HL7 Messages Standard Definition

Applicable to:

Capitation Based Funding

Electronic Registers

Version 3.11 Version Control

Date	Version	Description	Author
22 Jul 2001	Draft	First draft - High Level	Stu McKinlay
23 Aug 2001	2.00	Add Trial Run Flag	Sheryll Mallett
27 Aug 2001	2.10	Updated Post team review	Terry Corkery
04 Oct 2001	2.20	Updated address field sizes as per Critchlow's request	Sheryll Mallett
31 Oct 2001	2.30	Cosmetic changes adding shading to fields not used or sent. Removed date of enrolment confirmation field, as this should appear in the date of enrolment field. Changed the Practice details contract number to Practice Id. Type of register changed from "PF" to "CF". Changed length of Provider type from 1 to 3.	Sheryll Mallett
6 Nov 2001	2.40	Updated tables 4 and 5 for return of patient error records as per discussion with Colin.	Sheryll Mallett
19 Nov 2001	2.50	Updated sample HL7 layout	Sheryll Mallett
27 Nov 2001	2.60	Updated doc to add criteria around file naming	Sheryll Mallett
15 Mar 2002	2.70	Reviewed document wording and segment definitions. Changed message naming conventions so that invalidly formatted messages could receive error messages in standard format. Renamed ZCT segment as 'Claim Type' (as per existing HB HL7 Messages). Added sample formats to appendicies.	Stu McKinlay
20 Mar 2002	2.71	Changed 'PCO' to a more generic 'Organisation' where applicable in order to cater for inclusion of PHO's and other organisations in the future. Changed mandatory fields in line with business rules documentation.	
03 Apr 2002	2.72	Reviewed in accordance with the return of validation results to submitting organisation.	
11 Jul 2002	3.0	New Version for CBF Production Release. Includes the following : 1. Organisation Name and Logo changes 2. The term Capitated replaced by Capitation 3. The term Provider replaced by Practitioner 4. Updated Fig 1 re: Organisation replacing PCO/PHO, CIC support and Health Benefits becoming Health PAC The above are not tracked. 5. Note on applicability of this spec to Capitation Information Cleansing (CIC). Also inserted a note that Payment Period is optional for CIC. 6. Modified 4.3.1 for : Practice must be followed by at least one Patient; Provider is optional, but	Subhasish Dutta

		when provided must be followed by at least one Patient. 7. Inserted section 4.3.2 regarding reserved and prohibited characters and unavailability of support for escape sequences. Also added a note to the same effect in 8.3.2. 8. Inserted a note in 5.2.5.3 on Rapid Addressing Numbers, and added an example in Appendix B 9. Added 8.3.8 MSH-8 Security which was missing. 10. Added file naming conventions for CBF and CIC to section 8.3.10 and updated 3.2 to refer to 8.3.10. 11. Added DOD field to 9.2 and two non-used missing fields from Patient Identification segment. Added 9.3.28 to 9.3.30 as Field Notes. 12. Changed 9.3.22 - PID-22 Ethnic Group from a compound to a repeating field. 13. In 14.2, changed Date of Last Consultation to Optional 14. Other minor corrections (e.g. numbered PID-23 to PID-27 correctly 15. Added a note on the fields to be filled for point-of-contact geocoding to be considered complete. 16. Added DHB field to ZRD segment and added Field Notes. 17. Replaced Appendix C – Sample HL7 formats with corrections as provided by Leonie.	
29 Jul 2002	3.01	Merged the “Message Acknowledgements: Detailed Use Case Specification” into this document, as follows : 1. Added Acknowledgement Types as 3.2 2. Reorganised 4.3 Triggers – to emphasize Message Structure in 4.4 and Acknowledgement Structure in 4.5. 3. Added Acknowledgement Segments as section 16. 4. Added List of Errors as Appendix D. 5. Other minor reorganisations (such as : removal of blank pages) 6. Note on optionality of patient address components. 7. Added examples for the File names of different acknowledgement types.	Subhasish Dutta
1 Aug 2002	3.02	1. Accepted all non-content related changes in the document, for onward transmission to PMS	Subhasish Dutta

		vendors. 2. Updated contact details to use HealthPAC Contact Centre after 20th August, and Donna Harrison prior to 20th August.	
12 Aug 2002	3.03	Updates made to Acknowledgement Messages : 1. ZER and ZSA custom CBF segment types added. 2. BNF Structure expanded 3. Registers and Acknowledgement Message Processing explained. 4. List of Error Identifiers corrected 5. Additional Sample files added. 6. Removed chapter 18 on Acknowledgement Types and Segments as this is covered elsewhere.	Subhasish Dutta
23 Sep2002	3.04	Additions / Changes for Production release 2 as follows: 1. Additional Error Descriptions for : • Valid Payment Reference Data for Organisation not found (Error Id – 1003) • Practice Exception for Organisation absent in Register (Error Id – 1005) 2. Additional ZSA eror identifier of 3004 - Rejection of Patient due to death in previous quarter 3. Note on the mandatory/optionality of delimiters 4. Minor corrections	Subhasish Dutta
12 Mar 2004	3.05	All ".reg" references changed to ".asr" Scheduled for PHO Release 5 as per DAA20	Ronil Bhindi
26 Mar 2004	3.06	• Change related to DAA20. Section 3.3.1 File Extension changed from "reg" to .asr". • Section 8.3.10 defines MSH-10-Message Control ID. The following examples in the appendices have been updated to be "CBFHL7**OUT**": • C.2.1, C2.2 changed to reflect Section 8.3.10 • Example 2, 3 and 4 • Change to CIC component of Section 8.3.10 to have the same structure for Message Control IDs for CBF files • Reviewed by Subhasish Dutta	Ronil Bhindi
26 March 2004	3.07	• Update to include the following three fields in the ZRD patient register segment as per DAA24 - Care Plus Initiative requirements: • Enrolment Status • Start date of enrolment • End date of enrolment	Ronil Bhindi

27 April 2004	3.08	Update to include Care Plus Initiative Requirements.	Lynda Kamstra
16 June 2004	3.09	Update the version number as requested by Primary Care Working Group	Lynda Kamstra
7 November 2005	3.10	Changed length of HUHC number from 6 to 7	Philippa Burcher
2 May 2007	3.11	Update to 15.3.20 ZRD-20-Care Plus Enrolment Start Date (remove rule that it must be on or after the ZRD-7-Date of Enrolment field)	Shane Kerr

Table of Contents

1. Brief Description

1.1 Introduction

This document defines messaging and communication standards for the electronic transfer of patient register information between Organisations and HealthPAC.

The requirements for transmitting these registers have been divided into 2 implementation phases. This standard falls into the second phase of the project, and covers transmission of patient registers for Capitation Based Funding. The first stage is to check with HealthPAC that you are eligible to claim the Capitation Based Funding subsidy. To enquire about or request an information pack on Capitation Based Funding, please contact HealthPAC Contact Centre on 0800 252 464, which is to be operational from 20th August 2002. Calls before this time please call Donna Harrison on (04) 381 5300.

This standard is based on Health Level Seven (HL7) version 2.3 with extensions to meet specific New Zealand and HealthPAC Electronic Registering requirements.

