Health New Zealand
Te Whatu Ora

National Minimum Dataset (NMDS)

File Specification for File Version 015.0

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1. Introduction

1.1. Purpose of this Document

This file specification defines the file format used to send information to National Collections 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.

1.2. 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.

1.3. Related Documents

This document should be read in conjunction with the NMDS Data Dictionary.

1.4. 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 clinical 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.

1.5. Importance of Accurate Information

Accurate information is vital to both the provision of services and the efficient operation of the health and disability support sector.

Responsibility for National Collections sat with the Ministry of Health until 1 July 2022 when it moved to Health NZ. As part of the health sector restructure there are significant changes happening to how data is collected reported and stored, but irrespective of this the objective continues to be the same; that national collections data is accurate, timely and consistent and is available nationally, while protecting data confidentiality and avoiding undue compliance and collection costs for the sector.

1.6. Compliance with Standards

All health and disability service providers, agencies and organisations, as defined in the Health Information Privacy Code 2020, accessing or providing national collections 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.

1.7. Connection to National Systems

Given the Government's investment in the national health information systems, and because of the requirement for nationally consistent data, health and disability service providers are required to use the national systems, standards and protocols where reasonable.

Direct access provides:

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

1.8. Authority for Collection of Health Information

Health NZ may collect health information where this is necessary for lawful purposes connected with its functions and activities. These purposes, functions and activities may be set out in legislation, such as the Te Pae Ora (Healthy Futures) Act 2022, the Health Act 2009, 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 2020 and the Health Information Privacy Code 2020.

1.9. Contact

If you have any queries regarding this file layout or the NMDS load process, please contact Data Management, National Collections operations@health.govt.nz

2. Changes to Previous Versions of the File Specification

2.1. Changes to the specification from document version 16.1 to 16.2

The following changes have been made to the NMDS File Specification document version 16.2:

- Updated WIESNZ version for the financial year 2024/25 – WIESNZ24
- Added details of new validation check (NMS3053 E) for 'facility transfer from' and 'facility transfer to' same as facility code reported for an event. This validation was implemented 1 July 2024 but is applicable for all events reported, see Section 10 Error and Warning Messages
- Updated Guidelines for Event Start/End Datetime
- Added List of Acronyms and Descriptions, see Appendix D: List of Acronyms and Descriptions.

2.2. Changes to the specification from document version 16.0 to 16.1

The following changes have been made to the NMDS File Specification document version 16.1:

- Corrected front page to read 'File Specification for File Version 015.0'.
- Updated warning message 'NMS3051 W' condition onset flag 1 on principal diagnosis to state it was retired 1 July 2013.
- Update Health New Zealand Logo and wording referring to Te Whatu Ora.

2.3. Changes to the specification from document version 15.9.4 to 16.0

The following changes have been made to the NMDS File Specification document version 16.0:

- Updated WIESNZ version for the financial year 2023/24 – WIESNZ23
- Addition of ICD-10-AM/ACHI Twelfth Edition
- Addition of AR-DRG v10.0
- Addition of new field – Episode Clinical Complexity Score (ECCS) to Costweight file (.ndw)
- Updated total hours on mechanical ventilation and total hours on noninvasive ventilation validation rules
- Addition of ICD-10-AM/ACHI Twelfth Edition Diagnosis and Clinical Code Combinations.

New Zealand upgraded to the Twelfth Edition of the International Classification of Diseases and Health Related Problems, Tenth Revision – Australian Modification (ICD-10-AM) and the Australian Classification of Health Interventions (ACHI) as the standard for diagnosis and procedure clinical coding from 1 July 2023. The classification system code for ICD-10-AM/ACHI Twelfth Edition is '16'.

The ICD-10-AM/ACHI Twelfth Edition codes supplied by Districts are back mapped to ICD-10-AM/ACHI Eleventh Edition codes, which are used to assign an AR-DRG v10.0 DRG.

2.4. Changes to the specification from document version 15.9.3 to 15.9.4

The following changes have been made to the NMDS File Specification document version 15.9.4:

- Updated WIES version for the financial year 2022/23 – WIESNZ22
- Updated for the restructure of the Health sector and move to Health NZ.

2.5. Changes to the specification from document version 15.9.2 to 15.9.3

The following changes have been made to the NMDS File Specification document version 15.9.3:

- Updated WIES version for the financial year 2021/22 – WIESNZ21.

2.6. Changes to the specification from document version 15.9.1 to 15.9.2

The following changes have been made to the NMDS File Specification document version 15.9.2:

- Extended Diagnosis/procedure description to 200 characters
- Clarification to domicile code.

2.7. Changes to the specification from document version 15.9 to 15.9.1

The following changes have been made to the NMDS File Specification document version 15.9.1:

- Addition of ICD-10-AM/ACHI/ACS Eleventh Edition.

New Zealand upgraded to the Eleventh Edition of the International Classification of Diseases and Health Related Problems, Tenth Revision – Australian Modification (ICD-10-AM) and the Australian Classification of Health Interventions (ACHI) as the standard for diagnosis and procedure clinical coding from 1 July 2019. The classification system code for ICD-10-AM/ACHI Eleventh Edition is ‘15’.

The ICD-10-AM/ACHI Eleventh Edition codes supplied by Districts are back mapped to ICD-10-AM/ACHI Eighth Edition codes, which are used to assign an AR-DRG v7.0 DRG.

2.8. Changes to the specification from document version 15.8 to 15.9

The following changes have been made to the NMDS File Specification document version 15.9:

- Added a clarification around the requirement for Event Leave Days.

2.9. Changes to the specification from document version 15.7 to 15.8

The following changes have been made to the NMDS File Specification document version 15.8:

- Updated Domicile Code Notes to reflect the use of Census 2013 domicile codes with effect from 1 July 2015
- Updated Occupation Code Notes to reflect the use of ANZSCO v1.2 occupation codes with effect from 1 July 2015
- Added a clarification around the requirement for Event Leave Days.

2.10. Changes to the specification from document version 15.6 to 15.7

The following changes have been made to the NMDS File Specification document version 15.7:

- Added health specialty code M14 to the condition specifying which health specialty codes may be used in conjunction with clinical code 92211-00 [571] for combined ventilatory support.

2.11. Changes to the specification from document version 15.5 to 15.6

The following changes have been made to the NMDS File Specification document version 15.6:

- Added a condition about the patient's age to the rule defining the valid collection of ACHI procedure code 92211-00 [571] for combined ventilatory support.

2.12. Changes to the specification from document version 15.4 to 15.5

The following changes have been made to the NMDS File Specification document version 15.5:

- Updated the description from Domicile Code
- Added details of new validation for Total Hours on Mechanical Ventilation and Total Noninvasive Ventilation Hours for the ACHI Eighth Edition procedure code 92211-00 [571]
- Updated Errors NMS3008E and NMS3009E
- Addition of ICD-10-AM/ACHI/ACS Eighth Edition.

New Zealand upgraded to the Eighth Edition of the International Classification of Diseases and Health Related Problems, Tenth Revision – Australian Modification (ICD-10-AM) and the Australian Classification of Health Interventions (ACHI) as the standard for diagnosis and procedure clinical coding from 1 July 2014. The classification system code for ICD-10-AM/ACHI Eighth Edition is '14'.

The ICD-10-AM/ACHI Eighth Edition codes supplied by Districts are back mapped to ICD-10-AM/ACHI Sixth Edition codes, which are used to assign an AR-DRG v6.0x and v6.0 DRG.

2.13. Changes to the specification from document version 15.3 to 15.4

The following changes have been made to the NMDS File Specification document version 15.4:

- Updated Condition Onset Flag validation to reflect that primary diagnoses are not required to have a condition onset flag value of '2'
- Updated Funding Agency to include the new purchaser code 33 MOH Screening Pilot or Programme.

2.14. Changes to the specification from document version 15.2 to 15.3

The following change has been made to the NMDS File Specification document version 15.3:

- Updated Duplicate and Overlapping Events validation to incorporate some refinements to this aspect of NMDS file processing
- Updated Condition Onset Flag (COF) validation to reflect that inpatient mental health events will bypass COF validation.

2.15. Changes to the specification from document version 15.1 to 15.2

The following change has been made to the NMDS File Specification document version 15.2:

- Updated the definition for funding agency to reflect that it is conditionally mandatory
- Defined 'cM'.

2.16. Changes to the specification from document version 15.0 to 15.1

The following change has been made for the NMDS File Specification document version 15.1:

- Added warning message 3051 for unexpected Condition Onset Flag values.

2.17. Changes to the specification from document version 14.0 to 15.0

The following changes have been made for NMDS File Specification document version 15.0:

- Change the File Version to V015.0
- Add Funding Agency Code
- Add Condition Onset Flag
- Document validation rules on new fields
- Update List of NMDS Errors and Warnings.

2.18. 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.

The back mapping of ICD-10-AM/ACHI Sixth Edition codes supplied by Districts to ICD-10-AM/ACHI Third Edition codes will no longer be required. The Sixth Edition codes will be used to assign an AR-DRG v6.0 DRG.

2.19. 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 WIESNZ09
- Changes to the ethnicity Level 2 codeset.

2.20. 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
- 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 WIESNZ08.

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

The ICD-10-AM/ACHI Sixth Edition codes supplied by Districts are back mapped to ICD-10-AM/ACHI Third Edition codes, which are used to assign an AR-DRG v5.0 code. The Casemix Exclusion Rules associated with WIESNZ08 will apply to the NMDS load process for the 2008/09 financial year.

2.21. 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 and Introduce validation on Health Specialty Code Start and End dates
- Add and retire Principal Health Service Purchaser Codes and introduce validation on Principal Health Service Purchaser Code Start and End dates
- Add new Event End Type Codes
- Add changes for WIES11c.

The input file version number remains at V011.5.

2.22. 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 List of NMDS Errors and Warnings
- Update Diagnosis and Clinical Code Combinations.

The input file version number remains at V011.5.

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

The AR-DRG v5.0 Grouper was 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/ACHI Third 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 Diagnosis and Clinical Code Combinations.

2.24. 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.

2.25. 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 was uncertainty around the introduction of new legal status codes, these legal acts were removed, until the matter was finalised (likely until September 2004).

The input file version number remains at V011.0.

2.26. 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 and Health Related Problems, Tenth Revision – Australian Modification (ICD-10-AM) and the Australian Classification of Health Interventions (ACHI) as the standard for diagnosis and procedure clinical coding from 1 July 2004. The classification system code for ICD-10-AM/ACHI Third Edition is ‘12’.

The AR-DRG 4.2 grouper was used to produce the NMDS Cost Weight file and thus only applies to the NMDS load process. The ICD-10-AM/ACHI Third Edition codes supplied by Districts are back mapped to ICD-10-AM/ACHI Second Edition codes, which are used to assign an AR-DRG 4.2 code. The Casemix Exclusion Rules associated with WIES8C continue to apply to the NMDS load process 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.

