

National Non-admitted Patients Collection (NNPAC)

File Specification for File Version V07.0

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1. Front Matter

1.1. Reproduction of material

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2. Introduction

2.1. Purpose

This Ministry of Health File Specification describes the file format used to send information to the Ministry for inclusion in the National Non-admitted Patient Collection (NNPAC). This includes the file layout and, to a lesser extent, the business rules used for validating the data items within the file.

2.2. Intended Audience

There are two audiences for this document:

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

2.3. Related Documents

This document should be read in conjunction with:

- NNPAC Data Dictionary
- NNPAC Error Messages

2.4. National Health Information Principles

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

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

2.5. 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.

In 1996, the Ministry of Health updated its strategic framework with Health Information Strategy for the Year 2000. Since then the world of Information

Technology has leapt ahead with the exponential growth of the World Wide Web, networked organisations and universal acceptance of electronic communication.

The Information Management and Technology Plan (renamed WAVE -Working to Add Value to E-information) for 2001, provides the framework for the development and maintenance of health information to meet national requirements.

The plan aims to ensure that an accurate, timely and consistent set of health data is available nationally, while protecting data confidentiality and avoiding undue compliance and collection costs for the sector.

2.6. Compliance with Standards

All health and disability service providers, agencies and organisations, as defined in the Health Information Privacy Code 1994, accessing or providing national data, are required to adhere to and comply with national information standards, definitions and guidelines.

Maintaining the integrity and security of the databases and the transmission or exchange of data between health and disability service organisations is essential. This is a shared obligation of all health and disability service agencies.

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

2.7. 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. For this reason health and disability agencies and service providers are encouraged to connect directly to the national systems.

Direct access provides:

- Secure communication protocols which meet the privacy requirements,
- Improved timeliness of data reporting for monitoring purposes, and
- Reduced costs for processing and transmitting data supplied to the national systems.

2.8. Authority for Collection of Health Information

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

2.9. Changes from Previous Versions of the Specification

- 2.9.1 Changes to the specification from document version 7.7 to 7.8
 - Update to 8.1.2 fields in the Event Record
 - Modification in the error message description for error code "NAP5062E"
- 2.9.2 Changes to the specification from document version 7.6 to 7.7
 - Update to 8.1.3 Event Type requirement in the Event Item Record
 - Addition of two warnings for Event Item Type PT and DG
- 2.9.3 Changes to the specification from document version 7.5 to 7.6
 - Update to Mode of Delivery types & descriptions
- 2.9.4 Changes to the specification from document version 7.4 to 7.5
 - Update to reference section numbering within document
 - Reinstated section 11.6 Duplicate Events Validation
- 2.9.5 Changes to the specification from document version 7.3 to 7.4

Update to Sections 8.1.2, 8.1.3. Field Record Type for Event Record and Event Item Record

- Field type changed to Char 10
- Format changed to A(10)
- 2.9.6 Changes to the specification from document version 7.2 to 7.3

Update to Sec. 8.1.3 Event Item Record Clinical Code & Clinical Code Sequence.

- Now mandatory.
- Erroneous "Mandatory where the Event End Type code is OB."
 Removed from notes section
- 2.9.7 Changes to the specification from document version 7.1 to 7.2
 - Addition of error codes for SNOMED reporting
 - Addition of section 8.1.3 Event Item Records
- 2.9.8 Changes to the specification from document version 7.0 to 7.1
 - Clarification to business rules for Clinical code and Clininical code sequence

- 2.9.9 Changes to the specification from document version 6.1 to 7.0
 - New file version 'V07.0' implemented for input file
 - Discontinuation of support for 'V05.0' input file
 - Addition of SNOMED coding system for Emergency Departments
 - Removal of erroneous 'Date of Service' requirement for delete records
 - Removal of two Location Codes
- 2.9.10 Changes to the specification from document version 5.3 to 6.1
 - Clarified definition of Mode of Delivery definitions
- 2.9.11 Changes to the specification from document version 5.3 to 6.0
 - New file version 'V06.0' implemented for input file
 - Discontinuation of support for 'V04.0' input file
 - Addition of Mode of Delivery field
 - Addition of Alcohol Involved field
 - Reinstatement of M87 Specialist Medical Genetics
 - Removal of 5 codes from Location/Activity Settling for Telehealth
 - Removal of Error Code 5059
- 2.9.12 Changes to the specification from document version 5.2 to 5.3
 - Add Activity Setting as another name for Location
 - Add 5 additional codes to Location/Activity Settling for Telehealth
 - Corrected the definitions of Agency Code and Funding Agency Code
 - Corrected the definitions for Agency Code and Funding Agency Code
- 2.9.13 Changes to the specification from document version 5.1 to 5.2
 - Corrected error code 5061 to Error Type E
- 2.9.14 Changes to the specification from document version 5.0 to 5.1
 - Updated to reflect the new purchaser code 33, MoH Screening Pilot.
- 2.9.15 Changes to the specification from document version 4.0 to 5.0:
 - New file version 'V05.0' implemented for input file
 - Addition of Funding Agency field
 - Amendment to business rules on duplicates
 - Addition of new error messages

2.9.16 Changes to the specification from document version 3.0 to 4.0:

- New file version 'V04.0' implemented for input file
- Only the current file version (4.0) and the version before (3.0) will be accepted from 01 July 2011.
- · Removal of input field datetime of event end
- Error message text field size increased from 70 characters to 256 characters (varchar)
- Revisions

2.9.17 Changes to the specification from document version 2.1 to 2.2:

The Volume field in the Event Record has incorrectly been described as a data type of Integer. The system has always allowed a data type of Number in the extract file for Volume. This version corrects the documentation.

The input file version number remains at V02.0.

2.9.18 Changes to the specification from document version 2.0 to 2.1:

These apply to all files sent on or after July 1, 2009.

Additional purchase units are introduced and changes are made to the mandatory status of some existing purchase unit codes required for submission to NNPAC.

The input file version number remains at V02.0.

2.9.19 Changes to the specification from document version 2.2 to 3.0:

- New file version 'V03.0' implemented for input file
- Removal of file version number from the file name of the load file, the acknowledgement file and the error file
- Amendment to NNPAC purchase units to retire old ones and add new ones.
- Event type field is now mandatory
- New input fields datetime of presentation, datetime of service, datetime
 of first contact, datetime of event end, datetime of departure, triage level,
 event end type, NMDS unique identifier
- Removal of input fields date of service, time of service and event end date. These are now datetime fields see point above.
- Addition of codes for community referred event types
- Reformatting of error message text
- Addition of a new section that provides guidelines for coding of fields.