1.1.1 ***Capitation Information Cleansing*** *– Applicability of this specification*

This document will also serve as the specification for the HL7 messages required by the Capitation Information Cleansing (CIC) project. Differences known to exist between the requirements for CBF and CIC are enumerated in this specification, and will be added to as differences continue to be established.

1.1.2 ***Point-of-contact geocoding***

Point of contact geocoding is intended to be done by organisations of patient data they submit so as to avoid the subsequent process of geocoding by Critchlows. It is emphasized here that the following fields are mandatorily required in order that the point-of-contact geocoding be deemed complete, otherwise the patient address will be re-geocoded by Critchlows.

- Longitude
- Latitude
- Meshblock
- (Deprivation) Quintile
- Uncertainty Code
- Domicile Code
- DHB ID (of the Patient)

1.2 Scope

The scope of this document is to define the structure of incoming registers, their data definitions and the resulting acknowledgement messages returned, as used in the testing phase of the CBF Project. Specifically the following messages are defined:

- Registers, sent (or resubmitted) by the Organisation
- Acknowledgements, sent by HealthPAC

This document does not include the definitions for:

- Payment Reports

- Summary Reports
- BCTI's
- The messaging between HealthPAC CBF system and external validation systems (Geo-Coding and NHI).

1.3 Background

HealthPAC will provide a register validation, payment and reporting facility for the Ministry of Health and District Health Boards. Registers are submitted by Organisations to HealthPAC, who in turn validate the registers, make the necessary payment calculations and disbursements. HealthPAC also report to the Ministry of Health and District Health Boards who use the information for contract management and analytical purposes.

This document defines the standards for the automated submission of Practice Patient Registers for GMS and Practice Nurse Capitation Based Funding subsidies. It also describes the acknowledgement messaging of these registers to the Organisation.

1.4 HL7 Standards

This document is consistent with the HL7 standard which corresponds to level 7 of the International Standards Organisation (ISO) Open System Interconnection (OSI) model. The primary goal of HL7 is:

> *…to provide standards for the exchange of data among health-care computer applications that eliminates or substantially reduces the custom interface programming and program maintenance that may otherwise be required.*

The HL7 standard allows for local extensions to be specified when required functionality is not present in the base HL7 specification. This option was used by the Ministry of Health (MOH) to create the IT 92-003.5 HL7 standard which provides the necessary transactions to support the establishment of a national index of patient demographic information. Also HL7 has proven to be effective in transmitting medical information. This, coupled with its use previously in New Zealand, makes it an ideal candidate as the basis of this message definition.

2. GMS and Practice Nurse Capitation Based Funding

2.1 CBF Messaging

Organisations may submit practice registers to HealthPAC via HealthPAC Portal as shown in the following figure.

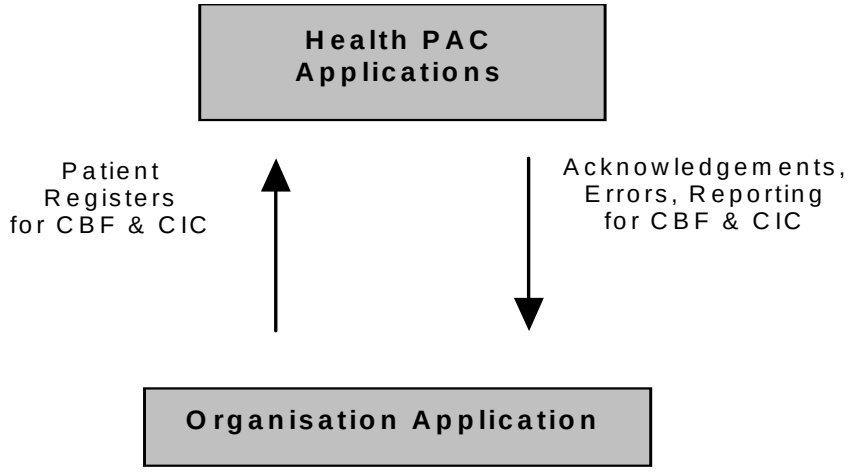


Figure 1: Transfer of registers between Organisations and HealthPAC

A Patient Register will result in the following information being transferred from the Organisation Application for each register:

- Organisation Details
- Practice details
- Practitioner details
- Patient details

The processing of an HL7 Register is conveniently divided into three stages. A different Acknowledgement Message is produced on completion of each stage. The three stages in the processing of HL7 Registers and the types of Acknowledgement Messages produced are as follows :

• Parsing, Cleansing and Saving HL7 Register	Reject or Accept Acknowledgement
• Detailed checking	Error Acknowledgement
• Enrichment.	Validation Acknowledgement

Each Acknowledgement message, which may include Error information about the acknowledged Register, will:

- Identify the Register message being acknowledged
- Identify and describe any errors with the Register that cause the HealthPAC system from processing it further

2.2 Assumptions

In developing this standard some assumptions have been made.

Technical Assumptions

The reader has some understanding of the HL7 messaging standard, and this standard is to be read in conjunction with [1], [2] and [3] (refer to appendix A for reference details).

The systems that transfer data in this manner will have online access to HealthPAC Claim Portal where messages can be placed and collected.

Each Organisation involved in the Pilot will be assigned a mailbox within the HealthPAC Portal.

For any questions on technical assumptions please direct your enquiries to HealthPAC Contact Centre or Donna Harrison (please see section 1.1). .

3. Transaction Definitions

3.1 Introduction

A transaction is considered to be a set of HL7 messages that completely and accurately transfer the required information from one computer system to another. In its simplest case a transaction may be the sending of a single HL7 message and a returned acknowledgement that the message was received and processed correctly.

The transactions defined in this chapter are concerned with the movement of Capitation Based Funding patient registers and message acknowledgements between an Organisation and HealthPAC.

Below is described the different Acknowledgements that can be sent in response to a message.

3.2 Acknowledgement Types

Every message received by the CBF system will result in an acknowledgement message. There are different types of acknowledgements for different scenarios / stages of processing that are outlined below.

3.2.1 Accept Acknowledgements

An accept acknowledgement message is sent whenever a register is received and parsed to the CBF system with no errors. Processing will continue and no follow up is required from the claiming organisation.

3.2.2 Reject Acknowledgements

A reject acknowledgement message is sent whenever a register message cannot continue processing. High level reasons the CBF system cannot process the file are because:

- The file is not recognized or is corrupt.
- The file format is not correct.
- Mandatory segments are missing (eg. Message Header, Organisation details, Claim Type or Practice)
- Mandatory data is missing or invalid in the Message Header, Organisation details, Claim Type or Practice segments.
- NHI or Residential Address thresholds are not met.

3.2.3 Error Acknowledgements

An error acknowledgement message is sent whenever a register message can continue processing but contains errors that will cause the rejection of one or more patient records. High level reasons the CBF system will not process the patient record are:

- Practice segment (ZPR) format is invalid or mandatory data is missing.
- Practitioner segment (PRD) format is invalid or mandatory data is missing.
- Patient segment (PID or ZRD) format is invalid or mandatory data is missing.

Note:

Where a practice segment rejects, all practitioners within that practice will reject.

Where a Practitioner segment rejects, all patients within that practitioner will reject.

3.2.4 Validation Acknowledgements

A validation acknowledgement message is sent at the end of register processing to indicate the final register state to the claiming organisation. This message will include:

- all patient records and their validated data (eg. address, NHI, CSC, HUHC) that is included in the final register for payment calculation.
- all patient records removed as duplicate records (from cross register matching).