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.

Content

The NMDS is a national collection of public and private hospital discharge information, including clinical information, for same day and multi day inpatients. Unit record data is collected and stored. All event 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 backloaded 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 (ie, New Zealand Cancer Registry 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 the NMDS collection or to request specific datasets or reports, contact the Data Services team, email, data-enquiries@health.govt.nz or visit the Health NZ web site https://www.tewhatuora.govt.nz/for-health-professionals/data-and-statistics/nz-health-statistics/national-collections-and-surveys/collections/national-minimum-dataset-hospital-events/

Collection methods – guide for providers	Data is provided by public and the larger private hospitals in an agreed electronic file format. A cut-down electronic file format is reported by other private hospitals.
Frequency of updates	Publicly funded hospital events are required to be loaded into the NMDS within 21 days after the month of discharge. Electronic input files are received and processed every day by National Collections. Health NZ National Collections has a team of staff who process private hospital electronic discharge reports.
Security of data	The NMDS is accessed by authorised National Collections staff for maintenance, data quality, audit and analytical purposes. Authorised staff have access to the NMDS for analytical purposes, via Qlik and other tools.
Privacy issues	Health NZ 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 2021, the Privacy Act 1993 and the Health Information Privacy Code 2020. 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.
National reports and publications	An annual *Hospital events web tool* is published on the Health NZ website https://www.tewhatuora.govt.nz/for-health-professionals/data-and-statistics/nz-health-statistics/health-statistics-and-data-sets/hospital-surgical-activity/hospital-events-web-tool/. This publication contains summary NMDS information for a financial year.

Data provision

Customised datasets or summary reports are available on request, either electronically or on paper. Staff from the Data 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.

There may be charges associated with data extracts.

The Data Services team also offers a peer review service to ensure data is reported appropriately when published by other organisations.

Contact the Data Services team
data-enquiries@health.govt.nz

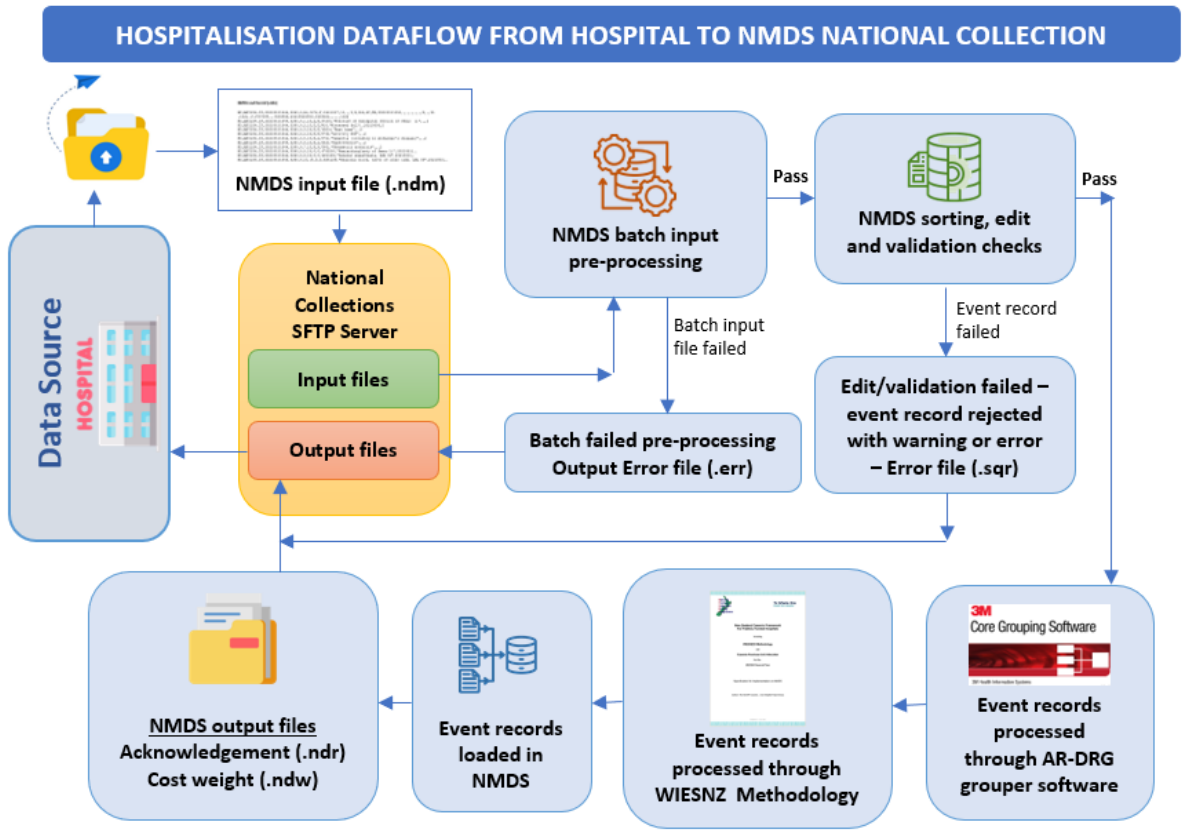
3. Batch Processing

3.1. Batch Process Overview

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

3.2. Batch Process Flow Diagram

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



3.3. 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 Data Management, National Collections), providing the data reaches National Collections within 21 days after the month of discharge.

3.3.1 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 National Collections. Each input file must contain a header record (HR) and an unlimited number of Event Details (HE) records.

For each Event Detail (HE) record, the file can contain from 1 to 99 Diagnosis (HD) records, and from 0 to 99 Psychiatric Data (HC) records.

The extract file requirements are set out in Section 5 Extract File Requirements and the layout specifications for the input file are set out in Section 6 Extract File (.ndm). The business rules for the fields (both coded and non-coded) are described in the NMDS (Hospital Events) Data Dictionary.

3.3.2 Event detail records

Each health event detail (HE) record in an input file has a message function of 'A1', 'A2' or 'D1'. The effect of these functions in 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 keys are found in the NMDS. If an existing or overlapping record exists, or errors or warnings are generated, the event record is rejected.
A2	Add ignoring any warnings	Creates a new health event if no existing record with the same keys are found in the NMDS, regardless of any warnings generated. If an existing or overlapping record exists, or errors are generated, the event record is rejected.
D1	Delete	Deletes the event record from the NMDS.

An audit trail is kept in the audit tables.

3.3.3 Send batch to National Collections

The batch file is sent to National Collections via SFTP or other means.

3.4. National Collections Batch Pre-processing

3.4.1 Pre-processing

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

- Batch is in sequence.
- Header record (HR) count of number of event records equals the actual number of event records in the input file.
- Field data types and the number of fields per record comply with NMDS requirements.

3.4.2 Batch passes pre-processing

If the input file passes pre-processing, no error file is generated. The input file then progresses to validate and load into the NMDS (see Section 3.6. Load into the NMDS/Validate (pre-processing passed).

3.4.3 Batch fails pre-processing

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

- The header record (HR) followed by any error messages relating to the header
- Each input data record in error followed by one or more error messages.

National Collections sends the error file to the data provider.

3.5. 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 errors and resubmit it with the same file name. No further input files will be processed until it passes the pre-processing stage.

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

The data fields in the input file are then validated, edit checked and loaded.

3.6.1 Sorting

Incoming event record transactions are sorted by:

- The message function (eg, D1 then A1 or A2)
- Record type (eg, HE, HD, or HC), and
- Business (data) key (see Section 4 Data Keys)

3.6.2 Validation and errors

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

3.6.3 Edit checks

Edit checks performed include:

- Data field value checks – code tables and range checks.
- Event record referential checks – checking for duplicate and overlapping event records. See Section 11.3 Duplicate and Overlapping Event.
- Data integrity checks – errors and warnings are rejected if the data value is inconsistent with values in other fields or is missing. Event records that

generate a warning message are rejected and can only be loaded into the NMDS if the event record is resubmitted with message function A2. Demographic data (eg, sex, date of birth) are checked with the specified edit flags held against ICD-10-AM/ACHI codes in the clinical code table for each ICD-10-AM/ACHI code reported.

3.6.4 AR-DRG and WIESNZ values

AR-DRG and WIESNZ values are calculated at this stage.

AR-DRG – Australian Refined Diagnosis Related Groups
The AR-DRG grouper is a specially designed computer software that assigns event records to DRGs, according to each version of the AR-DRG classification system – it uses diagnoses and procedures with other event data (administrative and demographic variables).

DRGs are calculated by National Collections as part of the NMDS load process. DRGs are not reported to the NMDS by hospitals.

AR-DRG v10.0 applies for all event records where the date portion of Event end datetime is on or after 1 July 2023

AR-DRG v7.0 applied for all event records where the date portion of Event end datetime was from 1 July 2017 to 30 June 2023.

Past DRG versions include, AR-DRG v6.0x, v6.0, v5.0, v4.2, v4.1 and AN-DRG v3.1 and v3.0.

WIESNZ – Weighted Inlier Equivalent Separations, New Zealand
The New Zealand casemix costweight model is known as WIES (Weighted Inlier Equivalent Separation).

The New Zealand Casemix Framework for Publicly Funded Hospitals specifies the WIESNZ methodology used for publicly funded hospitals so that case weighted discharge values can be calculated for all National Minimum Dataset (NMDS) event records by National Collections. Further variables are also defined, as required, to allocate purchase units (PUs) and New Zealand specific DRGs (NZ-DRGs).

Costweight values are calculated by National Collections as part of the NMDS load process. Costweight values are not reported to the NMDS by hospitals.

The costweight is calculated using the New Zealand Weighted Inlier Equivalent Separation (WIES) methodology, according to different schedules each financial year - https://www.tewhatuora.govt.nz/for-health-professionals/data-and-statistics/nz-health-statistics/data-references/#weighted-inlier-equivalent-separations-wies

3.6.5 Loading

If all the event records in an input file are valid (ie, the batch passes the pre-processing validation), each delete transaction (D1) is applied to the existing NMDS event record it is deleting and each new event record (A1 or A2) is loaded into the NMDS if it doesn't have data validation errors.

3.7. NMDS Output Files

Editing and loading the input files into the NMDS results in an acknowledgement file (.ndr), a costweight file (.ndw) and a formatted error report (.sqr) for event records rejected with warnings or errors.

3.7.1 Acknowledgement file (.ndr)

NMDS produces an acknowledgement file that has the same name prefix as the input file with a filename extension of '.ndr'. It is supplied by National Collections to the provider, and reports on all event records submitted by the provider to the NMDS. The information in the acknowledgement file will state if the event record has been successfully processed or not.

3.7.1.1 Values calculated for header

The NMDS load process calculates the:

- Number of event records processed
- Number of event records deleted
- Number of event records inserted
- Number of event records rejected
- Date the file was loaded into NMDS.