2.9.20 Changes to the specification from document version 1.2 to 2.0:

These apply to all files sent on or after July 1, 2008.

A summary of the processing / editing changes is:

File naming

• To include version (see 7.1 Overview)

Record layouts

- Header to include date sent and file version (see 7 Extract File Layouts Header Record)
- Event to include optional event end date for ED records (see 7 Extract File Layouts Event Record)

Duplicate input records

 If multiple events with the same id are submitted in a batch, they are all rejected (see 11.5 Duplicate events Validation)

Load processing and editing

• See Business Rules, section 11.6.

2.9.21 Changes to the specification from document version 1.1 to v1.2:

The change is:

Start and End date validation introduced for Purchase Unit, Health Specialty and Purchaser Codes based on Date of Service.

3. Overview of the NNPAC National Collection

3.1. Scope

The NNPAC collection stores data about non-admitted secondary care events, such as outpatient and emergency department visits. Admitted events are held in the NMDS collection. Non-attendances are also in scope and inclusion is mandatory for clinics run by doctors. A non-attendance is where the appointment was not cancelled but the patient either never arrived or left before being seen by the doctor.

3.2. Start Date

July 1, 2006

3.3. Guide for Use

Any historical data to be included in the system will have to be provided in the format specified in this document.

3.4. Collection Methods

The data will be extracted by DHBs and other providers and transferred using FTP, in the format defined by this document.

3.5. Frequency of Updates

The provider will send data at least once per month.

Events will be sent within 20 days of the end of the month that they occurred in. As one provider may have multiple source systems, multiple files can be accepted at one time. Each source system will have a unique identifier.

3.6. Security of Updates

The data in the Ministry of Health data warehouse (including NNPAC) is protected with database passwords, Business Object passwords and Virtual Private Database rules and is only available through the secure Health Intranet.

3.7. Privacy Issues

All NHI numbers in the NNPAC are encrypted and no names or addresses recorded.

The providers have a requirement to have access to the unencrypted NHI for all persons living in their area or treated at their facilities.

3.8. National Reports and Publications

NNPAC data is available on request from data-enquiries@moh.govt.nz.

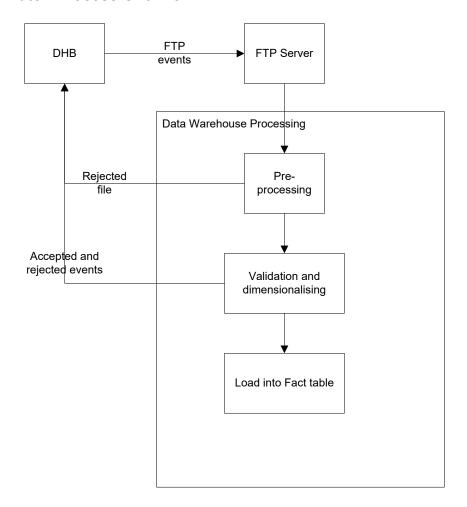
For Business Objects access to the NAP warehouse please go to http://busobjxi.moh.health.nz/

3.9. Data Provision

Access is restricted to Ministry of Health and DHB and SSO representatives who apply for access. SSO representatives need to demonstrate an agency relationship with a DHB to be able to access that DHB's information. All data is available to any user of the system.

4. Batch Processing

4.1. Batch Process Overview



4.2. Batch Process Details

- The provider produces a file from their extract system(s) and sends that by FTP to the Ministry FTP server. Zipped files will transmit faster.
- 2. Ministry of Health Operations copy the file to the data warehouse and start the load process.
- 3. The pre-process checks the number of records in the file. A header record contains the number of records in the file including the header. It also has an extract system identifier and batch number. Providers must submit files in sequential order for each extract system. If the file fails this check it is rejected and no further processing takes place.
- 4. If a record has the same identification as another event in a batch, then all events with that key are rejected. This includes DELETE entries.
- 5. Valid files then proceed to record validation. See the file layout for validation details. As accepted data is loaded, the process dimensionalises the data. This means looking up the key for dimensions such as Health Care User, Provider Type, and Purchase Unit etc.

- 6. Each record is written to a return file and marked as accepted or rejected. See the return file definition for details. Rejected records are also written to an error file for processing by the provider.
- 7. Accepted records are applied to the database. If the record is a delete type, then the record is physically deleted from the database. Otherwise, if the record has the same key as an existing record, it is updated else it is added. Records are processed in the order that they are received. The key is the client system identifier plus the pms unique identifier and the extract system indentifier.

5. Key Relationships

5.1. Overview

There is one fact table containing one row for each non-admitted patient event.

There are twenty three dimension tables used to analyse the facts.

The dim_nap_codes table holds codes with small cardinalities as a matrix of all possible combinations. This is done to reduce the number of dimensions.

7. Extract File Requirements

7.1. Overview 7.1.1 File Naming

Each input file will be named as: NNPAC extract system id batch number

eg NNPAC abcdef 34

7.1.2 Identification

The extract system id is the unique id for each extract system as registered with the Ministry of Health by the provider. To register an extract system id contact Data Management Services by e-mailing operations@moh.govt.nz. A provider may have more that one extract system. An extract system is defined as the system that produces the extract file.

The client system id is the unique id for each client system as registered with the Ministry of Health by the provider. A provider may have more than one client system. A client system is defined as the system that created the event record and its unique identifier. A client system will be registered at the Ministry with a matching extract system. The load process will validate that the client system identifier and extract system identifier combination in the load file is registered with the Ministry as a valid combination.

The source system may be the same as the client system or different, as in the case where the data is extracted from a data warehouse rather than a PMS.

The batch number is the sequential number for the file starting from 1. No gaps in the sequence are allowed as the files need to be processed strictly in order.

The key for events is extract system identifier, client system identifier, and PMS unique identifier.

Providers are responsible for supplying the PMS unique identifier consistently – if they do not then new records may be added in error. The same value for a PMS unique identifier can be supplied from multiple systems as long as the combination of extract system identifier, client system id and PMS unique identifier is unique.

7.1.3 Record Types and Layouts

- There are two record layouts Header and Event.
- There is one header record per file.
- There is any number of event records.
- Headers have a record type of 'HEADER'.
- Adds or updates have a record type of 'EVENT'.
- For an update, the whole record must be reported each time, even if only one field has changed.