NOTE : Earlier in CBF, the Accept and Reject Acknowledgement files had the extension "_1.err" and the Error Acknowledgement file had the extension "_2.err".

3.3 File Naming Conventions

NOTE : *The File name is primarily made up from the message control id, which is a composite of several items which together ensures that the filename is meaningful.*

3.3.1 Registers Submitted to HealthPAC

The filename for each HL7 file should be in the following format:

File name = *messagecontrolid*

File Extension = ' asr

The segment details section on Message Header (MSH) contains the description of 'message control id'.

The file should then be zipped up using a file extension of ZIP.

Examples are provided in the section on MSH segment details.

3.3.2 Acknowledgement Files returned from HealthPAC

The filename depends on the type of acknowledgement but has the following general form :

File name = *'messagecontrolid*

NOTE : The *messagecontrolid* is different for the different files / messages / acknowlegements.

File extension = depends on acknowledgement type and is given below :

Acknowlegement Type	**File extension**
Accept	.ack
Reject	.ack
Error	.err
Validation	.asr

Examples of file names are provided along with a description of *messagecontrolid* in the section on MSH segment details.

3.4 Transaction, Messages and Segments used

3.4.1 Transaction Summary

The following table lists the transactions defined in this document:

Trigger Event	Transaction Name	Message Type Sent	Message Type Returned
C90	CBF Patient Registers	REG	ACK

Table 1: Transaction Summary.

3.4.2 Message Type Summary

This transaction utilises the following messages:

Message Type	Description
REG	Capitation Based Funding - Patient Register
ACK	Acknowledgement

Table 2: Message Type Summary.

3.4.3 HL7 Segments Used

HL7 segments used in Capitation Based Funding messages are:

Segment ID	Segment Name
MSA	Message Acknowledgement
MSH	Message Header
ERR	Error
PID	Patient Identification
PRD	Practitioner
ZCT	HealthPAC Claim Type
ZPC	Organisation Details
ZPR	Practice Details
ZRD	Patient Register Details

Table 3: HL7 Segments for Capitation Based Funding Patient Registers.

3.4.4 Column Headings

The notation used is consistent with that used in [1], [2] and [3] (refer to appendix A for reference details) with column headings having the following meaning:

Column Header	Description
REF	Unique HL7 three character segment identifier
Chapter	HL7 chapter in which the segment is defined
Name	The unique descriptive name for the data element.
Usage	Not all the data elements in the HL7 standard segments are used in the transaction set defined in this document. Possible values are: M mandatory (segment must be present) O optional (segment may or may not be present) C conditional on event trigger X not used or sent [...] Indicates the maximum number of repetitions allowed

4. Capitation Based Funding Patient Registers

4.1 Function

CBF Patient Register Transactions consist of a series of message types submitted between a Organisation and HealthPAC.

Registers are initiated by the Organisation register message, with acknowledgements being returned by HealthPAC.

4.2 Abstract Message Pair

Each triggering event is listed below along with the applicable form of the message exchange.

The triggering events that follow are all served by the HealthPAC Capitation Based Funding unsolicited update and ACK response.

In the following tables :

> *Braces, {...}, indicate one or more repetitions of the enclosed group of segments. The group may contain only a single segment. Brackets, [...], show that the enclosed group of segments is optional. If a group of segments is optional and may repeat it is enclosed in brackets and braces, {[...]}. {[...]} and [{...}] are equivalent.*

4.3 Triggers

Currently, in CBF, only one Event is used : Initiate Capitation Based Funding Patient Register (event code C90)

This trigger event is used by the Organisation to submit a Capitation Based Funding register to HealthPAC.

4.4 Structure of Patient Register

CLM	Patient Referral Message		Usage
MSH	Message Header		M
ZPC	Organisation Details		M
ZCT	HealthPAC Register Type		M
{			
ZPR	Practice Identifier		M
{			
[			
PRD	Practitioner Identifier		O
]			
PID	Patient Identification		M
ZRD	Register Details		M
{			
[			
PID	Patient Identification		O
ZRD	Register Details		O
]			

}			
}			
}			

Table 4: Patient Register of Message Pair for Capitation Based Funding

NOTES :

1. ***Each Practice segment must be followed by at least one segment each of Patient Identification and Register Details segments.***
2. ***The Practitioner segment is optional, but where provided, must be followed by at least one segment each of Patient Identification and Register Details segments.***
3. ***In both of the above cases, there may then follow none, one or more pairs of Patient Identification and Register Details segments.***

4.5 Structure of Patient Register Acknowledgement

All message acknowledgements will contain a CBF generated unique message header (MSH) and a message acknowledgement (MSA). One or more error segments (ZER) may follow and where appropriate the segment in which the error occurs will follow.

The structure is described below using BNF :

Segment ID	Segment Type	Usage	NOTES for Each Acknowledgement Type			
			Accept	Reject	Error	Validation
MSH	Message Header	M	Mandatory			
MSA	Message Acknowledgment	M	Mandatory			
[			None of the following segments are returned.	-	-	-
ZPC]	Organisation Details	O	Required.	Optional ZPC, included only if it has errors	Not required	Required.
[{ZER}	CBF Error	O	Not required.	Optional, multiple ; required if one or more errors in ZPC	Not required.	
ZCT]	Claim Type	O	Required	Optional ZCT, included only if it has errors	Not required	Required
[{ZER }	CBF Error	O	Not required.	Optional, multiple ; required if one or more errors in ZCT	Not required	
{[			None of the following segments are returned.	Optional multiple Practices allowed		
ZPR]	Practice Details	O	-	Optional ZPR, included only if it has errors, or lower level segments (PRD, PID, ZRD) has errors.	Required	
[{ZER }	CBF Error	O	-	Optional, multiple ; required if one or more errors in ZPR	Not required	
{[			-	Not required	Required, multiple ZSA allowed	
ZSA]	Grouping Message	O	-	Not required	Required, multiple ZSA groupings (of patients)	

Segment ID	Segment Type	Usage	NOTES for Each Acknowledgement Type			
			Accept	Reject	Error	Validation
{[			-	Optional multiple Practitioners allowed		
PRD]	Practitioner	O	-	Optional PRD, included only if it has errors, or higher level segment (ZPR) has errors.		Required
[{ZER }	CBF Error	O	-	Optional, multiple ; required if one or more errors in PRD		Not required
{[			-	Optional multiple Patients allowed		
PID	Patient Identification	O	-	Included only if PID or ZRD has errors, or higher level segment (ZPR, PRD) has errors	Included only if PID or ZRD has errors	Required
[{ZER }]	CBF Error	O	-	Optional, multiple ; required if one or more errors in PID.		Not required
ZRD	Patient Register Details	O	-	Included only if PID or ZRD has errors, or higher level segment (ZPR, PRD) has errors	Included only if PID or ZRD has errors	Required
[{ZER }]	CBF Error	O	-	Optional, multiple ; required if one or more errors in ZRD.		Not required
]}			-			
]}			-			
]}			-			
]}			-			
[{ZER }]	CBF Error	O	-	Optional multiple segments for “other” errors – see example 1 of Reject Acknowledgement below.		
]			-			

Table 5: Structure of Acknowledgement Message.