These values are supplied back to the provider in the acknowledgement file header record, see example below.

AH,9999,XXX04539.ndm,08843,20240901,PROD,V015.0,1231,323,885,23,20240901

3.7.1.2 Error and warning messages in acknowledgement file

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

AK,NHI1234,IP,202406271306,1234,9,20248140523,1234567,8910111,0,"Data processed successfully",,,

AK,NHI2345,IP,202404232032,1234,9,202408140523,1234568,8910112,NMS3025E,"Event cannot overlap existing event - Event with overlapping start date",,,

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 7 Acknowledgement File (.ndr) and the error/warning messages in Section 10 Error and Warning Messages.

3.7.2 Costweight file (.ndw)

The NMDS produces a costweight file which has the same name prefix as the input file and an extension of '.ndw'. It is supplied by National Collections to the provider, and reports the DRG and results of the WIESNZ methodology process for each event record loaded in the NMDS, giving a subset of information relating to purchase units, excluded purchase units, WIESNZ costweight values, and other variables used for each event record. The file comprises a header record (WH) containing file information, and a costweight transaction (WT) record for each event record loaded in NMDS, see examples below.

WH,1234,XXX04539.ndw,00886,20240901,PROD

Key variables within the Costweight Transaction (WT) report identifying WIESNZ24 and AR-DRG v10.0 related data include:

- Costweight version (the WIESNZ version used for the FY) WIESNZ24 = '25'
- Release Number (identifies the software release version used to calculate the DRG) = '10.0'
- DRG Grouper Type (the version of the AR-DRG used) AR-DRG v10.0 = '09'.

WT,4437999,4408498,NHI1999,1234,9,IP,35,EXCLU,S40,09,10.0,202407100814,00000,J69B,J11W,25,,00000,000000000.2095,,MS02016,1.0

WT,4445799,4408499,NHI9999,1234,9,IP,35,M65.01,,M65,09,10.0,202407111900,00011,E71B,E71B,25,,00000,000000001.0877,,INCLU,1.0

WT,4449299,4408500,NHI1009,1234,9,IP,35,S55.01,S59,09,10.0,202407170850,00000,B66B,B66B,25,,00000,000000000.3450,,INCLU,2.0

See the layout specifications of the costweight file in Section 8 Costweight File (.ndw)

3.7.3 Formatted error report (.sqr)

A formatted file containing errors and warnings 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 C: Sample Error Report (.sqr file).

3.8. Batch Receive Process (pre-processing passed)

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

To address event records with error messages, data providers must review and correct the event records and resubmit them as part of a new input file.

Event records with warning messages may either be updated, or the data confirmed as correct. In the case of confirmations, the event record should be resubmitted with a message function of ‘A2’.

3.8.1 Corrections and deletes

Each event record must be corrected or deleted individually.

To update an event record that has already been loaded into the NMDS, provider systems must send a ‘D1’ (Delete) record followed by an ‘A1’ (Add) record.

To add an event record that has been rejected with a warning message the provider system should submit a ‘A2’ (Add ignoring any warnings) record. If more than one update has been performed on an event record in the provider system during the period covered by the data transfer, then only the latest update should be sent.

To delete an event record already loaded in the NMDS, only the values in the key fields (see Section 4 Data Keys) need be reported, but the values must be identical to the existing event record in the NMDS.

4. Data Keys

Each event record has a unique business key consisting of:

- NHI number
- Event type code (eg, IP, BT, IM)
- Event start datetime*
- Facility code
- Event local identifier (eg, 9, 8, 7 etc).

The business key is used to check for duplicates and overlapping event records on insert or check for existence of an event record on delete. During the load process, the NMDS checks that the data key is unique.

*for a delete (D1) record both date and time are used to check against the datetime field. For other validations (eg, overlapping and duplicate event records) only the date portion of the datetime field is used to check for duplicate and overlapping events.

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

5. Extract File Requirements

5.1. Batch File Name

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

- Three-letter acronym allocated to each sending agency by National Collections.
- Sequential number to uniquely identify each batch file.
- File extension allocated by National Collections ('.ndm') for NMDS input files.

For example, a typical file name for Capital & Coast District is 'CCH00001.ndm'.

File name checking is case lenient.

5.2. Batch File Format

The file is in ASCII format, where:

- Only ASCII characters 32 through 127 (except for 34) are permitted.
- Event 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"

5.2.1 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. The value 'cM' in this column denotes fields that are conditionally mandatory.

5.2.2 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, 202401280000 (which equates to 24:00 of 27/01/2024).

Partial dates or times are not permitted for datetime fields.

Datetime fields are sent as char and stored as datetime.

Event records from older versions of the input file that have date fields instead of the 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 Section 1.6 Compliance with Standards.

5.2.3 Code table values

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

5.3. Valid Event Records

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

5.3.1 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	

5.3.2 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	

5.3.3 Costweight file (eg, CCH00001.ndw)

The costweight file is an output of the WIESNZ calculation, which uses a combination of elements including DRG, health 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

5.3.4 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	

5.3.5 Formatted error report (eg, CCH00001.sqr)

This file is always generated. It is a formatted report containing event records with errors or warnings. Refer to Appendix C: Sample Error Report (.sqr file).

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	

6. Extract File (.ndm)

6.1. 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	New Agency codes are assigned by National Collections 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 to Section 5.1 Batch File Name.
Acronym		3	char	AAA	M	Acronym of the sending agency as assigned by National Collections.
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 event records. Includes the header record. Must contain the exact number of event 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.
NC 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	'V015.0' for files submitted in this layout.

6.2. 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 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 current format of the NHI number is a unique 7-character number (3 alpha, 3 numeric and one numeric check digit). A new format (3 alpha, 2 numeric, 1 alpha and one alpha check digit) will be issued when the current NHI numbers are exhausted. 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. Neonates born before the mother's admission to hospital or transferred from the hospital of birth are recorded as 'IP'. Event type 'ID' is retired and was only effective for event records ending on or before 30 June 2013. The presence of some fields depends on the Event type code. See Appendix A: Enhanced Event Type/Event Diagnosis Type Table.

Field name	Definition	Size	Data type	Format	M/O	Notes
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: • on or before the date of load • the same as the date of birth for birth events (event records with an event type of 'BT'). When event records 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 Sections 5.2.2 Dates, partial dates and datetimes and 12.1 Event Start Datetime (Admission).
Facility code	A code that uniquely identifies a healthcare facility. 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.	4	char	XXXX	M	The facility reported must be the healthcare facility that provided the service or treatment to the healthcare user. Must be a valid code in the Facility Code Table and included in the NMDS_facility_code table. New facility codes are assigned by National Collections on request.
Event local identifier	Local system-generated number to distinguish two or more event records of the same type occurring on the same day at the same facility.	1	char	N	M	The NHI number, Event type code, Event start datetime, Facility code and Event local identifier form a unique key for checking duplicates or overlapping event records on insert or checking for existence on delete. Use 9 first then '8,7,6…1'.

Field name	Definition	Size	Data type	Format	M/O	Notes
Message function	Code to indicate what action to take with this HE input event record.	2	char	AN	M	All event records should initially be sent as A1. If warning messages are returned then the event may be resubmitted as A2. The A2 record cannot be used to override error messages. D1 records may contain only key fields and control information. No mandatory field checking will be done for other fields in D1 event records. Refer to Section 3.3.2 Event detail records.
Domicile code	Statistics NZ Health Domicile Code representing a person's usual residential address. Also used for facility addresses. Domicile code should reflect the person's residential address at the Event start datetime. Exceptions to this are people in aged residential and long-term care, hospice, prison, post-secondary students for example.	4	char	XXXX	M	Must be a valid code in the Domicile Code Table. Where the date portion of Event end datetime is: - before 1 July 1998, the 1991 codes apply - between 1 July 1998 and 30 June 2003, the 1996 codes apply - between 1 July 2003 and 30 June 2008, the 2001 codes apply - between 1 July 2008 and 30 June 2015, the 2006 codes apply - on or after 1 July 2015, the 2013 codes apply. 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. 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.

Field name	Definition	Size	Data type	Format	M/O	Notes
Sex	The person's biological sex.	1	char	A	M	Must be a valid code in the Gender (sex) code table. Generates warning if Sex code is 'U' (unknown). Must be consistent with the diagnosis and procedure codes for the record to be loaded in the NMDS. Otherwise results in the event record rejected with a warning message.
Date of birth	The date on which the person was born.	8	char	CCYYMMDD	M	Must be on or before the date portion of Event start datetime and the date of load. Must equal the date portion of Event start datetime if Birth event (Event type 'BT'). Used to calculate age (normally using the date portion of Event end datetime). Must be consistent with the diagnosis and procedure codes for the record to be loaded in the NMDS. Otherwise results in the event record rejected with a warning message. Partial dates allowed.
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.

Field name	Definition	Size	Data type	Format	M/O	Notes
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 (New Zealand citizen or classified as 'ordinarily resident in New Zealand'). 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 healthcare facility.
Health specialty code	A classification describing the health specialty or service to which a healthcare user has been assigned and 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 ie, the date portion of Event end datetime must be within the range of the Health specialty code start and end date. For event type IM (psychiatric inpatient) 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.
Admission type code	A code used to describe the type of admission for a hospital healthcare 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 event records (Event type 'IM'). Mandatory for all other event types (eg, IP, BT).

Field name	Definition	Size	Data type	Format	M/O	Notes
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 event records 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 event records (Event type 'IM'). Mandatory for all other event types. Paired field with Event end type code. Partial dates not allowed. Refer to Sections 5.2.2 Dates, partial dates and datetimes and 12.2 Event End Datetime (Discharge)
Country of birth code	A 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 The country of birth codes will no longer be reported to the NMDS for event records with an end date on or after 1 July 2018.
Occupation code	The current occupation of a healthcare user, classified according to the Statistics NZ Standard Classification of Occupations (NZSCO90).	6	char	AAAAAA	O	Must be a valid code in the Occupation code table. The Statistics New Zealand Standard Classification of Occupations (NZCO95) is valid for health event records beginning up until 30 June 2015. The Australian and New Zealand Standard Classification of Occupations, 2013, Version 1.2 is valid for health event records beginning with effect from 1 July 2015. 0111 – 999999

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 use. It may be used to supply a description of the healthcare users occupation for all event records at the discretion of the provider.
Birth location	The location of the birth delivery of a neonate.	1	char	N	O	Mandatory for birth event records (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.
Birth weight	Weight of neonate at time of birth, in grams.	4	char	NNNN	O	Mandatory for birth event records (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 event records (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)

Field name	Definition	Size	Data type	Format	M/O	Notes
Birth status	Field which records a livebirth.	1	char	A	O	Mandatory for birth event records (Event type 'BT'). Must not be supplied for other event types. L Liveborn Information about late fetal deaths (stillbirths) is obtained from death registration records and are reported in the Mortality Collection. Therefore, providers must only report information to NMDS about livebirths that occur in their facility.
Age of mother	Age of mother in years at time of birth of neonate.	2	char	NN	O	Mandatory for birth event records (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. If after three days for non-psychiatric hospital inpatients or 14 days for informal mental health inpatients the patient has not returned to care, discharge is effective on the date of leaving hospital. These days should not be recorded as Event leave days in this case.	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. Leave days must be reported if there are leave days for an event. If there are no leave days there is no need to report.
Event supplementary information	Enables extra information concerning an event to be recorded in a free-text format.	90	varchar	Any	O	Free text enclosed in quotation marks (" ").