- Deletes have a record type of 'DELETE'. They are the same format as an EVENT and EVENT ITEM record.
- If a non-delete record has the same key as an existing record, the existing record is updated else a new record is added.

8. Extract File Layouts

8.1. Overview

There are three record types – headers, events and event_items. All fields are bar '|' delimited. Bars must not appear in any field. Text fields should not be in quotes. Commas are allowed in text fields but not carriage returns or other formatting. No leading or trailing spaces are permitted unless otherwise stated. All codes are in upper case unless otherwise stated.

8.1.1 Header Record

Field	Type	Format	Reqd. ¹	Notes
record type	char 6	A (6)	M	'HEADER'
extract system identifier	char 10	A (10)	M	Validated against the extract_system table. New extract system identifiers need to be registered with the Ministry of Health.
number of records	integer		M	The number of records, including the header, in the file. eg 23456
batch number	integer		M	The sequential number of the batch. eg 43
date sent	date 8	CCYYMMDD	M	Must be a valid date. Must be on or before the current date.
file version	char 5	ANN.N	М	'V06.0' or 'V07.0 if the 'Date Sent' is on or after 1 July 2018.

8.1.2 Event Record

General rules for datetime fields:

Must be a valid date & time ie. Date must be a valid date in the past or today. The 24 hour clock is used. HH must between 00 and 23 and MM must be between 00 and 59. Leading zeroes are required. No separator is allowed between date or time components.

Eg '201002241030' is a valid date, '2010/02/24 10:30' is not valid

There are also cross validation rules for the datetime fields for ED events. Refer to 12.6 Checks Between Related fields.

¹ Required – M = Mandatory, C = Conditional, O = Optional

F: 11	-	- 1	D . ?	N. d
Field record type	char 10	A (10)	Reqd. ²	'EVENT' for an add or update. 'DELETE' for a delete. Delete records may contain only key fields (client system identifier, and PMS unique identifier). No mandatory field checking will be done for other fields in DELETE records.
event type	char 3	AAA	M	OP (outpatient), ED (emergency department). CR (community referred diagnostic), PC (presenting complaint). PT (procedure, treatment). DG (diagnosis) The Community Referred Diagnostic Event should only be used when the diagnostic is independent of any FSA, follow up or treatment procedure and has been ordered by the GP. Refer to 11.12 Community Referred Diagnostic Event. This field has been made mandatory for all events with Date of Service on or after 1 July 2010
health practitioner type	char 3	AAA	М	M (doctor), N (nurse), O (other)
client system identifier	char 10	A (10)	M	Validated against the external system table. New client system identifiers need to be registered with the Ministry of Health and must be associated with an extract system identifier.
pms unique identifier	varchar 14	X (14)	M	The identifier as used in the client system for this event. Leading and trailing blanks will be trimmed off in the load process.
NHI	char 7	AAANNNN	М	Must be registered on NHI at time of file transmission.

² Required – M = Mandatory, C = Conditional, O = Optional, NR = Not Required

Field	Type	Format	Reqd. ²	Notes
facility code	char 4	XXXX	Ċ	Must be a valid facility code. This is the code of the facility where the event took place. Mandatory if location type is Hospital Facility (i.e. 1, 2 or 3) but should be entered where available for other location types. Refer to 11.10 Events that occur outside a hospital
agency code	char 4	XXXX	M	Must be a valid agency code. This is the code of the agency which delived the treatment, whereas the funding agency code (below) is the code fo the agency paying for the service.
location type	Integer 2	NN	M	1 (Public Hospital), 2 (Private Hospital), 3 (Psychiatric Hospital), 5 (Private Residence), 6 (Other), 10 (Residential Care), 11 (Marae), 12 (Primary Care), Refer to 11.10 Events that occur outside a hospital.
health specialty code	char 3	ANN	M	As for NMDS. Must be a valid health specialty code and must be active for the Date of Service
equivalent purchase unit code	char 8	X (8)	M	PREADM (pre-admission), FIRST (first contact for client with condition at specialty), FOLLOWUP, CRD (community referred diagnostic) Is the purchase unit that would have been allocated if provided by a DHB as defined in the NSF data dictionary, regardless of funding. Must be a valid purchase unit code and must be active for the Date of Service.
				For DNA (Did Not Attend) or DNW (Did Not Wait), this is the Purchase Unit that would have been allocated had they attended or waited. For ED attendances where only ED service is triage, the purchase unit is ED00002. Note there is a series of Nationwide Service Framework Data Dictionary Purchase Unit codes expressly for use in NNPAC for pre-admissions and subsequently admitted ED events.

Field	Type	Format	Reqd. ²	Notes
acc claim	char 12	X(12)	0	Valid only if accident flag = 'Y'
number		,		
accident flag	char 1	Α	M	'Y' or 'N' or 'U' (unknown)
purchaser code	char 2	XX	M	As for NMDS. Must be a valid Principal health purchaser code and must be active for the Date of Service.
attendance code	char 3	AAA	М	ATT (attended), DNA (did not attend), DNW (did not wait)
volume	number	99999.999	М	Zero if attendance code is DNA or DNW or client-based or
		(floating- point)		programmed events, otherwise 1 or more if attendance code is ATT. This is not the number of events but the number of purchase units.
domicile code	char 4	AAAA	O	Must include leading zeroes. This is used for deriving the patient's DHB and as a data quality test to compare with the NHI domicile code.
datetime of presentation	datetime	CCYYMMDD HHMM	С	The date and time a patient presents/or is presented physically to the ED department; either to the triage nurse or clerical staff, whichever comes first.
datetime of service	datetime	CCYYMMDD HHMM	M	Mandatory for ED events with Datetime of service on or after 1 July 2010, null for all other events The date of service will be used to look up the NHI history tables to get the gender, ethnicity and domicile code of the patient at the time of the event.
				For ED events this is the date and time that a triage nurse/suitable ED medical professional starts the process of categorising the triage level of the incoming patient (i.e. 1 – 5).
				For outpatient visits the time of service should be the actual service start time if available. If not, then the booked appointment time may be used or a default time of '0000' may be sent.
				Refer to further notes in 11.11 ED Timestamps