4.5.1.1 Accept Acknowledgement Notes

Where an Accept Acknowledgement occurs only the message header and message acknowledgment segments will be returned.

4.5.1.2 Reject Acknowledgement Notes

Where a CBF Error Segment (or segments) occur in a Reject Acknowledgement, the associated segment in which the error occurs will be displayed (except for errors where thresholds are not met).

Where a CBF Error occurs in a Practitioner, Patient Identification or Patient Register Details segment, the “owning” Practice segment will also be displayed.

4.5.1.3 Error Acknowledgement Notes

If one or more associated Practitioners and Patient segments for a Practice are without errors, then these segments will be contained in a Grouping Message segment for the Practice.

If one or more associated Practitioners and Patient segments for a Practice are with errors, then these segments will be contained in a Grouping Message segment for the Practice.

Where a CBF Error Segment (or segments) occurs in an Error Acknowledgement, the associated segment in which the error occurs will be displayed.

Where a CBF Error occurs in a Practitioner, Patient Identification or Patient Register Details segment, the “owning” Practice segment will also be displayed.

Where a CBF Error Segment (or segments) is displayed for the following segment, the associated segment will also be displayed (as follows).

- practice (ZPR) - all practitioners (PRD) and patients (PID and ZRD) within that practice will reject and be displayed also.
- practitioner (PRD) - all patients (PID and ZRD) within that practitioner will reject and be displayed also.
- patient identification or register details (PID or ZRD) - both segments will be displayed.

4.5.1.4 Validation Acknowledgement Notes

If one or more associated Practitioners and Patient segments for a Practice are validated and enriched, then these segments will be contained in a Grouping Message segment for the Practice.

If one or more associated Patient segments for a Practice are identified to be duplicates, then these segments will be contained in a Grouping Message segment for the Practice.

CBF Error Segments are absent in this Message.

Organisation Details and Claim Type segments are absent in this Message.

All valid Practice and patient identification, patient register details segments are included in this Message.

4.6 Reserved Characters

The following characters have a special use in HL7 and are reserved and must not be used / present in text or other fields, except for their intended special purpose (see section 8.3.1 and 8.3.2) :

| ^ ~ \ &

The following characters are also not supported

‘ “

Some of these special characters are supported in the HL7 standard with escape sequences, but this feature is not supported in this implementation.

4.7 Delimiters

This is as per the HL7 2.3 Standard, but is being stated separately with regard to Segment Terminator and Field Delimiter, which are as follows :

- Segment Terminator CR (Carriage Return character) and optionally LF(Line Feed character)
- Field Delimiter |

Note : The last field in a segment will not be followed by a field delimiter, as the segment terminator will be present instead.

Note : The mandatory / optionality of the different types of delimiters is described below in line with the HL7 Standard.

- Segment Delimiter (CR and optionally LF) is mandatory, except at the end of the message file.
- Field/Component Delimiter ('|') is mandatory, except at the end of the segment.
- Sub-component Delimiters, which occur in in Compound fields, ('^') are optional. However, if, for example, the fifth sub-component of six sub-components is mandatory, then the first four ^ characters are mandatory and the fifth ^ can be omitted.

As an example, the MSA segment should look like (using nonsense values) :

MSA|xyz||||abc^abc1^CBF

5. Segment Definitions

5.1 Introduction

Segments, in HL7 are logical groupings of related items of information. They are the building blocks of messages. This chapter describes the message segments used to construct the transaction message pairs as defined in Chapter 3.

5.2 Segment Descriptions

The segment descriptions are in a standard format using the following sub-sections.

5.2.1 Function

Contains a brief description of the type of data the segment contains or purpose for which it is intended.

5.2.2 Table of Fields

This sub-section lists the fields contained within each segment. The notation used in this section is consistent with that used in [1], [2] and [3] (refer to appendix A for reference details) with column headings having the following meaning:

Column Header	Description
SEQ	The sequence number showing the ordinal position of the data element within the segment.
LEN	The maximum length of the data element.
DT	The data type of the data element (see below for definitions).
OPT	Whether the data element is required or optional. Possible values are: R required, non-null N required, can be null O optional C conditional on event trigger [Only R has been utilised by the HL7 standard at this stage with a blank entry implying optional.]
RP#	The number of times the data element can repeat.
TBL#	The unique numeric identifier of the table containing the list of permissible values and their meaning. Unamended Standard tables can be found in [1] (refer to appendix A for reference details). Amended ones, and those which are specific to this document, are listed in Appendix B.
Item#	The unique numeric identifier for this data element within the HL7 data dictionary. The non-HL7 standard data elements introduced for this standard have been allocated in the range 11000 upwards.
Name	The unique descriptive name for the data element.

Column Header	Description
Usage	Not all the data elements in the HL7 standard segments are used in the transaction set defined in this document. Possible values are: M mandatory O optional C conditional on event trigger X not used

Where a standard HL7 segment has been utilised, this sub-section contains the message segment field list as shown in [1] (refer to appendix A for reference details). Any differences between standard HL7 segment defined in [1] are highlighted in Bold Italics and an * included in the USAGE column.

5.2.3 Table of Field Usage

For segments where field usage varies between trigger events an additional table is provided to detail these variations.

5.2.4 Field Notes

The field notes provided expand on the information shown in the Table of Fields giving:

- sub-component formats
- optionality of sub-components;
- New Zealand usage and valid values; and
- a more descriptive meaning of the field's purpose

5.2.5 Data element type descriptions

This implementation uses the data element definitions specified in [2] (refer to appendix A for reference details) with the following exceptions.

5.2.5.1 PN - Person Name

To allow for transmission of complete NHI name data, and prefix information the PN data type has been increased in size from 80 characters to a maximum length of 100 characters in all message segments.

Sub Component	NZ Usage	Notes
<family name> ^	ST(25)	
<first given name> ^	ST(20)	
<second given name> ^	ST(20)	
<third given name> ^	ST(20)	

Sub Component	NZ Usage	Notes
<prefix (e.g. DR)> ^	ST(4)	MR MAST Master MRS MISS MS DR Doctor SIR DAME Dame REV Reverend CRD Cardinal PROF Professor HON Honourable
<degree (e.g. MD)> ^	(not used)	
<source table ID>	(not used)	

5.2.5.2 CN - Composite ID Number and Name

To allow for transmission of NHI name data, and prefix information the CN data type has been increased in size from 60 characters to a maximum length of 90 characters in all message segments.

Sub Component	NZ Usage	Notes
<ID Number> ^	ST(7)	New Zealand Medical Council number
<family name> ^	ST(25)	
<given name> ^	ST(20)	
<middle initial or name> ^	ST(20)	
<suffix (e.g. JR. or III)> ^	(not used)	
<prefix (e.g. DR)> ^	ST(4)	(see PN data type for details)
<degree (e.g. MD)> ^	(not used)	
<source table ID>	(not used)	

5.2.5.3 AD - Address

To allow for transmission of NHI address data, address type and New Zealand domicile code, the AD data type differs in size from HL7 standards.