Field name	Definition	Size	Data type	Format	M/O	Notes
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 get health event (GHE) database.	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 • 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.
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	Must be a valid code in the Purchaser code table. 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. If the Principal health service purchaser code is 'A0' (ACC) the Accident Flag should be set to 'Y' and the ACC claim number field should not be blank.

Field name	Definition	Size	Data type	Format	M/O	Notes
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	Must be a valid code in the Agency code table. The reported Agency must be the organisation that provided or was contracted to provide the service or treatment to the healthcare user. New Agency codes are assigned by National Collections on request.
Weight on admission	The weight in grams at time of admission for infants less than 29 days old.	4	integer	NNNN	O	Mandatory for all event records including birth event records (Event type ‘BT’) if age at admission is less than 29 days. 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. Event type ‘ID’ was only effective for event records ending on or before 30 June 2013. Optional for all infants between 29 and 365 days old (inclusive) who weigh less than 2500g. 0001 – 9999 (default is ‘9000’). Event 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.
Accident flag	A flag that denotes whether a healthcare user is receiving care or treatment as the result of an accident.	1	char	A	O	If the Principal health service purchaser code is 'A0' (ACC) 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, ACC46 or AITC claim number for the event.	12	char	Any	O	Should not be blank where the Accident flag = ‘Y’. Accident event records where the ACC claim number is blank will only be accepted on confirmation (Message function ‘A2’).

Field name	Definition	Size	Data type	Format	M/O	Notes
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. Generate warning if: - not present when a Mechanical Ventilation procedure is present (ie, ACHI 11th or 12th Edition Clinical Code = 1388200 or 1388201 or 1388202 (Clinical Code Type = 'O'). - greater than the difference (calculated in hours) between the date portions of Event start datetime and Event end datetime. The 11th or 12th Edition ACHI code 9221100 must be assigned if and only if - the submitted clinical code system is 15 or 16 and - the HSC is one of M14, P41, P42, P43, P61, P71 and - one of 1388200, 1388201, 1388202 is assigned and - one of 9220900, 9220901, 9220902 is assigned and - the sum of the NIV and CVS hours ≥ 96 and - the patient/s age on the date of admission must be <= 28 days.
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 2500g) 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 event records where the date portion of Event end datetime is on or after 1 July 2009.** **CPAP is noninvasive (NIV) ventilation and must be reported in the Total noninvasive (NIV) ventilation hours field instead**. The information provided below is for historical reporting. 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 2500g based on the date portion of Event end datetime.

Field name	Definition	Size	Data type	Format	M/O	Notes
						Generate warning if: - more than 100 or - more than the difference (calculated in hours) between the date portions of Event start datetime and Event end datetime. Where the date portion of Event end datetime is before 1 July 2008 Generate warning if present and a CPAP procedure is not present. Generate warning if not present when a CPAP procedure is present, unless: - 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 2500g. Generate warning if present and Health specialty code not in the P30 and P40 ranges. Where the date portion of Event end datetime is on or after 1 July 2008 Generate error if present and a NIV procedure is not present. Generate warning if present and Health specialty code is not P61, P71 or in the P40 range. Generate an error if CPAP hours is submitted with event records ending on or after 1 July 2009 if the file version is 013.0.
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 an event record within the provider's system, independent of any business key. This field is stored and included in all acknowledgement and notification files.

Field name	Definition	Size	Data type	Format	M/O	Notes
File control reference number	Batch number.	14	char	Numeric	O	File number. Must be unique.
Client system identifier	An identifier for the corresponding event record stored within the health provider's system.	14	varchar	Any	O	May be used to store any event record level identification that a provider's system may require in addition to the PMS unique identifier.
Mother's NHI	For birth events, the NHI number assigned to the neonates birth mother.	7	char	AAANNN	O	Mandatory for Birth event records (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. Reporting ICU hours is mandatory for all healthcare users who have had a period of stay in ICU. Round incomplete hours up to the next hour. If the healthcare user has more than one period in ICU during an episode of care, 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 or reported.
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 health facility (Admission Source = T). Must be a valid facility code and must not be the same facility as the event facility code. Cannot be the same as the submitting facility. For a transfer from an overseas facility, use '9990'.

Field name	Definition	Size	Data type	Format	M/O	Notes
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 health facility (Event End Type = DA, DP, DT, EA, ET). Must be a valid facility code and must not be the same facility as the event 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 noninvasive ventilation (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, ACHI 11th or 12th Edition Clinical Code = 9220900 or 9220901 or 9220902 or 12th Edition code 1220400 (Clinical Code Type = 'O'), and/or - present and noninvasive procedure is not present (ie, ACHI 11th or 12th Edition Clinical Code = 9220900 or 9220901 or 9220902 or 12th Edition code 1220400 (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. The 11th or 12th Edition ACHI code 9221100 must be assigned if and only if - the submitted clinical code system is 15 or 16 and - the HSC is one of M14, P41, P42, P43, P61, P71 and - one of 1388200, 1388201, 1388202 is assigned and - one of 9220900, 9220901, 9220902 is assigned and - the sum of the NIV and CVS hours ≥ 96 and - the patient's age on the date of admission is <=28 days.
Funding agency code	The agency of the principal purchaser.	4	char	XXXX	cM	Funding agency has been reported from input file V015.0. Due to the disestablishment of District Health Boards from 1 July 2022 the term 'Funding' is no longer relevant for Districts. Prior to 1 July 2022 the Funding agency field was used for IDF funding.

Field name	Definition	Size	Data type	Format	M/O	Notes
						From 1 July 2022 Districts should continue to report Funding agency as the District of domicile the healthcare user is domiciled too. Where a District subcontracts to a private healthcare facility the Funding agency reported should be the District agency and the agency and facility reported will be the private healthcare facility providing the services and/or treatment.

6.3. 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 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 current format of the NHI number is a unique 7-character number (3 alpha, 3 numeric and one numeric check digit). A new format (3 alpha, 2 numeric, 1 alpha and one alpha check digit) will be issued when the current NHI numbers are exhausted. 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. Neonates born before the mother's admission to hospital or transferred from the hospital of birth are recorded as 'IP'. Event type 'ID' is retired and was only effective for event records ending on or before 30 June 2013. 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	A code that uniquely identifies a healthcare facility. 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.	4	char	XXXX	M	The facility that provided the service or treatment. Must be a valid code in the Facility code table.
Event local identifier	Local system generated number to distinguish two or more event records of the same type occurring on the same day at the same facility.	1	char	N	M	The NHI number, Event type code, Event start datetime, Facility code and Event local identifier form a unique key for checking duplicates, overlapping event records on insert or checking for existence on delete. Use 9 first then '8,7,6…1'.
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 record.
Clinical coding system ID	A code identifying the clinical coding system used for each ICD-10-AM/ACHI classification edition.	2	char	NN	M	Must be a valid code in the Clinical coding system code table. Must form part of a valid combination of Clinical code, Clinical code type, and Clinical coding system ID.
Diagnosis type	A code that groups clinical codes or indicates the priority of a diagnosis.	1	char	A	M	Must be a valid code in the Diagnosis type code table. There must be one and only one Diagnosis type 'A' for each event record. 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
Clinical code type	A code denoting which section of the clinical code table the clinical code falls within.	1	char	A	M	Must be a valid code in the Clinical code type code table. Must form part of a valid combination of Clinical code, Clinical code type, and Clinical coding system ID.

Field name	Definition	Size	Data type	Format	M/O	Notes
Clinical code	A code used to classify the clinical concept of a condition, disease, injury, external cause or procedure.	8	varchar	See Collection method	M	From 1 July 2023 ICD-10-AM/ACHI 12th Edition clinical codes should be supplied. Must be a valid code in the Clinical code table for the ICD-10-AM/ACHI classification edition. Earlier edition codes, such as ICD-10-AM/ACHI 11th Edition are still acceptable where a provider is not able to upgrade the classification by the specified date. Must form part of a valid combination of Clinical code, Clinical code type, and Clinical coding system ID. 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 edit flags held against each Clinical code on the Clinical code table.
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.	200	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	Mandatory if diagnosis type is 'O' unless Operation flag in Clinical code table is set to 'Y'. It is preferred that operation/procedure dates are reported for all codes with diagnosis type is ‘O’. Must be on or before the date of load, the date portion of Event end datetime, and the Psychiatric leave end date. Must be on or after the date portion of Event start datetime, the Date of birth. Only permitted if the diagnosis type is 'O'.

Field name	Definition	Size	Data type	Format	M/O	Notes
External cause date of occurrence	The date when an accident, poisoning, adverse effect or complication of surgical or medical care occurred.	8	char	CCYYMMDD	O	Must be on or before the date of load, the date portion of Event end datetime, and the Psychiatric leave end date. Must be on or after the Date of birth. Only permitted if Diagnosis type is 'E'. Required for ICD-10-AM 12th Edition external cause codes in the range U50-U73, V0000-Y899, Y92, but optional if Operation flag is set to 'Y'. ICD-10-AM codes U50-U73 Activity and Y92 Place of occurrence have the Operation flag set to 'Y' and reporting external cause dates for these codes is optional. However, it is recommended dates are reported for these codes. Partial dates allowed.
Condition Onset Flag	A code identifying hospital acquired conditions.	1	char	X	cM	Mandatory for specific ICD-10-AM codes. Valid values are 1, 2 and 9. See Section 11.1 Condition Onset Flag.

6.4. Input File Psychiatric Data (HC) Record

The HC record is mandatory for IM event records and optional for IP event records. 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 IP event records as well as IM event records.

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 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 current format of the NHI number is a unique 7-character number (3 alpha, 3 numeric and one numeric check digit). A new format (3 alpha, 2 numeric, 1 alpha and one alpha check digit) will be issued when the current NHI numbers are exhausted. 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	A code that uniquely identifies a healthcare facility. 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.	4	char	XXXX	M	The facility that provided the service or treatment. Must be a valid code in the Facility code table.
Event local identifier	Local system-generated number to distinguish two or more event records of the same type occurring on the same day at the same facility.	1	char	N	M	The NHI number, Event type code, Event start datetime, Facility code and Event local identifier form a unique key for checking duplicates, overlapping event records on insert or checking for existence on delete. Use 9 first then '8,7,6…1'.
Legal status date	The date from which a healthcare user's legal status applies.	8	char	CCYYMMDD	M	Partial dates not allowed. At least one mandatory for psychiatric inpatient event records (Event type 'IM'). Must be after the Date of birth. Must be on or before the date portion of Event end datetime. May be before the date portion of Event start datetime. Must be on or after the Legal status start date for the legal status code provided. Must be on or before the Legal status end date for the legal status code provided.