Field	Type	Format	Reqd. ²	Notes
datetime of first contact	datetime	CCYYMMDD HHMM	C	The date and time that the triaged patient's treatment starts by a suitable ED medical professional (could be the same time as the datetime of service if treatment is required immediately i.e. triage level 1). Mandatory for ED events with Datetime of service on or after 1 July 2010 and attendance code 'ATT', null for all other events
datetime of departure	datetime	CCYYMMDD HHMM	С	The date and time of the physical departure of the patient from ED to an in-patient ward, or the time at which a patient begins a period of formal observation (whether in ED observation beds, an observation unit, or similar), or the time at which a patient being discharged from the ED to the community physically leaves the ED. Mandatory for ED events with Datetime of service on or after 1 July 2010 and attendance code 'ATT', null for all other events Refer to further notes in 11.11 ED Timestamps
triage level	integer	N	С	From the scale of 1 – 5 Mandatory for ED events with Datetime of service on or after 1 July 2010 and attendance code 'ATT', null for all other events
event end type code	char	AA	С	Mandatory for ED events with Datetime of service on or after 1 July 2010 Must be a valid code in the Event End Type code table.

Field	Type	Format	Reqd. ²	Notes
NMDS PMS unique identifier	char 14	X (14)	C	NMDS PMS unique event identifier where a patient is admitted following their emergency event. The admission may be either because a patient has been admitted to an inpatient ward or there has been an administrative admission due to the 3 hour rule (see definition of admission in the glossary to the National Collections). Mandatory for events with Datetime of service on or after 1 July 2010 and attendance code = 'ATT' and equivalent purchase unit is like ED%A.
Funding agency code	char 4	XXXX	СМ	The Funding Agency Code is the code of the agency purchasing the treatement, whereas the agency code (above) is the code of the agency which delivered the treatment. The Funding Agency Code is reported from version 5.0 of the load file. It is mandatory for events with a purchaser code of 20, 33, 34, 35, 55, A0. It must be a valid Agency Code and it must align with the Purchaser Code. Please refer to Section 11.8 for more on these rules.
Mode of delivery code	char 2	X(2)	M	The Mode of Delivery Code is reported from Version 6.0 of the load file. It is mandatory for events with a with a datetime of service on or after 01 July 2015. 1 Face to Face (1 patient to 1 clinician) 2 Face to Face (1 patient to many clinicians) 3 Face to Face (1 clinician to many patients) 4 Remote patient monitoring 5 Telephone 6 Videoconference 7 Non-contact (virtual)

Field	Type	Format	Reqd. ²	Notes
Alcohol involved code	Varchar2(2)	X(2)	CM	The Alcohol Involved Code is reported from version 6.0 of the load file for DHB EDs. The code is mandatory for all events where the event type = 'ED'. Y (Yes) (agreement with the Alcohol Involved question) N (No) (disagree with the Alcohol Involved question) U (Not known) S (Secondary) (presentation is as a consequence of others' alcohol consumption)
Date time of disposition	Datetime	CCYYMMDD HHMM	CM	Mandatory where the Event type is ED and Event End Type code is OB. The date and time of the physical departure of the patient from observation (whether in ED observation beds, an observation unit, or similar) to an in-patient ward, or the time at which a patient being discharged from observation to the community physically leaves the observation area.
Clinical dispostion	Varchar2(3)	AAA	СМ	Mandatory where the Event type is ED and Event End Type code is OB Must be a valid code in the Clinical Disposition code table.
Clinical Code		Null	NR	Blank
Clinical code sequence		Null	NR	Blank

8.1.3 Event Item Record

General rules for fields:

Field	Type	Format	Reqd. ³	Notes
record type	char 10	A (10)	M	EVENT ITEM' for SNOMED
,,,				records with an Event Type of PC,
				PT and DG
event type	char 3	AAA	M	PC (presenting complaint -
				Mandatory).
				*PT (procedure, treatment).
			0	*DG (diagnosis)
				, -
				*Must be reported if a diagnosis or
				procedure/treatment occurred in
				ED.
health practitioner			NR	Blank
type	1 40	A (40)		N 1:1 (1
client system	char 10	A (10)	M	Validated against the external
identifier				system table. New client system
				identifiers need to be registered with
				the Ministry of Health and must be associated with an extract system
				identifier.
pms unique identifier	varchar	X (14)	М	The identifier as used in the client
pinio di liquo luonalio.	14	7. ()		system for this event. Leading and
				trailing blanks will be trimmed off in
				the load process.
NHI	char 7	AAANNNN	M	Must be registered on NHI at time of
				file transmission.
facility code		Null	NR	Blank
agency code		Null	NR	Blank
location type		Null	NR	Blank
health specialty code		Null	NR	Blank
service type		Null	NR	Blank
equivalent purchase		Null	NR	Blank
unit code		N. II	ND	DI I
acc claim number		Null	NR	Blank
accident flag		Null	NR	Blank
purchaser code attendance code		Null Null	NR NR	Blank Blank
volume		Null	NR	Blank
domicile code		Null	NR	Blank
datetime of		Null	NR	Blank
presentation		11011	1417	Diam
datetime of service		Null	NR	Blank
datetime of first		Null	NR	Blank
contact		14011	1417	Diam

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³ Required – M = Mandatory, C = Conditional, O = Optional, NR = Not Required

Field	Туре	Format	Reqd. ³	Notes
datetime of departure		Null	NR	Blank
triage level		Null	NR	Blank
event end type code		Null	NR	Blank
NMDS PMS unique identifier		Null	NR	Blank
Funding agency code		Null	NR	Blank
Mode of delivery code		Null	NR	Blank
Alcohol involved code		Null	NR	Blank
Date time of disposition		Null	NR	Blank
Clinical dispostion		Null	NR	Blank
Clinical Code	Varchar2 (2000)	XXXXXX	M	Must be a valid code in the HISO ED SNOMED code set.
Clinical code sequence	Varchar2 (2)	XX	M	Sequential number for PC, PT and DG Event Type codes in each Event Item record to assist in unique identification. Valid values are 01 – 21 (incl leading zeros). Sequence numbers are not related to event item type but in order they are listed.

9. Acknowledgement File

9.1. Overview

A file is returned for each input file that passes pre-processing. It contains one record for each input record, marked as accepted or in error. The file is sent to the DHB via FTP with an accompanying email, both sent automatically.

The files are named NNPAC_ACK_extract system id_batch number.