Sub Component	NZ Usage	Notes
<street address> ^	ST(35)	Address line 1 ; also see Note below.
<other designation> ^	ST(30)	Address line 2
<city> ^	ST(30)	Suburb
<state or province> ^	ST(30)	City/Town
<zip> ^	(not used)	
<country> ^	(not used)	Country

Sub Component	NZ Usage	Notes
<type>^	(not used)	"C" - current or temporary "P" - permanent "M" - mailing "B" - business
<other geographic designation>	ST(4)	New Zealand domicile code

NOTE : For rural / semi-rural addresses that have ***Rapid Addressing Numbers***, these numbers are to be placed where a house number would usually go. E.g. if an address, Busby Manor in Cheltenham has a rapid addressing number of 1435, <street address> would be 1435 Busby Manor.

5.2.5.4 TN – Telephone

To allow for multiple phone numbers the TN section is in use.

Sub Component	NZ Usage	Notes
[NN]	(not used)	Country Code
[(99)]	NM(2)	Area Code
9999999	NM(7)	Phone Number
[X99999]	(not used)	Extension
[B99999]	(not used)	Pager number
[C#<any text>]	CH<text>	Home phone number with up to 15 characters of <text>
	CO<text>	Office phone number with up to 15 characters of <text>
	CF<text>	FAX phone number with up to 15 characters of <text>
	CC<text>	Cellular phone number with up to 15 characters of <text>
	CB<text>	Beeper phone number with up to 15 characters of <text>

6. Segment Descriptions

The following pages contain segment and data descriptions for Capitation Based Funding patient registers. These segment descriptions are designed to help in the building and maintenance of patient registers.

Any feedback that may make these description sections more useful or easier to follow is most appreciated. This feedback should be directed to HealthPAC Contact Centre or Donna Harrison (please see section 1.1).

7. MSA - Message Acknowledgement Segment

7.1 Function

This segment contains information sent to acknowledge a message. It may contain error, notification, reject or acceptance messages.

7.2 Table of Fields - MSA Segment

Seq	Len	DT	Opt	RP/#	TBL#	Item#	Element Name	Usage
1	2	ID	R		0008	00018	Acknowledgement Code	M
2	20	ST	R			00010	Message Control ID	M
3	80	ST	O			00020	Text Message	X
4	15	NM	O			00021	Expected Sequence Number	X
5	1	ID	B		0102	00022	Delayed Acknowledgement Type	X
6	100	CE	O			00023	Error Condition	C

7.3 Field Notes

7.3.1 MSA-1-Acknowledgment Code

Valid Values	Description
AA	Acknowledgment Accept
AE	Acknowledgement Error
AR	Acknowledgement Reject
AV	Acknowledgement Validation
CA	Enhanced mode: Accept acknowledgement: Commit Accept
CE	Enhanced mode: Accept acknowledgement: Commit Error
CR	Enhanced mode: Accept acknowledgement: Commit Reject

7.3.2 MSA-2-Message Control ID

Sub Component	NZ Usage	Notes
< Message Control ID >	ST(20)	Unique identifier of the message being acknowledged.

7.3.3 MSA-3-Text Message

Not used.

7.3.4 MSA-4-Expected Sequence Number

Not used.

7.3.5 MSA-5-Delayed Acknowledgement Type

Not used.

7.3.6 MSA-6-Error Condition

Sub Component	NZ Usage	Notes
<identifier> ^	ID(4)	Error condition code
<text> ^	ST(90)	Error text description
<name of coding system> ^	"CBF"	HealthPAC CBF Messages
<altern. Identifier> ^	(not used)	
<altern. Text> ^	(not used)	
<name of altern. coding system>	(not used)	

8. MSH - Message Header

8.1 Function

This segment is common to all messages and is a control segment which specifies the sender/receiver, purpose and formatting syntax. For a full description see [1] (refer to appendix A for reference details).

8.2 Table of Fields

Seq	Len	DT	Opt	RP/#	TBL#	Item#	Element Name	Usage
1	1	ST	R			00001	Field Separator	M
2	4	ST	R			00002	Encoding Characters	M
3	180	HD	O			00003	Sending Application	M
4	180	HD	O			00004	Sending Facility	M
5	180	HD	O			00005	Receiving Application	M
6	180	HD	O			00006	Receiving Facility	M
7	26	TS				00007	Date/Time of Message	M
8	40	ST				00008	Security	O
9	7	CM	R		0076	00009	Message Type	M
10	20	ST	R			00010	Message Control ID	M
11	3	PT	R		0103	00011	Processing ID	M
12	8	ID	R		0104	00012	Version ID	M
13	15	NM				00013	Sequence Number	X
14	180	ST				00014	Continuation Pointer	X
15	2	ID			0155	00015	Accept acknowledgement type	X
16	2	ID			0155	00016	Application acknowledgement type	X
17	2	ID				00017	Country Code	X

8.3 Field Notes

8.3.1 MSH-1-Field separator

Valid Values	Description
"|"	Field/element separator.

8.3.2 MSH-2-Encoding characters

Valid Values	Description
"^~\&"	To ensure messaging consistency the preceding encoding characters must be used. Where '^' – Component Separator '~' – Repetition Separator '\' – Escape Character '&' – Sub-component Separator

ADDITIONAL NOTES :

1. It is emphasized that none of the characters representing Field Separator or Encoding Characters can be used in text or other fields, except for the above purpose.

2. Also included in this prohibition are single and double quotes (i.e. ‘ and “).
3. It is also reiterated that Escape sequences are not supported.

8.3.3 MSH-3-Sending Application

The identifying code of the Software package used.

8.3.4 MSH-4-Sending Facility

The identifying code for Organisation or PMS vendor.

8.3.5 MSH-5-Receiving Application

The identifying code of the HealthPAC system that will process the claim

8.3.6 MSH-6-Receiving Facility

HealthPAC

8.3.7 MSH-7-Date/Time of Message

Component	NZ Usage	Notes
< Date/Time of Message>	TS(14)	CCYYMMDDHHMMSS (Example: 20010507192132)

8.3.8 MSH-8-Security

It is optional and its use is not further specified.

8.3.9 MSH-9-Message Type

Sub-Components	NZ Usage	Notes
<Message type>^	“REG” “ACK”	Patient Record Message Acknowledgement
<Trigger Event>	“C90"	Initiate Capitation Based Funding Register

8.3.10 MSH-10-Message Control ID

Components	NZ Usage	Notes
< Message Control ID >	ST(31)	Unique identifier for the message assigned by the sending system, (Note this is consistent with the MOH NHI/MWS HL7 implementation). The format of the message control id depends on a number of factors, including whether the message is for CBF or CIC, as described below.

NOTE : The message control id determines the file name for messages, extracts, acknowledgements and error files.

NOTE : The filename extensions to be used are as follows :

- Register and Validation Acknowledgement files : .asr
- Reject or Accept Acknowledgement files : .ack
- Error Acknowledgement files : .err

NOTE :

1. ORGID is to be replaced by the Organisation Identifier
2. mmddhh is to be replaced by the date and month followed by the hour at which the message was created.
3. Quoted text is to be used exactly as given.

