event	E	E-code (External cause of injury)	N	O
BT	Birth event	O	Operation / Procedure	N	O
ID	Intended day case	A	Principal diagnosis	1	M
ID	Intended day case	B	Other relevant diagnosis	N	O
ID	Intended day case	E	E-code (External cause of injury)	N	O
ID	Intended day case	O	Operation / Procedure	N	O
ID	Intended day case	M	Morphology	N	O
IM	Psychiatric inpatient event	A	Principal diagnosis	1	M
IM	Psychiatric inpatient event	B	Other relevant diagnosis	N	O
IM	Psychiatric inpatient event	E	E-code (External cause of injury)	N	O
IM	Psychiatric inpatient event	O	Operation / Procedure	N	O
IM	Psychiatric inpatient event	P	Mental health provisional diagnosis	N	O
IM	Psychiatric inpatient event	M	Morphology	N	O
IP	Non-psychiatric inpatient event	A	Principal diagnosis	1	M
IP	Non-psychiatric inpatient event	B	Other relevant diagnosis	N	O
IP	Non-psychiatric inpatient event	E	E-code (External cause of injury)	N	O
IP	Non-psychiatric inpatient event	O	Operation / Procedure	N	O
IP	Non-psychiatric inpatient event	M	Morphology	N	O

Appendix B: Duplicate and overlapping event checking rules

Fatal duplicate events

Reject if:

- the same key fields exist.
- master_hcu_id, Event type, Event start datetime and Event end datetime are all the same, facility is different, and Length of stay is greater than zero days.
- master_hcu_id, Facility, Event start datetime and Event end datetime are all the same, Event types are different, and Length of stay is greater than zero days.

Warnings

Generate warning if:

- master_hcu_id, Facility, Event start datetime, Event end datetime, and Event type are all the same, and Length of stay of both events is zero.

Fatal overlapping events

Reject if:

- master_hcu_id, Facility, Event start datetime, and Event type are all the same; and Length of stay of both events is greater than zero.
- master_hcu_id, Facility, and Event type (not "IM") are all the same; Event start datetime of one event is between the Event start datetime and Event end datetime of the other event; and Length of stay of both events is greater than zero.
- master_hcu_id, Facility, and Event start datetime are all the same; Event types are different (not "IM"); and Length of stay of each event is greater than zero.
- master_hcu_id, Event start datetime, and Event type (not "IM") are the same; Facilities are different; and Length of stay of each event is greater than zero.
- master_hcu_id is the same; Facilities and Event types are different (Event types not "IM"); Event start datetime of one event is between Event start datetime and Event end datetime of the other event; and Length of stay of each event is greater than zero.

In general (in plain English)

A day case (Event type either ID or IP and Length of stay 0 days) may occur within an IP or IM event for the same master_hcu_id where the Length of stay is not zero.

Two day cases (Event type = IP and Length of stay = 0, or Event type = ID and Event start datetime is the same as an IP or IM event) may exist on one day for the same master_hcu_id.

An IP or IM event where Length of stay is greater than zero may exist within an IM event for the same master_hcu_id.

If Length of stay is greater than zero for both events and the Length of stay for both events for the same master_hcu_id is the same then reject.

Appendix C: Diagnosis and Clinical Code Combinations

Clinical Code System	Clinical System Description (not stored in table)	Clinical Code Type	Clinical Code Type Description (not stored in table)	Diagnosis Type	Diagnosis Type Description (not stored in table)	From Range	To Range
02	ICD9CM	A	Diagnosis	A	Principal diagnosis	00100	79999
02	ICD9CM	A	Diagnosis	B	Other relevant diagnosis	00100	79999
02	ICD9CM	B	Injury	A	Principal diagnosis	80000	99999
02	ICD9CM	B	Injury	B	Other relevant diagnosis	80000	99999
02	ICD9CM	E	External cause of injury	E	Ecode (External cause of injury)	80000	99999
02	ICD9CM	M	Morphology (pathology)	M	Pathological nature of growth	8000	99999
02	ICD9CM	O	Operation/Procedure	O	Operation / Procedure	01000	99999
02	ICD9CM	V	V code (supplementary classification)	A	Principal diagnosis	V1000	V8299
02	ICD9CM	V	V code (supplementary classification)	B	Other relevant diagnosis	V1000	V8299
06	ICD9-CMA	A	Diagnosis	A	Principal diagnosis	00100	79999
06	ICD9-CMA	A	Diagnosis	B	Other relevant diagnosis	00100	79999
06	ICD9-CMA	B	Injury	A	Principal diagnosis	80000	99999
06	ICD9-CMA	B	Injury	B	Other relevant diagnosis	80000	99999
06	ICD9-CMA	E	External cause of injury	E	Ecode (External cause of injury)	80000	99999
06	ICD9-CMA	M	Morphology (pathology)	M	Pathological nature of growth	80000	99999
06	ICD9-CMA	O	Operation/Procedure	O	Operation/Procedure	01000	99999
06	ICD9-CMA	V	V code (supplementary classification)	A	Principal diagnosis	V1000	V8299
06	ICD9-CMA	V	V code (supplementary classification)	B	Other relevant diagnosis	V1000	V8299
10	ICD-10-AM First Edition	A	Diagnosis	A	Principal diagnosis	A000	R99
10	ICD-10-AM First Edition	A	Diagnosis	B	Other relevant diagnosis	A000	R99
10	ICD-10- AM First Edition	B	Injury	A	Principal diagnosis	S0000	T99
10	ICD-10- AM First Edition	B	Injury	B	Other relevant diagnosis	S0000	T99
10	ICD-10- AM First Edition	M	Morphology (pathology)	M	Pathological nature of growth	8000	99999
10	ICD-10- AM First Edition	O	Operation/Procedure	O	Operation / Procedure	1080100	9999999
10	ICD-10- AM First Edition	V	V code (supplementary classification)	A	Principal diagnosis	Z000	Z999