9.2. Acknowledgement Record

Field	Туре	Format	Notes
client system identifier	char 10	A (10)	Identifier of the source client system.
pms unique identifier	varchar 14	X (14)	The identifier as used in the client system for this event.
extract system identifier	char 10	A (10)	The identifier of the system the data was extracted from.
Batch Number	integer		The sequential number of the batch. eg 43
action taken	char 8	A (8)	'INSERTED', 'UPDATED', 'DELETED', 'ERROR', 'WARNING'

10. Error File

10.1. Overview

As well as being in the acknowledgement file, rejected records are also in a separate error file. The error file also contains the cautions.

The files are named NNPAC_ERROR_extract system id_batch number.

If there are multiple errors for a record there will be multiple entries in the file, one for each error or warning.

10.2. Error Record

Field	Туре	Format	Notes
client system identifier	char 10	A (10)	Identifier of the source client system.
pms unique identifier	varchar 14	X (14)	The identifier as used in the client system for this event.
NHI	char 7	AAANNNN	Unencrypted
extract system identifier	char 10	A (10)	The identifier of the extract system. The first three characters will be the DHB acronym as used in the NMDS header record.
Batch Number	integer		The sequential number of the batch. eg 43
error number	char 8	AAANNNNA	This is the standard error number format for MOH systems.
error text	varchar 256	X (256)	Existing error messages (eg for NMDS) will be reused where appropriate.

10.3. Error Messages

10.3.1 Error Messages – Pre-load batch validations

The following error messages may be produced when the input files are loaded into NNPAC. They are emailed to the operators' email and the DHB (if email address found).

Error Message	Error Description
NNPAC load failed. Error: Missing header record or file version in file:	Header record is missing in file (%1)
%1. This file has not been processed.	
NNPAC load failed. Error: Missing header record or file version in file:	File version is missing in the header record
%1. This file has not been processed.	
·	
NNPAC load failed. Error: Invalid file version in file: %1. This file has not	File version not previous version or current version
been processed.	
NNPAC load failed. Error: Missing Extract Identifier in file: %1. This file	No extract identifier given in header record
has not been processed.	-

10.3.2 Error Messages - Data warehouse batch validations

The following error messages may be produced by validation that occurs when moving data from the IDS to the data warehouse. These error messages are sent by email to the operator/DHB, prefixed with the following, for all the error messages: 'Batch load failed for %1 (DHB). Extract_system_identifier: %2. Batch number: %3 (batch number). Error message: (as detailed in the table below).

Error Message	Error Description
Missing extract system identifier	Extract System Identifier has not been supplied
Invalid extract system identifier %1	The extract system identifier (%1) supplied is not in the
	dim_external_system
Date Sent is a required field. Missing Date Sent for system: %1, batch	Date Sent has not been supplied for the system (%1)
number: %2	batch number (%2)
Missing batch number for system %1	Batch number has not been supplied for system (%1)
Missing batch in sequence for system %1 last batch was %2 this batch	Where batch number supplied > maximum (batch
%3	number) in dim_nap_batch for the extract identifier
Invalid File Version for system %1	Where file_version not previous version or current
	version for system (%1)
Records found %1 Records expected %2 for system %3 batch %4	Where the count of records in load_nap_event differs
	from the number_of_records (supplied in the header
	record)

Example error message:

'Batch load failed for Canterbury DHB. Extract_system_identifier: CDHB_DW. Batch number: 45. Error message: Records found 5 Records expected 4 for system CDHB_DW batch 45'

10.3.3 Error Messages - Event record validation

The following error messages may be produced when the event records are validated. The error messages can be in the form of errors (E) or cautions (C). If a record causes an error it will always be rejected. Cautions are used to describe why data is considered invalid. If a record causes a caution, it will be loaded.

The following table is a complete list of NNPAC error messages:

Prefix_code	ID	Error Type	Error Message	Error Description
NAP	5000	E	Could not find Record to delete	No record found to delete with the same key (extract system identifier, client system identifier, PMS unique identifier) as requested.
NAP	5001	E	Record Type invalid: %1	Record type (%1) not in list of valid record types (i.e. HEADER, EVENT, DELETE)
NAP	5002	E	NHI invalid: %1	NHI number (%1) not allocated to a person in the NHI system.
NAP	5003	Е	Invalid Accident Flag: %1	Accident flag (%1) not one of the allowed values (i.e. Y, N, U).
NAP	5004	E	Invalid Attendance Code: %1	Attendance code (%1) not one of the allowed values (i.e. ATT, DNA, DNW).
NAP	5005	Е	Invalid Event Type: %1	Event type not one of the allowed values.
NAP	5006	E	Invalid Health Practitioner Type: %1	Health practitioner (also known as provider) type (%1) not one of the allowed values (i.e. M, N, O).
NAP	5007	E	Invalid Service Type: %1	Service type (%1) not one of the allowed values (i.e. PREADM, FIRST, CRD, FOLLOWUP).
NAP	5008	E	Invalid Hours in %2: %1	Hours in the field (%2) are greater than 24 or not numeric. (%1 = hours entered)

Prefix_code	ID	Error Type	Error Message	Error Description
NAP	5009	E	Invalid Minutes in %2: %1	Minutes in the field (%2) are greater than 60 or not numeric. (%1 = minutes entered)
NAP	5010	E	Invalid Facility Code: %1	Facility code (%1) is not in the list of facilities. (See Common Code tables on the Ministry web site ⁴).
NAP	5011	E	Invalid Agency Code: %1	Agency code is not in the list of agencies. (See Common Code tables on the Ministry web site).
NAP	5012	E	The Datetime of Service is after the processing date	The datetime of service is after the processing date.
NAP	5013	E	The Datetime of Service is 20 years before the processing date	The datetime of service is 20 years before the processing date.
NAP	5014	E	Invalid Date in %2: %1	Datetime field (%2) does not contain a valid date (where %1 = actual date entered).
NAP	5015	E	Location Type invalid: %1	The location type code (%1) is not one of the allowed values. (See list of valid codes on page 20).
NAP	5016	E	Equivalent Purchase Unit code invalid: %1	The equivalent purchase unit code (%1) is not one of the allowed values for NNPAC (it may be valid in other datamarts). (See DIM_Purchase_Unit table)
NAP	5017	E	Purchaser Code invalid: %1	Purchaser code (%1) not one of the allowed values. Also known as Principal Health Service Purchaser or Health Purchaser.
NAP	5018	E	Health Specialty Code invalid: %1	Health specialty code (%1) not one of the allowed values. (See Common Code tables on the Ministry web site).