Message Control IDs for CBF files :

NOTE : In the examples provided, the Organisation has an ID of 432456 and the CBF REG message is sent on 1st August at 11 AM :

Message Type	Source	Destination	Form of Message Control ID	Example
CBF Register	Organisation	CBF	"CBFHL7IN"_ORGID_mmddhh	CBFHL7IN_432456_080111.asr
Accept / Reject Acknowledgement	CBF	Organisation	"CBFHL7OUT"_ORGID_mmddhh	CBFHL7OUT_432456_080111.ack
Error Acknowledgement	CBF	Organisation	as above	CBFHL7OUT_432456_080111.err
Extract to be geocoded	CBF	Critchlows	"CBFGEO"_ORGID_mmddhh	CBFGEO_432456_080111
Geocoded extract	Critchlows	CBF	"CBFGEO"_ORGID_mmddhh"MCD	CBFGEO_432456_080111MCD
Extract to be validated by NZHIS	CBF	NZHIS	"CBFNHI"_ORGID_mmddhh	CBFNHI_432456_080111
NZHIS validated extract	NZHIS	CBF	"CBFNHI"_ORGID_mmddhh"MCD"	CBFNHI_432456_080111MCD
Validated CBF Register / Validation Acknowledgement	CBF	Organisation	"CBFHL7OUT"_ORGID_mmddhh	CBFHL7OUT_432456_080111. asr

Message Control IDs for CIC files :

Message Type	Source	Destination	Form of Message Control ID
CIC Register	Organisation	CIC	"CICHL7IN"_ORGID_mmddhh.asr
Accept / Reject Acknowledgement	CIC	Organisation	"CICHL7OUT"_ORGID_mmddhh.ack
Error Acknowledgement	CIC	Organisation	CICHL7OUT"_ORGID_mmddhh.err
Extract to be geocoded	CIC	Critchlows	"CICGEO"_ORGID_mmddhh
Geocoded extract	Critchlows	CIC	"CICGEO"_ORGID_mmddhhMCD"
Extract to be validated by NZHIS	CIC	NZHIS	"CICNHI"_ORGID_mmddhh
NZHIS validated extract	NZHIS	CIC	"CICNHI"_ORGID_mmddhhMCD"
Validated CIC Register / Validation Acknowledgement	CIC	Organisation	"CICHL7OUT"_ORGID_mmddhh.asr

8.3.11 MSH-11-Processing ID

Valid Values	Description
"D"	Development / Debugging
"P"	Production

“T” “L”	Test / Training/Trial Pilot

8.3.12 MSH-12-Version ID

Valid Values	Description
“2.3”	To specify the version 2.3 of HL7 is being used.

9. PID - Patient Identification

9.1 Function

This segment contains data that serves to uniquely identify a patient record.

9.2 Table of Fields - PID Segment

Seq	Len	DT	Opt	RP/#	TBL#	Item#	Element Name	Usage
1	4	SI				00104	Set ID	X
2	16	CK				00105	Patient ID (External ID)	O
3	20	CX	R	Y		00106	Patient ID (Internal ID)	M
4	12	ST		Y		00107	Alternate Patient ID	X
5	100	PN	R			00108	Patient Name	M
6	100	PN				00109	Mother's Maiden Name	X
7	26	TS				00110	Date of Birth	M
8	1	IS			0001	00111	Gender	M
9	100	PN		Y		00112	Patient Alias	O
10	2	IS			0005	00113	Race	X
11	180	AD		Y		00114	Patient Address	O
12	4	IS				00115	County Code	X
13	40	TN		Y		00116	Phone Number – Home	X
14	40	TN		Y		00117	Phone Number – Business	X
15	60	CE			0296	00118	Primary Language	X
16	1	IS			0002	00119	Marital Status	X
17	3	IS			0006	00120	Religion	X
18	20	CX				00121	Patient Account Number	X
19	16	ST				00122	SSN Number	X
20	25	CM				00123	Driver's Licence Number	X
21	20	CX				00124	Mother's Identifier	X
22	8	CE			0189	00125	Ethnic Group	M
23	60	CE				00126	Birth Place	X
24	2	ID			0136	00127	Multiple Birth Indicator	X
25	2	NM				00128	Birth Order	X
26	4	IS		Y	0171	00129	Citizenship	X
27	60	CE			0172	00130	Veterans Military Status	X
28	80	CE			0212	00739	Nationality	X
29	26	TS				00740	Patient Death Date and Time	O
30	1	ID			0136	00741	Patient Death Indicator	X

9.3 Field Notes

9.3.1 PID-1-Set Id

Not used.

9.3.2 PID-2-Patient Id (External Id)

The unique national identifier for health sector individual (ie. National Health Index).

Sub Component	NZ Usage	Notes
<patient ID (NM)>^	CN(7)	NZHIS Health Care User Identifier (NHI)
<check digit (NM)>^	(not used)	
<check digit scheme (ID)>^	(not used)	
<assigning facility ID (ST)>^	(not used)	
<type (ID)>	(not used)	

9.3.3 PID-3-Patient Id (Internal Id)

Practice's unique internal identifier for patient. This should not be an NHI.

9.3.4 PID-4-Alternate Patient Id (Internal Id)

Not used

9.3.5 PID-5-Patient Name

Patients full name. Format as per PN – Patient Name

9.3.6 PID-6-Mothers Maiden Name

Not used

9.3.7 PID-7-Date of Birth

Patient's date of birth (Health PAC usage does not include time of birth).

Valid Values	Notes
Valid dates	The patient's date of birth. As per HL7 standard (ie CCYYMMDD).

9.3.8 PID-8-Gender

Self identified gender of patient. Valid values as per table below.

Valid Values	Notes
"M"	Male
"F"	Female
"U"	Unknown

9.3.9 PID-9-Patient Alias

Patients full alias. Formatted as per 'Person Name'

9.3.10 PID-10-Race

Not used.

9.3.11 PID-11-Patient Address

Patient's residential or home address (see AD section of Data Element Type descriptions for format). Although residential address is not mandatory, there is a threshold in place of 80% that must be met for register to accept.

9.3.12 PID-12-Country code

Not used.

9.3.13 PID-13-Phone Number - Home

Not used.

9.3.14 PID-14-Phone Number - Business

Not used.

9.3.15 PID-15-Primary Language

Not used.

9.3.16 PID-16-Marital Status

Not used.

9.3.17 PID-17-Religion

Not used.

9.3.18 PID-18-Patient Account Number

Not used.

9.3.19 PID-19-SSN Number

Not used.

9.3.20 PID-20-Drivers Licence Number

Not used.

9.3.21 PID-21-Mother's Identifier

Not used.

9.3.22 PID-22-Ethnic Group

Patient's self-identified ethnicity codes. Patient may have up to three ethnic codes.

Sub-Component	Description
<Ethnicity 1>~	Primary Ethnicity
<Ethnicity 2>~	Secondary Ethnicity
<Ethnicity 3>	Tertiary Ethnicity

NOTE : This is a repeating field (and not a compound field), so if there is only one value, the ~ is not required. (e.g. |10|, or |11~12|).

The below table outlines ethnicity codes accepted by CBF.

Valid Codes	Notes
10	European not further defined
11	NZ European / Pakeha

Valid Codes	Notes
12	Other European
21	NZ Maori
30	Pacific Island not further defined
31	Samoan
32	Cook Island Maori
33	Tongan
34	Niuean
35	Tokelauan
36	Fijian
37	Other Pacific Island
40	Asian not further defined
41	South East Asian
42	Chinese
43	Indian
44	Other Asian
51	Middle Eastern
52	Latin American / Hispanic
53	African
54	Other
98	Declined to State
99	Not Stated

9.3.23 PID-23-Birth Place

Not used.