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 event records (Event type 'IM'). Left justified, ie, the second character can be a space. Code must be present in the Legal status code table.

7. Acknowledgement File (.ndr)

7.1. 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 event 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
NCR 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 event 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

7.2. Acknowledgement File Transaction (AK) Record

Contains the result of the load process for each event record in the input file.

Refer to Section 3.7.1 Acknowledgement file (.ndr).

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	AAANNNNA	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 five fields are repeated for each error found in an event record.

8. Costweight File (.ndw)

The costweight file is provided with the acknowledgement file for each input file loaded.

8.1. 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 National Collections
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
National Collections Processing environment	4	char	AAAA	M	'PROD' or 'COMP'

8.2. 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
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 event end 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 AR-DRG version used
Release number	4	char	N.NA	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 National Collections from the event start datetime and event end datetime and leave day provided in the health event record
DRG code	4	char	A/N	M	DRG value for the health event Left-aligned, zero-padded
NZ DRG code	4	char	A/N	M	DRG value as reported in DRG code or modified following WIESNZ methodology Left-aligned, zero-padded
Costweight version	2	char	NN	M	The WIESNZ version used for the FY
Patient Clinical Complexity Level (PCCL)	1	char	N	M	Patient Clinical Complexity Level as output from the grouper software
Total hours on mechanical ventilation	5	char	NNNNN	M	Copied from health event record
WIESNZ	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 NMDS as per the WIESNZ methodology
Episode Clinical Complexity Score (ECCS)	10	Char	X(10)	M	Episode Clinical Complexity Score is an output from the AR-DRG v10.0 grouper software The ECCS value is a rounded score to the nearest 0.5 and up to 32

9. Error File (.err)

An error file is generated only if the input 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 event records in the input file that have failed the pre-processing checks.

9.1. 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 event records received Includes the header record
Date sent	8	char	CCYYMMDD	M	Date in ISO 8601 format to day level Partial dates not allowed
National Collections Processing environment	4	char	AAAA	M	'PROD' or 'COMP'

9.2. File Failure Record

Contains the error for each failed event record in the input file.

Errors and warnings are listed in Section 10.2 List of NMDS Errors and Warning Messages.

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

10. Error and Warning Messages

The table below describes errors and warnings that can be reported from the input file loading.

The following information is given for each code:

10.1. Fields

Field	Definition
Error/warning number	This number consists of three parts: • Application_code: A three-letter code assigned by National Collections to identify each software application (eg, NMS = NMDS). For the standard error message that applies to more than one software application, the application code is NZS (= National Collections). • Error_ID: This is a unique number (eg, 1003). • Error_type: Severity of message (E = error, W = warning).
Error/warning type description	A detailed description of the error/warning and suggestions for why it may have arisen.
Error/warning 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 (e.g., the value '%2' is not a valid value for the field '%1'). Where the error/warning message is listed as 'to be assigned', this number is not currently used.

10.2. List of NMDS Errors and Warning Messages

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

Field name	Error type description	Error Message
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 event 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 was submitted. 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 is incorrect. The valid values are A1 (Add), A2 (Add ignoring warnings) and D1 (Delete).	This value '%1' is not a valid transaction type
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
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 input file. 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 National Collections. In this case the agency referred to in the heading is noted as inactive. Check that the agency abbreviation is correct, then contact Data Management National Collections 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 event record already loaded in NMDS.	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

Field name	Error type description	Error Message
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
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 input file 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 principal health purchaser code and the ACC claim 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

Field name	Error type description	Error Message
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	The clinical code %1 cannot be assigned to this event because of the condition in %2.	%1cannot be used because %2
NMS3009 E	The clinical code in %1 must be assigned for this event.	%1 must be assigned for this event
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 event end date minus event start 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.	
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 healthcare user or for another that has been merged with this healthcare user.	Event cannot overlap existing event
NMS3026 W	Some of the business key fields for this event record match with another event record in the NMDS. This indicates that a similar event for this patient has already been reported. The other event may be for this healthcare user or for another that has been merged with this healthcare user.	Warning: similar event already exists

Field name	Error type description	Error Message
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 A2 in the message function field.	Diagnosis %1 is not normal for sex %2
NMS3033 W	The sex for this healthcare user has been reported as unknown. Please report the biological 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 healthcare user 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 event record has been submitted twice within the input 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

Field name	Error type description	Error Message
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.	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 neonates aged less than 29 days. This event record is for an older healthcare user and includes a value in the CPAP field.	%1 only required for perinatal conditions
NMS3045 W	Mental health 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 Principal health purchaser code or an Admission type code has been used on an event record where the date in Event end date is after the end date for the code provided.	%1 %2 is retired from use
NMS3047 E	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. An example of this is where a Legal Status code has been used on an event record where the supplied Legal Status date is prior to the Event start date for the code provided.	%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
NZS3049 E	The time in this field is not in the correct format. It needs to be HHMM.	Invalid time in field %1
NZS3050 E	File version 15 or greater should be used to submit event with condition onset flag.	Diagnoses for this facility must be submitted with a condition onset flag via File Version 15 or greater
NMS3051 W	Typically, the condition considered to be the principal diagnosis should have arisen before the hospital admission began.	The principal diagnosis should have a condition onset flag of 2 Warning message retired from use 1 July 2013
NMS3053 E	This error arises when the 'facility transfer from' or 'facility transfer to' code is the same as the facility code reported for the event. Implemented 1 July 2024 but applicable for all events reported.	Value in %1 is the same as the value in facility code

11. Business Rules

This section provides additional business rules for reporting NMDS event records.

11.1. Condition Onset Flag

Condition Onset Flag is reported in the file version 15.0

Each facility has a Condition Onset Flag implementation date.

For an event reported with an **event end date** less than the Condition Onset Flag implementation date the Condition Onset Flag value may be 1, 2 or 9. This will allow event records prior to implementation to be sent/resent either with the appropriate value or as unreported.

For an event with an **event end date** greater than or equal to the Condition Onset Flag implementation date the Condition Onset Flag value may be 1 or 2.

Where the event end date is not submitted the event start date will be used for the validation.

Inpatient mental health event records without event end dates do not undergo Condition Onset Flag validation.

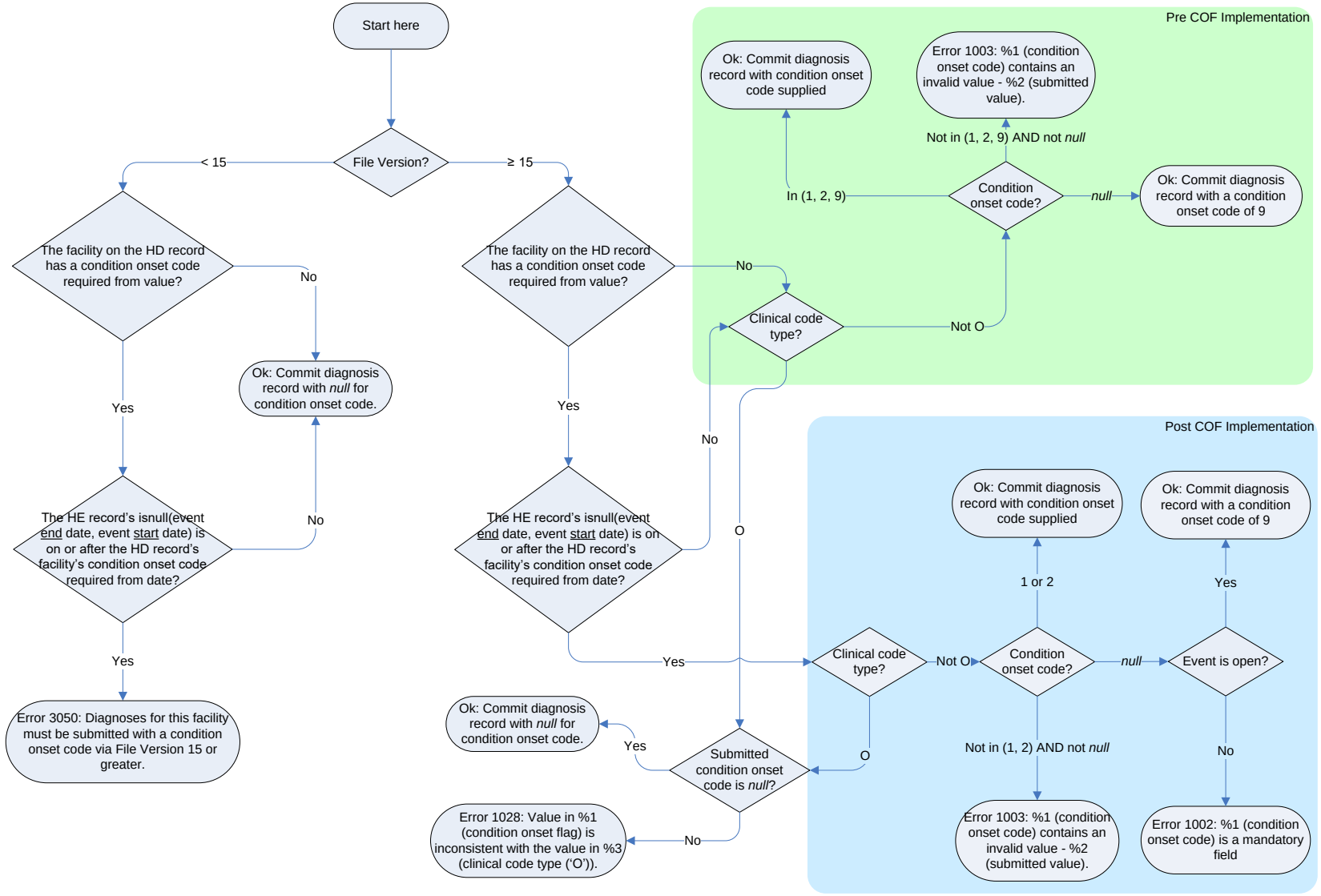
See the Figure 1 on the next page for the validation process to which condition onset flag values are subjected.

The Condition Onset Flag implementation date was 1 July 2012. Facilities were required to notify National Collections of the date from which they could supply Condition Onset Flag values.

All event records loaded in the NMDS up to 1 July 2012 have the Condition Onset Flag set to null.

On and after 1 July 2012 any event records loaded in the file version 14.0 had the Condition Onset Flag set to null.

Figure 1 – Condition Onset Flag Validation Process



11.2. Funding Agency

Funding Agency rules are as follows.