⁴ For code tables on the Ministry web site go to http://www.nzhis.govt.nz/moh.nsf/pagesns/47

Prefix_code ID		Error Type	Error Message	Error Description		
NAP	5019	E	Volume %1 incompatible with Attendance Code: %2	The value (%1) in the volume is not allowed for attendance code. For example, DNA should have a volume of 0.		
NAP	5020	E	Invalid Client System Identifier: %1	The client system identifier is not that agreed with MOH.		
NAP	5021	Е	No PMS Unique Identifier provided	The PMS unique identifier is missing.		
NAP	5022	E	ACC Claim must be NULL when Accident Flag is %1	ACC claim must be NULL when accident flag is (%1) (where %1 = populated value)		
NAP	5023	E	Duplicate. All records for this EventID in this extract are rejected.	Duplicate. All records for this EventID in this extract are rejected.		
NAP	5028	E	Purchaser Code %1 is invalid for this datetime of service	Purchaser Code (%1) is not yet active for use. Also known as Principal Health Service Purchaser or Health Purchaser		
NAP	5029	Е	Purchaser Code %1 is retired from use	Purchaser Code (%1) is retired from use.		
NAP	5030	Е	Health Specialty Code %1 invalid for this datetime of service	Health Specialty Code (%1) is not yet active for use. (See Common Code tables on the Ministry web site).		
NAP	5031	E	Health Specialty Code %1 is retired from use	Health Specialty Code (%1) is retired from use.		
NAP	5032	E	Purchase Unit Code %1 invalid for this datetime of service	Purchase Unit Code (%1) is not yet active for use.		
NAP	5033	E	Purchase Unit Code %1 is retired from use	Purchase Unit Code (%1) is retired from use.		
NAP	5034	E	Service Type %1 incompatible with Purchase Unit Code %2	Service Type (%1) is incompatible with Purchase Unit Code (%2).		
NAP	5036	Е	Volume: %1 is incompatible with Preadmission Purchase Unit %2	Volume (%1) is incompatible with Preadmission Purchase Unit (%2).		
NAP	5037	Е	Volume: %1 is invalid for Purchase Unit Code %2 (UOM='client').	Volume (%1) is invalid for Purchase Unit Code (%2) when (UOM='client').		
NAP	5038	Е	No longer used			
NAP	5039	Е	No longer used			
NAP	5040	С	Domicile Code %1 is invalid for this Datetime of Service %2	Domicile Code (%1)is not active at the Datetime of Service (%2).		

Prefix_code	Prefix_code ID Error Error Messag Type		Error Message	Error Description	
NAP	5041	С	Domicile Code %1 is for an overseas resident	Domicile Code (%1) is for an overseas resident	
NAP	5042	С	Domicile Code %1 does not correspond to a valid DHB	Domicile Code (%1) does not correspond to a valid DHB.	
NAP	5043	Е	Invalid file version %1 for period %2	Invalid file version (%1) submitted for the period reported (%2).	
NAP	5044	E	Date Sent invalid: %1	Date sent (%1) invalid	
NAP	5045	E	%1 in the future: %2	(Datetime field %1) (%2) is in the future	
NAP	5046	Е	%1 is a required field	(Field %1) is a required field	
NAP	5047	Е	%1 is required for %2	(Field %1) is a required field when the condition (%2) is true	
NAP	5048	Е	%1 invalid: %2	(%2) is not one of the allowed values for (field %1)	
NAP	5049	Е	Attendance Code invalid: %1	Attendance code (%1) must be 'ATT'	
NAP	5050	Е	%1 must be on or before %2	Datetime field (%1) must be less than or equal to datetime field (%2)	
NAP	5052	Е	%1 must be null for %2 event type	A value has been submitted for (field %1) where null should have been submitted on an event type of (%2)	
NAP	5053	E	%1 must be null for Attendance Code %2	A value has been submitted for (field %1) where null should have been submitted on an event with attendance code of (%2)	
NAP	5054	E	%1 must be null for Purchase Unit Code %2	A value has been submitted for (field %1) where null should have been submitted on an event with purchase unit code of (%2)	
NAP	5055	E	Service Type %1 is invalid for Event Type %2	Service type code (%1) is not allowed for event type (%2)	
NAP	5056	E	Event End Type: %1 incompatible with Purchase Unit or Attendance Code	Event end type (%1) is incompatible with purchase unit code or attendance code	
NAP	5057	E	%1 %2 invalid for this datetime of service	(The code %1) (eg. Triage Level) containing a value of (%2) is not yet active for use	

Prefix_code	ID	Error Type	Error Message	Error Description	
NAP	5058	E	%1 %2 is retired from use	The code %1 (eg. Triage Level) containing a value of %2 is retired from use	
NAP	5060	E	Invalid Funding Agency: %1	Funding Agency code (%1) is not in the list of agencies (see Common Code tables).	
NAP	5061	E	Funding Agency should be a DHB for Purchaser Code %1	Funding Agency should have an agency type=01 DHB for purchaser codes 20, 35 and 55	
NAP	5062	Е	Version %1 event records must have %2 fields	Version V5.0/V6.0/V7.0 event records must have 26/28/32 fields	
NAP	5063	Е	Mode of Delivery Code invalid: %1	The mode of delivery code is not one of the allowed values	
NAP	5064	Е	No Mode of Delivery Code provided	Mode of delivery identifier is missing.	
NAP	5065	Е	Alcohol Involved Flag invalid: %1	The alcohol involved code is not one of the allowed values	
NAP	5066	Е	Alcohol Involved Flag: %1 - has been submitted by non-pilot DHB: %2	Not an alcohol-involved pilot DHB ED	
NAP	5067	Е	No Alcohol Involved Flag submitted	No Alcohol Involved Flag submitted	
NAP	5068	Е	No PC event type found for this event	No PC event type found for this event	
NAP	5069	E	More than one PC event item type found for this event	More than one PC event item type found for this event	
NAP	5071	С	More than five DG event items submitted for this event	More than five DG event items submitted for this event	
NAP	5072	С	More than 15 PT event items submitted for this event	More than 15 PT event items submitted for this event	
NAP	5073	Е	Event end type code is OB but no Date time of disposition	Event end type code is OB but no Date time of disposition	
NAP	5074	E	Datetime of disposition must be on or after Datetime of departure	Datetime of disposition must be on or after Datetime of departure	
NAP	5075	E	Datetime of disposition must not be a future date	Datetime of disposition must not be a future date	
NAP	5076	E	Event end type code is OB but no clinical_disposition reported	Event end type code is OB but no clinical_disposition reported	