9.3.24 PID-24-Multiple Birth Indicator

Not used.

9.3.25 PID-25-Birth Order

Not used.

9.3.26 PID-26-Citizenship

Not used.

9.3.27 PID-27-Veterans Military Status

Not used.

9.3.28 PID-28-Nationality

Not used.

9.3.29 PID-29-Patient Death Date and Time

Patient's date of death (HPAC usage does not include time of death).

Valid Values	Notes
Valid dates	The patient's date of death. As per HL7 standard (ie CCYYMMDD).

9.3.30 PID-30-Patient Death Indicator

Not used.

10. PRD - Practitioner

10.1 Function

The details of the registered patients usual practitioner. The inclusion of this segment is optional, but where included Practitioner Type and Practitioner Identifier are required.

10.2 Table of Fields - PRD Segment

Seq	Len	DT	Opt	RP/#	TBL#	Item#	Name	Usage
1	3	CE	R	Y	0286	01155	Practitioner Type	O
2	100	PN	O	Y		01156	Practitioner Name	O
3	180	AD	O			01157	Practitioner Address	X
4	60	CM	O			01158	Practitioner Location	X
5	20	TN	O	Y		01159	Practitioner Phone Number	X
6	60	CM	O	Y		01160	Electronic Address	X
7	200	CE	O		0185	01161	Preferred Method of Contact	X
8	90	CN	R	Y		01162	Practitioner Identifiers	O
9	26	TS	O			01163	Effective Start Date of Role	X
10	26	TS	O			01164	Effective End Date of Role	X

10.3 Field Notes

10.3.1 PRD-1-Practitioner Type

Sub-Component	Valid Values
<Practitioner Type>^	“M” = MCNZ Registered
<Role Type>	“P” = Practitioner

10.3.2 PRD-2-Practitioner Name

Practitioners name, minimum requirement is for practitioners surname. See 'Data Element Type' section for PN format.

10.3.3 PRD-3-Practitioner Address

Not used.

10.3.4 PRD-4-Practitioner Location

Not used.

10.3.5 PRD-5-Practitioner Phone Number

Not used.

10.3.6 PRD-6-Electronic Address

Not used.

10.3.7 PRD-7-Preferred Method of Contact

Not used.

10.3.8 PRD-8-Practitioner Identifiers

HealthPAC usage is the practitioner's New Zealand professional registration number. In CBF all registration numbers will be New Zealand Medical Council. Valid characters are 0 – 9.

NOTE : The CN data type allows the same information as PN data type to be entered. However, for PRD-8, these components are not used.

10.3.9 PRD-9-Effective Start Date of Role

Not used.

10.3.10 PRD-10-Effective end Date of Role

Not used.

11. ZCT –Claim Type

11.1 Function

The type of register being made.

11.2 Table of Fields

Seq	Len	DT	Opt	RP/#	TBL#	Item#	Name	Usage
1	2	ST					Type of Register	M
2	9	ST					Disb 1 Payee Number	X
3	30	ST					Disb 1 Payee Name	X
4	9	MO					Disb 1 Payee Amount	X
5	9	ST					Disb 2 Payee Number	X
6	30	ST					Disb 2 Payee Name	X
7	9	MO					Disb 2 Payee Amount	X
8	9	ST					Disb 3 Payee Number	X
9	30	ST					Disb 3 Payee Name	X
10	9	MO					Disb 3 Payee Amount	X

11.3 Field Notes

11.3.1 ZCT-1-Type of Register

Valid Values	Description
“CF”	Capitation Based Funding subsidy.

11.3.2 ZCT-2-Disb 1 Payee Number

Not Used.

11.3.3 ZCT-3- Disb 1 Payee Name

Not used.

11.3.4 ZCT-4- Disb 1 Payee Amount

Not used.

11.3.5 ZCT-5- Disb 2 Payee Number

Not used.

11.3.6 ZCT-6- Disb 2 Payee Name

Not used.

11.3.7 ZCT-7- Disb 2 Payee Amount

Not used.

11.3.8 ZCT-8- Disb 3 Payee Number

Not used.

11.3.9 ZCT-9- Disb 3 Payee Name

Not used.

11.3.10 ZCT-10- Disb 3 Payee Amount

Not used.

12. ZER –CBF Error

12.1 Function

Provides further information on errors present in the register.

NOTE : The HL7 Standard ERR segment type is not used in CBF.

12.2 Table of Fields

Seq	Len	DT	Opt	RP/#	TBL#	Item#	Element Name	Usage
1	206	CM	R	Y			Error Message	M

12.3 Field Notes

12.3.1 ZER-1- Error Message

Component	NZ Usage	Notes
<error code>^	ID(4)	Error condition code ; valid values are defined in Tables 5 and 6.
<error text>^	ST(80)	Error text description; specified in Tables 5 and 6.
<field-level error text>	ST(120)	Detailed Error text description identifying the field (and possibly the component); specified in Tables 5 and 6.

NOTE : The introduction of additional Composite fields is advised against in the HL7 2.3 Standard, which will be acted on in a subsequent release.

13. ZPC – Organisation Details

13.1 Function

The Organisation details for a register submission to HealthPAC.

NOTE : The term ***Organisation*** is being used as the common term replacing and representing PHO and the earlier PCO. PMS Developers are to keep in mind that presence of the term Organization implies either / both PCO / PHO.

13.2 Table of Fields

Seq	Len	DT	Opt	RP/#	TBL#	Item#	Name	Usage
1	10	ST					Organisation ID	M
2	6	NM					Contract Number	M
3	9	NM					Payee Number	M
4	8	DT					Payment Period	M See Note
5	9	NM					Total Affiliated Practices	M
6	9	NM					Total Registered Patients	M
7	30	ST					Organisation Name	M

13.3 Field Notes

13.3.1 ZPC-1- Organisation ID

The assigned Organisation Identifier (Perorg ID) from the Ministry of Health's Contract Management System.

13.3.2 ZPC-2- Contract Number

The assigned Contract Number from the Ministry of Health's Contract Management System.

In the case of CIC only, this field can be provided as "999999"

13.3.3 ZPC-3- Payee Number

The assigned Payee Number from the Ministry of Health's Contract Management System. This will ensure payment is directed to the correct account where multiple bank accounts are held by a claimant.

In the case of CIC only, this field can be provided as "999999999"

13.3.4 ZPC-4- Payment Period

The first date of payment period for which the register is being submitted. For example, '20020701' for the July to September 2002 payment period.

NOTE : While this field is mandatory for CBF, it is optional for CIC.

13.3.5 ZPC-5- Total Affiliated Practices

The total number of practices included in this register.

13.3.6 ZPC-6- Total Registered Patients

The total number of patient records included in this register.

13.3.7 ZPC-7- Organisation Name

The Legal Name of the Organisation.

14. ZPR – Practice Details

14.1 Function

The Organisation details for a register submission to HealthPAC.

NOTE : Each Practice must be followed by at least one Patient, otherwise the Practice will not be processed.

14.2 Table of Fields

Seq	Len	DT	Opt	RP/#	TBL#	Item#	Name	Usage
1	35	ST					Practice Name	M
2	6	NM					Practice Id	M
3	9	NM					Payee Number	O

14.3 Field Notes

14.3.1 ZPR-1- Practice Name

The name of the practice to whom practitioners and patients are attached.