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

Clinical Code System	Clinical System Description (not stored in table)	Clinical Code Type	Clinical Code Type Description (not stored in table)	Diagnosis Type	Diagnosis Type Description (not stored in table)	From Range	To Range
10	ICD-10- AM First Edition	V	V code (supplementary classification)	B	Other relevant diagnosis	Z000	Z999
11	ICD-10-AM second edition	A	Diagnosis	A	Principal diagnosis	A000	R99
11	ICD-10-AM second edition	A	Diagnosis	B	Other relevant diagnosis	A000	R99
11	ICD-10-AM second edition	B	Injury	A	Principal diagnosis	S0000	T99
11	ICD-10-AM second edition	B	Injury	B	Other relevant diagnosis	S0000	T99
11	ICD-10-AM second edition	E	External cause of injury	E	Ecode (External cause of injury)	S0000	Y98
11	ICD-10-AM second edition	M	Morphology (pathology)	M	Pathological nature of growth	8000	99999
11	ICD-10-AM second edition	O	Operation/Procedure	O	Operation / Procedure	1080100	9999999
11	ICD-10-AM second edition	V	V code (supplementary classification)	A	Principal diagnosis	Z000	Z999
11	ICD-10-AM second edition	V	V code (supplementary classification)	B	Other relevant diagnosis	Z000	Z999
12	ICD-10-AM third edition	A	Diagnosis	A	Principal diagnosis	A000	R99
12	ICD-10-AM third edition	A	Diagnosis	B	Other relevant diagnosis	A000	R99
12	ICD-10-AM third edition	B	Injury	A	Principal diagnosis	S0000	T99
12	ICD-10-AM third edition	B	Injury	B	Other relevant diagnosis	S0000	T99
12	ICD-10-AM third edition	E	External cause of injury	E	Ecode (External cause of injury)	U5000	Y98
12	ICD-10-AM third edition	M	Morphology (pathology)	M	Pathological nature of growth	8000	99999
12	ICD-10-AM third edition	O	Operation/Procedure	O	Operation / Procedure	1100000	9798600
12	ICD-10-AM third edition	V	V code (supplementary classification)	A	Principal diagnosis	Z000	Z999
12	ICD-10-AM third edition	V	V code (supplementary classification)	B	Other relevant diagnosis	Z000	Z999
13	ICD-10-AM sixth edition	A	Diagnosis	A	Principal diagnosis	A000	U049
13	ICD-10-AM sixth edition	A	Diagnosis	B	Other relevant diagnosis	A000	U049
13	ICD-10-AM sixth edition	B	Injury	A	Principal diagnosis	S0000	T983
13	ICD-10-AM sixth edition	B	Injury	B	Other relevant diagnosis	S0000	T983
13	ICD-10-AM sixth edition	E	External cause of injury	E	Ecode (External cause of injury)	U5000	Y98
13	ICD-10-AM sixth edition	M	Morphology (pathology)	M	Pathological nature of growth	8000	99999
13	ICD-10-AM sixth edition	O	Operation/Procedure	O	Operation / Procedure	1100000	9798600
13	ICD-10-AM sixth edition	V	V code (supplementary classification)	A	Principal diagnosis	Z000	Z999
13	ICD-10-AM sixth edition	V	V code (supplementary classification)	B	Other relevant diagnosis	Z000	Z999

Printed copy is not guaranteed to be current. Refer to the electronic source for the latest version

Appendix D: Sample Error Report (.sqr file)

Health Agency Facility Code: 4014			
Message function=A1	PMS unique identifier=NIValpha	Line=2	
HCU ID=AAA1234	Local event ID=9	Health specialty code=P41	
Sex=M	Event type=BT	Principal service purchaser=34	
Birth date=01/07/2009	Start datetime=01/07/2009 08:22	Health agency code=4121	
Ethnicity=11;;	End datetime=01/07/2009 17:55	Hours on mechanical ventilation=	
Resident=Y	Admission source=R	Occupation code=	
Domicile code=2669	Admission type=AA	Birth weight=3580	Occupation free text=
Country code=572	Admission weight=3580	Gestation period=39	
Suppress flag=N	Event end type=DR	Birth status=L	
ACC status flag=	Event leave days=	Age of mother=24	Psychiatric leave end date=
AI claim number=	Birth location=1	Psychiatric leave end type=	
Hours on cpap=			
Mothers NHI=AAA1234	Total ICU Hours=	Transfer From=	Transfer To=
Client system identifier=TC2-07		Total NIV hours=25	