Prefix_code	ID	Error Type	Error Message	Error Description	
NAP	5077	E	Event Item record types must have a clinical code	Event Item record types must have a clinical code	
NAP	5078	E	Clinical code not a valid SNOMED ED Ref set code	Clinical code not a valid SNOMED ED Ref set code	
NAP	5079	Е	Event Item record(s) submitted for OP or CR event type	Event Item record(s) submitted for OP or CR event type	
NAP	5080	E	Event Item record(s) can only be submitted for events with a datetime of service on or after 01/07/2018	Event Item record(s) can only be submitted for events with a datetime of service on or after 01/07/2018	
NAP	5081	E	Diagnosis sequence is mandatory for Event Item records	Diagnosis sequence is mandatory for Event Item records	
NAP	5082	Е	Diagnosis sequence is only valid for Event Item records	Diagnosis sequence is only valid for Event Item records	
NAP	5083	Е	Diagnosis sequence must be of format XX	Diagnosis sequence must be of format XX	
NAP	5084	Е	Value in field Clinical Disposition is not one of the allowed values	Value in field Clinical Disposition is not one of the allowed values	
NAP	5085	Е	Value in field event type for Event Item records is not one of the allowed values	Value in field event type for Event Item records is not one of the allowed values	
NAP	5086	E	Two Clinical Code Sequence numbers are repeated for Event Item Record Type	Two Clinical Code Sequence numbers are repeated for Event Item Record Type	
NAP	5087	E	Event items must not be submited for attendance code DNA	Event items must not be submited for attendance code DNA	
NAP	5090	E	File of version 6 must not contain EVENT_ITEM records	File of version 6 must not contain EVENT ITEM records	
NAP	5091	Е	NHI for event item must be same as NHI for the parent event	NHI for event item must be same as NHI for the parent event	
NAP	5092	E	File contains %1 unidentifiable event items	File contains %1 unidentifiable event items	

Prefix_code	ID	Error Type	Error Message	Error Description
NAP	5093	E	Event End Type Code OB can only be submitted for events with a datetime of service on or after 01/07/2019	Event End Type Code OB can only be submitted for events with a datetime of service on or after 01/07/2019
NAP	5094	E	Datetime of disposition can only be submitted for events with a datetime of service on or after 01/07/2019	Datetime of disposition can only be submitted for events with a datetime of service on or after 01/07/2019
NAP	5095	E	Clinical disposition can only be submitted for events with a datetime of service on or after 01/07/2019	Clinical disposition can only be submitted for events with a datetime of service on or after 01/07/2019
NAP	5096	Е	Event end type OB can only be submitted for ED events	Event end type OB can only be submitted for ED events
NAP	5097	E	Clinical disposition and datetime of disposition can be only submitted for ED event end type	Clinical disposition and datetime of disposition can be only submitted for ED event end type
NAP	5098	С	No PT (Procedure/Treatment) event items submitted for this ED event	No PT (Procedure/Treatment) event items submitted for this ED event
NAP	5099	С	No DG (Diagnosis) event items submitted for this ED event	No DG (Diagnosis) event items submitted for this ED event

11. Business Rules

11.1. Overview

The validation rules for individual fields are in the extract file layout. Other rules are defined here.

11.2. Errors, Warnings and Cautions

Rules can generate errors, warnings or cautions. If a record causes an error it will always be rejected. Cautions are used to describe why data is considered invalid. If a record causes a caution, it will be loaded. If a record causes a warning, it will be rejected. However, if it is re-submitted it will be accepted. The system will record all warnings and check to see if the warning has already been sent to the DHB.

Warnings will be implemented at a later phase.

11.3. Purchase unit and specialty cross-validation

The facility will be available to add rules for gender and age cross-validation with health specialty and purchase units, where such rules have been identified. For example, paediatric specialties may have a maximum age. These rules will generate warnings rather than errors.

This will be implemented at a later phase.

11.4. Purchase Unit Date Validation

Start and End Dates were introduced for Purchase Unit Codes as at 1 July 2007. Validation is performed during the load process on the Equivalent Purchase Unit Code to ensure it is active for the Date of Service.

11.5. Checks Between Related Fields

Some data in an event record is validated against other data in the record or the system. This includes ensuring:

- The **IDF UOM** = 'client' and the **Volume** = 0
- The Purchase Unit Type = 'P' and the Volume = 0
- Service Type 'CRD' is only valid for Event Type 'CR'
- Valid combinations of Purchase Unit Type and Service Type as shown in the table below.

Service Purchase Unit Type									
Type	F- S- P- G- O- C-								
	First	Subsequent	Preadm	General	Procedure	Community			
PREADM	-	-	Valid	-	-	-			

FIRST	Valid	-	-	Valid	Valid	Valid
FOLLOWUP	-	Valid	-	Valid	Valid	Valid
CRD	-	-	-	Valid	Valid	Valid

For ED events the datetime stamps must be in chronological order. ie

- 1. Datetime of presentation ≤ Datetime of service
- 2. Datetime of presentation ≤ Datetime of service ≤ Datetime of first contact if Datetime of first contact not null
- 3. Datetime of service ≤ Datetime of first contact ≤ Datetime of departure if Datetime of departure not null

11.6. Duplicate Events Validation

From 1 July 2008, duplicate events in an extract will all be rejected. Duplicate events are defined all those events, including deletes, with the same:

- Extract System Identifier
- Client System Identifier
- PMS Unique Identifier

11.7. Cautions

Cautions are issued as a record is accepted with possibly the wrong IDF DHB.

11.8. Funding Agency

Funding Agency rules are as follows

	17	20	33	34	35	55	98	19	6	Α0
Purchaser Code	Accredited employer	Overseas eligible	MoH Screening Pilot	MOH- funded purchase	DHB- funded purchase	Due to strike	Mixed funding where no MOH, DHB or ACC purchase is involved	Overseas chargeable	Privately funded	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			Y	Υ						
The submitted Funding Agency Code must be1237										Y

Guidelines for Coding Events

11.9. Overview

This section provides additional guidelines for coding fields.