Due to the disestablishment of District Health Boards (DHBs) from 1 July 2022 the term 'Funding' is no longer relevant for Districts, as the field 'Funding Agency' was used for IDF funding.

Districts should continue to report Funding agency as the District the healthcare user is domiciled too.

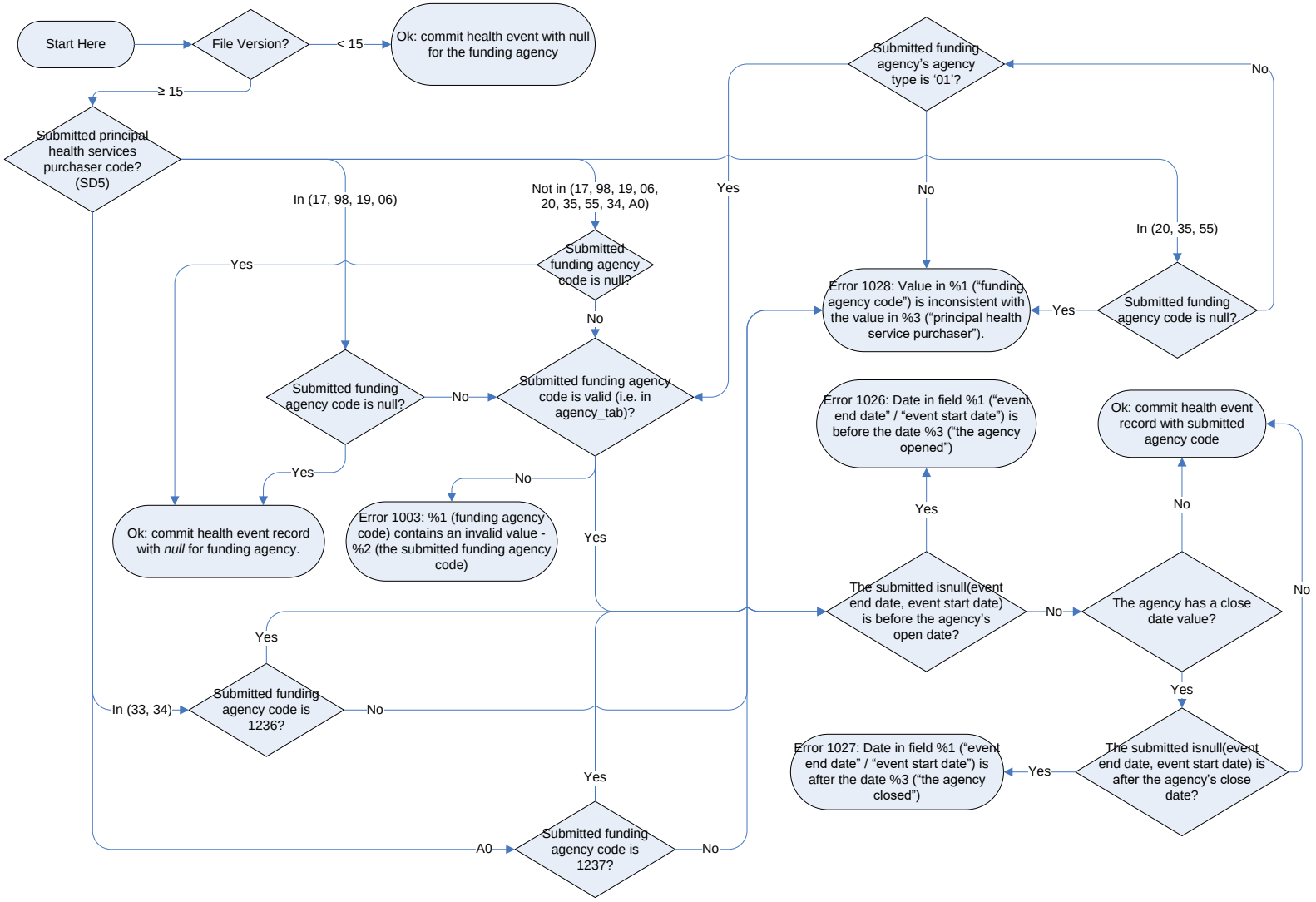
Where a District subcontracts to a private healthcare provider the Funding agency reported should be the District (agency code) entering into contracting arrangements with the private healthcare provider and the agency and facility reported will be the private healthcare agency and facility.

Purchaser Code	17 Accredited employer	20 Overseas eligible	33 MOH* Screening Pilot or Programme	34 MOH* funded purchase	35 District funded purchase	55 Due to strike	98 Other/not specified (Mixed funding)	19 Overseas chargeable	6 Privately funded	A0 ACC - direct purchase
The submitted funding agency code must be valid or may be null	Y						Y	Y	Y	
The submitted agency code must be valid and have an agency type of 01		Y			Y	Y				
The submitted Funding Agency Code must be 1236 Ministry of Health*			Y	Y						
The submitted Funding Agency Code must be 1237 ACC										Y

*The reference to Ministry of Health (MOH) has not been updated to Health NZ because the descriptions in the National Collections database tables have not yet been updated.

See Figure 2 on the next page for validation process to which funding agency values are subjected.

Figure 2 – Funding Agency Validation Process



11.3. Duplicate and Overlapping Events

The table below contains the rules for checking for duplicate or overlapping event records.

Check	Rule	Error Message
Duplicate 1	Events with the same business key may not be reported more than once.	[NMS3025E] Event cannot overlap existing event – An event already exists for these keys
Duplicate 2	Events with the same business key may not be reported more than once. Note that in this check, the time components of the events' start dates are ignored.	[NMS3025E] Event cannot overlap existing event – An event already exists for these keys(with different timestamp)
Duplicate 3	A patient may not have two multiday events of the same type for the same period at a different facility.	[NMS3025E] Event cannot overlap existing event – Event for same period and event type, but different facilities
Duplicate 4	A patient may not have two multiday events of different types for the same period at the same facility.	[NMS3025E] Event cannot overlap existing event – Event for same period and facility, but different event types
Duplicate 5	A patient is unlikely to have two single day events of different types on the same day at the same facility with different event local identifiers.	[NMDS3026W] Warning: similar event already exists – Event for same period and facility, but different event types with 0-day length of stay
Duplicate 6	A patient may not have two single day events of different types on the same day at the same facility with the same event local identifiers.	[NMDS3025E] Event cannot overlap existing event – Event for same period and facility, but different event types with 0-day length of stay
Duplicate 7	A patient should not have two single day events of the same type on the same day at the same facility.	[NMS3026W] Warning: similar event already exists – Event for same period, facility and event type, with 0-day length of stay
Duplicate 8	A patient should not have two single day IM events on the same day at the same facility.	[NMS3026W] Warning: similar event already exists – Event for same period, facility and event type, with 0-day length of stay
Overlap 9	A patient may not have two multiday events of the same type beginning on the same day at the same facility.	[NMS3025E] Event cannot overlap existing event – Event with same start date at same facility with same event_type
Overlap 10	A patient may not have two overlapping multiday non-IM events at the same facility.	[NMS3025E] Event cannot overlap existing event – Event with overlapping start date at same facility and same event type
Overlap 11	A patient may not have two multiday non-IM events of different types on the same day at the same facility.	[NMS3025E] Event cannot overlap existing event – Event with same start date at same facility but different event type
Overlap 12	A patient may not have two multiday non-IM events of the same type beginning on the same day at different facilities.	[NMS3025E] Event cannot overlap existing event – Event with same start date at different facility and same event type
Overlap 13	A patient may not have two overlapping multiday non-IM events at different facilities.	[NMS3025E] Event cannot overlap existing event – Event overlaps with another multiday non-IM event at a different facility
Duplicate 14	A patient may not have more than one BT events.	[NMDS3025E] Event cannot overlap existing event – There is already a birth event recorded for this patient

12. Guidelines for Event Start/End Datetime

This section provides additional guidelines for reporting event start and event end datetime.

12.1. Event Start Datetime (Admission)

For **acute events** meeting the three hour admission rule the event start datetime is when the patient is first seen by a clinician, nurse (excluding triage nurse), nurse practitioner or other healthcare professional in the Emergency Department, Acute Assessment Unit, Admission Planning unit or the like. When determining the event start datetime, exclude waiting time in a waiting room and triage time. Patients who die in ED are admitted regardless of event duration.

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

For **non-acute events** – (ie, elective or arranged patients, sameday or multiday inpatient), the event start datetime will be when the patient physically arrives in the ward/unit. This will not include the time spent in a waiting area before any nursing/clinical care starts.

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

For **internal and external transfers** – the event start datetime is the datetime the patient physically arrives in the new healthcare setting/facility.

12.2. Event End Datetime (Discharge)

The event end datetime is the datetime the patient physically leaves the healthcare facility/setting or the process of documentation that changes the status or service provided to a patient during an admitted episode of care (eg, statistical discharge).

The healthcare setting includes 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 discharge 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 datetime, as they are no longer under the direct responsibility of any clinical staff.

The event end datetime for a discharge/transfer to another service within the same facility (DW) or discharge/transfer to another facility (DA, DT) will be when the patient leaves the healthcare facility/setting. There will be a gap between these events which is the time taken to transfer. It is not expected that these events are contiguous. This also applies to patient retrievals where a retrieval team is sent to another hospital to retrieve and transport a patient back to their hospital.

There must be consistency between the event end type and the event end datetime. The event end types are:

DA Discharge to an acute facility
DC Psychiatric patient discharged to community care
DD Died
DF Statistical Discharge for change in funder
DI Self Discharge from hospital – Indemnity signed
DL Committed psychiatric patient discharged to leave for more than 14 days
DN Psychiatric remand patient discharged without committal
DO Discharge of a patient for organ donation
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 other service within the same facility
EA Discharge from Emergency department acute facility to another acute healthcare facility
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 signed
ET Discharge from Emergency department acute facility to another healthcare facility

Event end datetime for the following event end types:

DD Died
ED Died while still in Emergency department acute facility
The event end datetime for an event with DD or ED event end type is the datetime of death from the hospital record of the death certificate or the date of completion of organ procurement.

DO Discharge of a patient for organ donation
The event end datetime for a patient statistically discharged for organ procurement (donation) is the datetime the patient is declared brain dead from the hospital record of the death certificate. All events with a DO event end type will be followed with another event (admission) for the organ procurement even if the organ procurement is unsuccessful. The subsequent organ procurement event (admission) will have an event end type of DD and the event end datetime is to be when the organ procurement is complete.

DF Statistical Discharge for change in funder
Change in funder may occur when an arranged or elective admission is funded by a private insurer (06) or ACC (A0), and a complication of the surgical/medical care arises, and the patient requires further hospitalisation beyond the care required for the private insurer or ACC funded event. The event end datetime for the private or ACC funded event is what the clinician reports as the end of the required hospitalisation for the private or ACC funded episode of care.