11.10. Events that occur outside a hospital

For purchase units that have events that may occur outside the hospital, reporting should be as follows

Location - choose the location that best describes where the event took place. The options are:

- 1 Public hospital
- 2 Private Hospital
- 3 Psychiatric Hospital
- 5 Private Residence
- 6 Other
- 10 Residential Care
- 11 Marae
- 12 Primary Care

Facility Code Where a facility code is available in the facility code table then enter it but it must reflect the location of the event. If no facility code is available leave the field blank. If you are using a facility code for the first time in NNPAC or if a code is rejected by the NNPAC load please notify the Identity Data Management Team in the Information Group.- National Health Board.

Examples

- 1. For DOM101-Professional nursing services provided in the community which will occur in the patients home use 5 Private Residence and leave facility code blank.
- 2. For S00008 Minor Operations eg Skin Lesions provided in GP Practice use 12 Primary Care and the facility code of that GP Practice from facility code table (http://www.health.govt.nz/nz-health-statistics/data-references/code-tables/common-code-tables/facility-code-table)

11.11. ED Timestamps 11.11.1 Datetime of Presentation

The date and time a patient presents/or is presented physically to the ED department; either the triage nurse or clerical staff, whichever comes first.

11.11.1.2 Datetime of Service (Triage)

The date and time that a triage nurse/suitable ED medical professional starts the process of categorising the triage level of the incoming patient (i.e. 1 - 5).

The appropriate standard of care is for the first contact with staff in the ED to be with a triage nurse ('triage first'), so this datetime ideally should be the same as 'datetime of presentation.' However, it is understood that patients may present to a receptionist first in some departments, or may wait in a triage queue on some occasions. Hence 'datetime of presentation' and 'datetime of triage' are recorded separately. However, DHBs should endeavour to have 'triage first' and to ensure triage is undertaken immediately upon the patient's arrival.

Note the 'datetime of triage' is from the start of triage. It is understood that many EDs record the time the triage nurse 'files' the electronic triage record for the patient and that this is often towards the end of the triage process. DHBs with EDs of this sort should endeavour to have a system which electronically records the start of triage.

11.11.1.3 Datetime of First Contact

The date and time that the triaged patient's treatment starts by a suitable ED medical professional (could be the same time as the above if treatment is required immediately i.e. triage level 1).

11.11.1.4 Datetime of Departure from ED

The date and time of the physical departure of the patient from ED to an in-patient ward, or the time at which a patient begins a period of formal observation (whether in ED observation beds, an observation unit, or similar), or the time at which a patient being discharged from the ED to the community physically leaves the ED.

The datetime of departure is the time at which the patient is physically moved from ED to an inpatient ward, or the time at which a patient begins a period of formal observation, whether in ED observation beds, an observation unit, or similar. The physical move will follow, or be concurrent with, a formal admission protocol, but it is the patient movement that stops the clock on the emergency event, not associated administrative decisions or tasks.

Inpatient wards include short stay units (or units with a similar function). Under certain circumstances, a 'decant' ward designed to deal with surge capacity will qualify as an inpatient ward. Key criteria are that patients should be in beds rather than on trolleys, and be under the care of appropriate clinical staff.

A formal observation area generally has dedicated space, dedicated staffing, and fixed capacity (beds). In relation to transfers to an APU; if there is a clinical intervention and supervision by ED staff over and above triage, then the time from presentation to transfer should be counted in reporting against the ED LOS target. Otherwise, it should be excluded.

Datetime of departure is the time at which a patient being discharged from the ED to the community physically leaves the ED. If a patient's treatment is finished, and they are waiting in the ED facilities only as a consequence of their personal transport arrangements for pickup, they can be treated as discharged for the purposes of this measure. If the patient goes home then returns to become an inpatient, then the clock stops at the point they leave the ED. If the patient goes home then returns to ED for further care, it is counted as another ED admission.

11.11.1.5 Date Time of Disposition

The date and time of the physical departure of the patient from observation to an inpatient ward or discharge to the community. If a patient's treatment is finished, and they are waiting in the observation facilities only as a consequence of their personal transport arrangements for pickup, they can be treated as discharged.

11.12. Community Referred Diagnostic Event

The type of events that should be reported under Community Referred Diagnostic Event include any tests that have purchase units that currently start with 'CS'. See table below.

PURCHASE_UNIT_CODE	PU_DESCRIPTION
CS01001	Community Radiology
CS02001	Community Laboratory (Hospital)
CS02002	Community Laboratory
CS02003	Refugees and Asylum seekers - lab tests
CS02004	Non-Schedule Community Laboratory Tests
CS03001	Hospital Dispensing of Pharmaceuticals
CS04001	Community referred tests - cardiology
CS04002	Community referred tests - neurology
CS04003	Community referred tests - audiology

CS04004	Community referred tests - gastroenterology	
CS04005	Community referred tests - endocrinology	
CS04007	Community referred tests - urology	
CS04008	Community referred tests - respiratory	
CS04009	Community referred tests - Pacemaker physiology tests	
CS05003	Long Stay Labs and Pharms	
CS05004	Mobile Dental X-Ray Service	

11.13. **Deaths**

There is no requirement to send NNPAC or NMDS events for patients who are dead on arrival in ED.

However, if a patient arrives in ED and receives treatment then dies, that event must be submitted to NNPAC as an EDA event and to NMDS too. This is the case irrespective of how long they received treatment.

11.14. Mode of Delivery

Definitions for Mode of delivery field NNPAC

Mode of delivery = how the activity was delivered (relationship between patient and clinician)
Reporting the mode of delivery does not change what activity providers are already reporting NNPAC, the purpose is to identify how services are currently being delivered

1	In Person (1 patient to 1 clinician)	Individual face in person at the same location. *Where tests are performed the mode of delivery is in person
2	In Person (1 patient to many clinicians)	Multi disciplinary meeting with patient present at the same location and time
3	In Person (1 clinician to many patients)	Group of patients being seen by one or more clinicians at the same location and time
4	Remote patient monitoring	monitoring of patient's biometric health information communicated from a remote patient medical device
5	Telephone	Voice only contact between patient and clinician using telephone
6	Video	Communication via technology enabling remote visual and audio contact between patient and clinician(s)
7	Non-contact	An event where decisions about patient health care are made without the patient being present.

^{*}Where tests are performed the mode of delivery is face to face - because at some point the patient was there - e.g. bloods were taken etc.