DW Discharge to other service within same facility
The event end datetime for a patient statistically discharged between disability and health of older people, disability support services or mental health services and medical, surgical, maternity or the emergency department is when the patient transfers into the care of one of these health specialities.

12.3. NMDS Event End Types Mapped to Separation Modes

The NMDS event end types are mapped to separation modes, which are required for some AR-DRGs. There is no NMDS event end type that maps to separation (discharge) mode '2 or 02 Discharge/transfer to a residential ageing service'.

Current NMDS Event End Types	Separation (Discharge) Modes
DA – Discharge to an acute facility	**01** – Discharge/transfer to an acute hospital
N/A	**02** – Discharge/transfer to a residential ageing service
DC – Psychiatric patient discharged to community care	**09** – Home/other
DD – Died	**08** – Died
DF – Statistical discharge for change in funder	**05** – Statistical separation – type change
DI – Self-discharge from hospital, indemnity signed	**06** – Left against medical advice
DL – Committed psychiatric patient discharged to leave for more than 14 days	**09** – Home/other
DN – Psychiatric remand patient discharged without committal	**09** – Home/other
DO – Discharge of a patient for organ donation	**08** – Died
DP – Psychiatric patient transferred for further psychiatric care	**03** – Discharge/transfer to a psychiatric hospital
DR – Ended routinely	**09** – Home/other
DS – Self-discharge from hospital (no indemnity)	**06** – Left against medical advice
DT – Discharge of patient to another healthcare facility	**04** – Discharge/transfer to other health care accommodation
DW – Discharge to other service within same facility.	**05** – Statistical separation - type change
EA – Discharge from emergency department acute facility to another acute healthcare facility	**01** – Discharge/transfer to an acute hospital
ED – Died while still in emergency department acute facility	**08** – Died
EI – Self discharge from treatment in an emergency department acute facility with indemnity signed	**06** – Left against medical advice
ER – Routine discharge from an emergency department acute facility	**09** – Home/other
ES – Self discharge from treatment in an emergency department acute facility without indemnity	**06** – Left against medical advice
ET – Discharge from emergency department acute facility to another healthcare facility	**04** – Discharge/transfer to other health care accommodation

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	External cause of injury (E-code)	N	O
BT	Birth event	O	Operation / Procedure	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	External cause of injury (E-code)	N	O
IP	Non-psychiatric inpatient event	O	Operation / Procedure	N	O
IP	Non-psychiatric inpatient event	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	External cause of injury (E-code)	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

Appendix B: 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	ICD-9-CM	A	Diagnosis	A	Principal diagnosis	00100	79999
02	ICD-9-CM	A	Diagnosis	B	Other relevant diagnosis	00100	79999
02	ICD-9-CM	B	Injury	A	Principal diagnosis	80000	99999
02	ICD-9-CM	B	Injury	B	Other relevant diagnosis	80000	99999
02	ICD-9-CM	E	External cause of injury (E-code)	E	External cause of injury	80000	99999
02	ICD-9-CM	M	Morphology (pathology)	M	Morphology (pathology)	8000	99999
02	ICD-9-CM	O	Operation/Procedure	O	Operation/Procedure	01000	99999
02	ICD-9-CM	V	Supplementary classification (V-code)	A	Principal diagnosis	V1000	V8299
02	ICD-9-CM	V	Supplementary classification (V-code)	B	Other relevant diagnosis	V1000	V8299
06	ICD-9-CM-A	A	Diagnosis	A	Principal diagnosis	00100	79999
06	ICD-9-CM-A	A	Diagnosis	B	Other relevant diagnosis	00100	79999
06	ICD-9-CM-A	B	Injury	A	Principal diagnosis	80000	99999
06	ICD-9-CM-A	B	Injury	B	Other relevant diagnosis	80000	99999
06	ICD-9-CM-A	E	External cause of injury	E	External cause of injury	80000	99999
06	ICD-9-CM-A	M	Morphology (pathology)	M	Morphology (pathology)	80000	99999
06	ICD-9-CM-A	O	Operation/Procedure	O	Operation/Procedure	01000	99999
06	ICD-9-CM-A	V	Supplementary classification (V-code)	A	Principal diagnosis	V1000	V8299
06	ICD-9-CM-A	V	Supplementary classification (V-code)	B	Other relevant diagnosis	V1000	V8299
10	ICD-10-AM/MBS-E First Edition	A	Diagnosis	A	Principal diagnosis	A000	R99*
10	ICD-10-AM/MBS-E First Edition	A	Diagnosis	B	Other relevant diagnosis	A000	R99
10	ICD-10-AM/MBS-E First Edition	B	Injury	A	Principal diagnosis	S0000	T889*
10	ICD-10-AM/MBS-E First Edition	B	Injury	B	Other relevant diagnosis	S0000	T983
10	ICD-10-AM/MBS-E First Edition	E	External cause of injury	E	External cause of injury (codes include place of occurrence and activity)	V0100	Y98
10	ICD-10-AM/MBS-E First Edition	M	Morphology (pathology)	M	Pathological nature of growth	8000	9990
10	ICD-10-AM/MBS-E First Edition	O	Operation/Procedure	O	Operation/Procedure	1080100	9798600
10	ICD-10-AM/MBS-E First Edition	V	Supplementary classification (V-code)	A	Principal diagnosis	Z000	Z999*
10	ICD-10-AM/MBS-E First Edition	V	Supplementary classification (V-code)	B	Other relevant diagnosis	Z000	Z999

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
11	ICD-10-AM/ACHI Second Edition	A	Diagnosis	A	Principal diagnosis	A000	R99*
11	ICD-10-AM/ACHI Second Edition	A	Diagnosis	B	Other relevant diagnosis	A000	R99
11	ICD-10-AM/ACHI Second Edition	B	Injury	A	Principal diagnosis	S0000	T889*
11	ICD-10-AM/ACHI Second Edition	B	Injury	B	Other relevant diagnosis	S0000	T983
11	ICD-10-AM/ACHI Second Edition	E	External cause of injury	E	External cause of injury Place or occurrence and Activity Nosocomial and other related conditions	V010 Y920 Y95	Y919 Y939 Y98
11	ICD-10-AM/ACHI Second Edition	M	Morphology (pathology)	M	Morphology (pathology)	8000	9989
11	ICD-10-AM/ACHI Second Edition	O	Operation/Procedure	O	Operation/Procedure	1130000	9798600
11	ICD-10-AM/ACHI Second Edition	V	Supplementary classification (V-code)	A	Principal diagnosis	Z000	Z999*
11	ICD-10-AM/ACHI Second Edition	V	Supplementary classification (V-code)	B	Other relevant diagnosis	Z000	Z999
12	ICD-10-AM/ACHI Third Edition	A	Diagnosis	A	Principal diagnosis	A000	R99*
12	ICD-10-AM/ACHI Third Edition	A	Diagnosis	B	Other relevant diagnosis	A000	R99
12	ICD-10-AM/ACHI Third Edition	B	Injury	A	Principal diagnosis	S0000	T889*
12	ICD-10-AM/ACHI Third Edition	B	Injury	B	Other relevant diagnosis	S0000	T983
12	ICD-10-AM/ACHI Third Edition	E	External cause of injury	E	Activity External cause of injury Place or occurrence Nosocomial and other related conditions	U5000 V010 Y9200 Y95	U739 Y919 Y929 Y98
12	ICD-10-AM/ACHI Third Edition	M	Morphology (pathology)	M	Morphology (pathology)	8000	9989
12	ICD-10-AM/ACHI Third Edition	O	Operation/Procedure	O	Operation/Procedure	1100000	9798600
12	ICD-10-AM/ACHI Third Edition	V	Supplementary classification (V-code)	A	Principal diagnosis	Z000	Z999*
12	ICD-10-AM/ACHI Third Edition	V	Supplementary classification (V-code)	B	Other relevant diagnosis	Z000	Z999
13	ICD-10-AM/ACHI Sixth Edition	A	Diagnosis	A	Principal diagnosis	A000	U049*
13	ICD-10-AM/ACHI Sixth Edition	A	Diagnosis	B	Other relevant diagnosis	A000	U049
13	ICD-10-AM/ACHI Sixth Edition	B	Injury	A	Principal diagnosis	S0000	T889*
13	ICD-10-AM/ACHI Sixth Edition	B	Injury	B	Other relevant diagnosis	S0000	T983
13	ICD-10-AM/ACHI Sixth Edition	E	External cause of injury	E	Activity External cause of injury Place or occurrence Nosocomial and other related conditions	U5000 V0000 Y9200 Y95	U739 Y919 Y929 Y98
13	ICD-10-AM/ACHI Sixth Edition	M	Morphology (pathology)	M	Morphology (pathology)	8000	9989
13	ICD-10-AM/ACHI Sixth Edition	O	Operation/Procedure	O	Operation/Procedure	1100000	9798600
13	ICD-10-AM/ACHI Sixth Edition	V	Supplementary classification (V-code)	A	Principal diagnosis	Z000	Z999
13	ICD-10-AM/ACHI Sixth Edition	V	Supplementary classification (V-code)	B	Other relevant diagnosis	Z000	Z999

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
14	ICD-10-AM/ACHI Eighth Edition	A	Diagnosis	A	Principal diagnosis	A000	U079*
14	ICD-10-AM/ACHI Eighth Edition	A	Diagnosis	B	Other relevant diagnosis	A000	U079
14	ICD-10-AM/ACHI Eighth Edition	B	Injury	A	Principal diagnosis	S0000	T889*
14	ICD-10-AM/ACHI Eighth Edition	B	Injury	B	Other relevant diagnosis	S0000	T983
14	ICD-10-AM/ACHI Eighth Edition	E	External cause of injury	E	Activity Healthcare associated infection External cause of injury Place or occurrence Nosocomial and other related conditions	U5000 U900 V0000 Y9200 Y95	U739 U900 Y919 Y929 Y98
14	ICD-10-AM/ACHI Eighth Edition	M	Morphology (pathology)	M	Morphology (pathology)	8000	9992
14	ICD-10-AM/ACHI Eighth Edition	O	Operation/Procedure	O	Operation/Procedure	1100000	9798600
14	ICD-10-AM/ACHI Eighth Edition	V	Supplementary classification (V-code)	A	Principal diagnosis	Z000	Z999*
14	ICD-10-AM/ACHI Eighth Edition	V	Supplementary classification (V-code)	B	Other relevant diagnosis	Z000	Z999
15	ICD-10-AM/ACHI Eleventh Edition	A	Diagnosis	A	Principal diagnosis	A000	U079*
15	ICD-10-AM/ACHI Eleventh Edition	A	Diagnosis	B	Other relevant diagnosis Provisional assignment of new codes Supplementary codes for chronic conditions Other codes for special purposes	A000 U000 U781 U91	R99 U079 U882 U92
15	ICD-10-AM/ACHI Eleventh Edition	B	Injury	A	Principal diagnosis	S0000	T889*
15	ICD-10-AM/ACHI Eleventh Edition	B	Injury	B	Other relevant diagnosis	S0000	T983
15	ICD-10-AM/ACHI Eleventh Edition	E	External cause of injury	E	Activity External cause of injury Place or occurrence Nosocomial and other related conditions	U5000 V0000 Y9200 Y95	U739 Y919 Y929 Y98
15	ICD-10-AM/ACHI Eleventh Edition	M	Morphology (pathology)	M	Morphology (pathology)	8000	9992
15	ICD-10-AM/ACHI Eleventh Edition	O	Operation/Procedure	O	Operation/Procedure	1100000	9798600
15	ICD-10-AM/ACHI Eleventh Edition	V	Supplementary classification (V-code)	A	Principal diagnosis	Z000	Z999*
15	ICD-10-AM/ACHI Eleventh Edition	V	Supplementary classification (V-code)	B	Other relevant diagnosis	Z000	Z999

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
16	ICD-10-AM/ACHI Twelfth Edition	A	Diagnosis	A	Principal diagnosis	A000	U079*
16	ICD-10-AM/ACHI Twelfth Edition	A	Diagnosis	B	Other relevant diagnosis Provisional assignment of new codes Provisional assignment of diseases Supplementary codes for chronic conditions Other codes for special purposes	A000 U000 U750 U781 U91	R99 U499 U779 U882 U93
16	ICD-10-AM/ACHI Twelfth Edition	B	Injury	A	Principal diagnosis	S0000	T889*
16	ICD-10-AM/ACHI Twelfth Edition	B	Injury	B	Other relevant diagnosis	S0000	T983
16	ICD-10-AM/ACHI Twelfth Edition	E	External cause of injury	E	Activity External cause of injury Place or occurrence Nosocomial and other related conditions	U5000 V0000 Y9200 Y95	U739 Y919 Y929 Y98
16	ICD-10-AM/ACHI Twelfth Edition	M	Morphology (pathology)	M	Morphology (pathology)	8000	9993
16	ICD-10-AM/ACHI Twelfth Edition	O	Operation/Procedure	O	Operation/Procedure	1100000	9798600
16	ICD-10-AM/ACHI Twelfth Edition	V	Supplementary classification (V-code)	A	Principal diagnosis	Z000	Z999*
16	ICD-10-AM/ACHI Twelfth Edition	V	Supplementary classification (V-code)	B	Other relevant diagnosis	Z000	Z999

*Note: some codes in this range are unacceptable principal diagnoses.

Appendix C: Sample Error Report (.sqr file)

```
14-Aug-2023 08:49                          PUBLIC/PRIVATE HOSPITAL LOAD ERROR REPORT                                  Page 3
Errors                                        BATCH NUMBER: 110799 - ABC05539.ndm

Health Agency Facility Code: 9999

Message function=A1      PMS unique identifier=6426599                          Line=3835
HCU ID=NHI1234           Local event ID=9                                       Health specialty code=M14
Sex=F                    Event type=IP                                          Principal service purchaser=35
Birth date=08/10/1960    Start datetime=18/06/2023 13:07                        Provider agency code=1999
Ethnicity=11;;           End datetime=25/06/2023 12:30                          Hours on mechanical ventilation=00002
Resident=Y               Admission source=R                                     Occupation code=
Domicile code=2699       Admission type=WN         Birth weight=                Occupation free text=
Country code=            Admission weight=         Gestation period=
Suppress flag=N          Event end type=DR         Birth status=
ACC status flag=N        Event leave days=         Age of mother=               Psychiatric leave end date=
AI claim number=                                   Birth location=              Psychiatric leave end type=
Hours on cpap=
Mothers NHI=             Total ICU Hours=00022     Transfer From=               Transfer To=
Client system identifier=4008699                   Total niv hours=             Funding agency code=1999

    *** Load Error: [NMS3025E] Event cannot overlap existing event - An event already exists for these keys

Diagnosis     Clinical                                                    Date of       Date of      Condition
Num Type   Sys Type Code     Description                                 Oper/Proc    Ext Injury    Onset Flag
--- ----   --- ---- -------  ------------------------------------------  ----------   ----------    ----------
1   A      15  A    Q2112    Sinus venosus defect                                                        2
2   B      15  A    Q262     Total anomalous pulmonary venous connect                                    2
3   O      15  O    3874202  Closure of atrial septal defect           18/06/2023
4   O      15  O    3874500  Intra-atrial transposition of venous ret  18/06/2023
5   O      15  O    3828703  Open ablation of arrhythmia circuit or f  18/06/2023
6   O      15  O    3860000  Cardiopulmonary bypass, central cannulat  18/06/2023
7   O      15  O    5511800  2 dimensional real time transoesophageal  18/06/2023
8   O      15  O    9251429  General anaesthesia, ASA 29               18/06/2023
```

```
Health Agency Facility Code: 9991

Message function=D1      PMS unique identifier=3720199                          Line=45
HCU ID=ABC1234           Local event ID=9                                       Health specialty code=S00
Sex=M                    Event type=ID                                          Principal service purchaser=35
Birth date=30/11/1940    Start datetime=01/11/2011 08:30                        Provider agency code=1999
Ethnicity=12;;           End datetime=01/11/2011 11:30                          Hours on mechanical ventilation=
Resident=Y               Admission source=R                                     Occupation code=
Domicile code=0479       Admission type=WN         Birth weight=                Occupation free text=
Country code=            Admission weight=         Gestation period=
Suppress flag=N          Event end type=DR         Birth status=
ACC status flag=N        Event leave days=         Age of mother=               Psychiatric leave end date=
AI claim number=                                   Birth location=              Psychiatric leave end type=
Hours on cpap=
Mothers NHI=             Total ICU Hours=          Transfer From=               Transfer To=
Client system identifier=4008099                   Total niv hours=             Funding agency code=1999

    *** Load Error: [NZS1023E] Record cannot be deleted - key fields not found



Message function=A1      PMS unique identifier=6457199                          Line=7106
HCU ID=XXX1234           Local event ID=9                                       Health specialty code=S30
Sex=F                    Event type=IP                                          Principal service purchaser=35
Birth date=14/09/2002    Start datetime=27/07/2023 16:24                        Provider agency code=1999
Ethnicity=21;11;         End datetime=27/07/2023 22:36                          Hours on mechanical ventilation=
Resident=Y               Admission source=R                                     Occupation code=
Domicile code=0419       Admission type=AC         Birth weight=                Occupation free text=
Country code=            Admission weight=         Gestation period=
Suppress flag=N          Event end type=DR         Birth status=
ACC status flag=N        Event leave days=         Age of mother=               Psychiatric leave end date=
AI claim number=                                   Birth location=              Psychiatric leave end type=
Hours on cpap=
Mothers NHI=             Total ICU Hours=          Transfer From=               Transfer To=
Client system identifier=4009099                   Total niv hours=             Funding agency code=1999


Diagnosis     Clinical                                                 Date of       Date of      Condition
Num Type   Sys Type Code     Description                              Oper/Proc    Ext Injury     Onset Flag
--- ----   --- ---- -------  ---------------------------------------  ----------   ----------     ----------
1   A      16  A    N924     PV Bleeding in the premenopausal period                                     2
    *** Warning:    [NMS3030W] Diagnosis N924 is not normal for ages below 25
```

```
14-Aug-2023 08:49                    PUBLIC/PRIVATE HOSPITAL LOAD ERROR REPORT                    Page 18
Summary                                 BATCH NUMBER: 110799 - ABC05539.ndm


Summary of Load Errors:
Count    Result
-----    ------------------------------------------------------------------------------
    1    Duplicate - combination of legal status date and legal status code already used
    6    Event cannot overlap existing event - An event already exists for these keys
    1    Event cannot overlap existing event - Event with overlapping start date at different facility
    1    Procedure 9221100 cannot be used because the patient's age was not 28 days or under on the Date of Admission.
    5    This record cannot be found to delete
   11    Too young for diagnosis
    1    accident_flag not consistent with acc_claim_number
-----
   26    Total number of errors found

------------------------------------------------------------------------------------------
Summary of failed message types:
Count    Message type
-----    ------------
   17    A1
    1    A2
    5    D1

------------------------------------------------------------------------------------------
File summary
------------

    23   Total failed transactions
  1208   Health events processed successfully
------
  1231   Total transactions
------------------------------------------------------------------------------------------
```

Appendix D: List of Acronyms and Descriptions

Acronym	Description
A1	Add
A2	Add Ignoring any Warnings
ACC	Accident Compensation Corporation
ACHI	Australian Classification of Health Interventions
ACS	Australian Coding Standards
AH	Acknowledgement File Header Record
AK	Acknowledgement File Transaction Record
ANZSCO	Australian and New Zealand Standard Classification of Occupants
AN-DRG	Australian National Diagnosis Related Groups
AR-DRG	Australian Refined Diagnosis Related Groups
ASCII	American Standard Code for Information Interchange
AT&R	Assessment, Treatment and Rehabilitation
BT	Birth Event
COF	Condition Onset Flag
COMP	Compliance
CPAP	Continuous Positive Airway Pressure
CVS	Continuous Ventilatory Support
D1	Delete
DRG	Diagnosis Related Group
ECCS	Episode Clinical Complexity Score
FF	File Failure
FH	File Header
FY	Financial Year
GA	General Anaesthesia
HC	Psychiatric Data Record
HD	Health Diagnosis Record
HDU	High Dependency Unit
HE	Health Event Details Record
HMV	Hours on Mechanical Ventilation
HR	Header Record
ICU	Intensive Care Unit
ICD-9-CM	International Statistical Classification of Diseases and Related Health Problems, 9th Revision, Clinical Modification
ICD-9-CM-A	International Statistical Classification of Diseases and Related Health Problems, 9th Revision, Clinical Modification, Australian
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification

ID	Intended Day stay
ID	Identifier
IDF	Inter-District Flow
IM	Psychiatric Inpatient Event
IP	Non-psychiatric Inpatient Event
ISO	International Organisation for Standardisation
MBS-E	Medicare Benefits Schedule – *Extended*
MOH	Ministry of Health
NC	National Collections
NHI	National Health Index
NICU	Neonatal Intensive Care Unit
NIV	Noninvasive Ventilation
NMDS	National Minimum Dataset
NNPAC	National Non-Admitted Patient Collection
NZ	New Zealand
NZSCC	New Zealand Standard Classification of Country
NZSCO	New Zealand Standard Classification of Occupations
PCCL	Patient Clinical Complexity Level
PMS	Patient Management System
PROD	Production
SFTP	Secure File Transfer Protocol
WH	Costweight Header Record
WIES	Weighted Inlier Equivalent Separation
WT	Costweight Transaction Record