14.3.2 ZPR-2- Practice Identifier

The claiming organisation's unique internal identifier for a practice.

14.3.3 ZPR-3- Payee Number

The practices assigned HealthPAC Payee Number (if applicable).

15. ZRD – Patient Register Details

15.1 Function

This segment contains the patient information not included in PID with which Capitation Based Funding subsidies are calculated.

15.2 Table of Fields

Seq	Len	DT	Opt	RP/#	TBL#	Item#	Name	Usage
1	100	PN					Maiden Name	O
2	12	NM					Residential X Coordinate	O
3	12	NM					Residential Y Coordinate	O
4	1	IS					Residential Status	O
5	180	AD					Postal Address	O
6	15	TN					Mobile/Other Phone	X
7	8	DT					Date of Enrolment	M
8	8	DT					Date of Enrolment Confirmation	X
9	8	DT					Date of Last Consultation	O
10	1	IS					Registration Status	M
11	7	NM					HUHC Number	O
12	8	DT					HUHC Expiry Date	O
13	16	NM					CSC Number	O
14	8	DT					CSC Expiry Date	O
15	7	ST					Meshblock	O
16	2	NM					Quintile	O
17	4	ST					Validation Indicator	O
18	30	NM					DHB	O
19	1	IS					Care Plus Enrolment Status	O
20	8	DT					Care Plus Enrolment Start Date	O
21	8	DT					Care Plus Enrolment End Date	O

15.3 Field Notes

15.3.1 ZRD-1-Maiden Name

Patient's maiden name if applicable (see PN section of Data Element Type descriptions for format).

15.3.2 ZRD-2-Residential X Coordinate

Patient's residential latitude coordinate. Assigned via processes at HealthPAC or via point of contact geo-coding.

15.3.3 ZRD-3-Residential Y Coordinate

Patient's residential longitude coordinate. Assigned via processes at HealthPAC or via point of contact geo-coding.

15.3.4 ZRD-4-Residential Status

Valid Values	Notes
"Y"	Permanent resident (New Zealand citizen, or classified as 'ordinarily resident in New Zealand').
"N"	Temporary resident (not a New Zealand citizen, does not have 'ordinarily resident in New Zealand' status).

15.3.5 ZRD-5-Postal Address

Patient's postal or mailing address (see 'AD – Address' section of Data Element Type descriptions for format).

15.3.6 ZRD-6- Mobile/Other Phone

Patient's mobile or other phone number (see 'TN – Telephone' section of Data Element Type descriptions for format).

15.3.7 ZRD-7- Date of Enrolment

The date on which the patient enrolled or registered with the Organisation.

15.3.8 ZRD-8- Date of Enrolment Confirmation

Not used.

15.3.9 ZRD-9- Date of Last Consultation

The date on which the patient's last consultation occurred.

15.3.10 ZRD-10- Registration Status

Patients current registration status.

Valid Values	Notes
"R"	Patient is registered with Organisation.
"E"	Patient is enrolled with Primary Health Organisation.

15.3.11 ZRD-11- HUHC Number

The current High User Health Card number of the patient.

This field is optional however, it should be noted that failure to submit this data will decrease the chances of validating patient as an HUHC holder.

15.3.12 ZRD-12- HUHC Expiry Date

The expiry date of the patient's current High Use Health Card.

15.3.13 ZRD-13- CSC Number

The current Community Services Card of the patient (or the patient's caregiver if a dependent).

This field is optional however, it should be noted that failure to submit this data will decrease the chances of validating patient as a CSC holder.

15.3.14 ZRD-14- CSC Expiry Date

The expiry date of the patient's current Community Services Card.

15.3.15 ZRD-15- Meshblock

Six digit code identifying a specified area as defined by Stats New Zealand.

15.3.16 ZRD-16- Quintile

Number ('1' to '5' inclusive) identifying the prosperity level of a geo-coded address.

15.3.17 ZRD-17- Validation Identifier

The matching indicator from external validation sources. Where matching is of a good enough standard, returned data can be uploaded into PMS databases.

Sub-components	Valid Values	Notes
<NHI Matching Type>^	"D" "V" Null	Direct match. Validated match. No match.
<Address Uncertainty Code>	"0", "1", "2", "3" "4" "5", "6", "7", "8", "9" "10"	Geo-code details found and address accepted. Funding based on geo date. Geo-code details found, but address not acceptable. Funding based on geo data. Not used. Locality geo-code details found. Address not accepted. DHB based on geo data, quintile set to default. Geo-code details not found and address not accepted. DHB and Quintile set to default.

15.3.18 ZRD-18- DHB

The ID of the District Health Board obtained as part of point-of-contact geocoding of the patient address (population based funding).

> ***NOTE** : This will be the same format and content as the DHB field currently provided by Critchlows as a part of batch processing geo-code data of patient addresses (refer Assign Geo-Codes Detailed Requirements Use Case).*

15.3.19 ZRD-19-Care Plus Enrolment Status

This field indicates if a patient is enrolled for Care Plus or not

Field	Valid Values	Notes
Care Plus Enrolment Status	"Y" "N"	Patient is enrolled Patient is **not** enrolled

***NOTE:** If this field is missing or invalid a value of "N" will be assumed.*

15.3.20 ZRD-20-Care Plus Enrolment Start Date

This is the patient's Care Plus enrolment date.

NOTE: *If the ZRD-19-Care Plus Enrolment Status field is "Y" this field must be supplied and must be a valid date. If a valid date is not supplied then a value of "N" will be assumed for the field ZRD-19-Care Plus Enrolment Status*

15.3.21 ZRD-21-Care Plus Enrolment End Date

This is the patient's Care Plus expiry date.

NOTE: *If the ZRD-19-Care Plus Enrolment Status field is "Y" this field must be supplied and must meet the following requirements. If these requirements are not met then a value of "N" will be assumed for the field ZRD-19-Care Plus Enrolment Status*

1. *The field must be supplied and must be a valid date,*
2. *The ZRD-21-Care Plus Enrolment End Date field must be after the ZRD-20-Care Plus Enrolment Start Date field*
3. *The ZRD-21-Care Plus Enrolment End Date field must be no longer than 16 months after the ZRD-20-Care Plus Enrolment Start Date field*
4. *The ZRD-21-Care Plus Enrolment End Date field must be after the date of Register Submission*

16. ZSA –Grouping Segment

16.1 Function

Enables the grouping of segments as required by CBF.

16.2 Table of Fields

Seq	Len	DT	Opt	RP/#	TBL#	Item#	Element Name	Usage
1	85	CM	R	Y			Grouping Message	M

16.3 Field Notes

16.3.1 ZSA-1- Grouping Message

Component	NZ Usage	Notes
<message identifier>^	ID(4)	Message code ; valid values are defined in Table 7.
<message text>	ST(80)	Message text description; specified in Table 7.

NOTE : The introduction of additional Composite fields is advised against in the HL7 2.3 Standard, which will be acted on in a subsequent release.

17. General Implementation

17.1 Introduction

Issues addressed in regard to the general implementation of this standard include:

- Data Communications
- Data Security

17.2 Further References

There are no further references at the time of publishing this document.

Appendix A. References

Other documentation to be read in conjunction with this message standard definition:

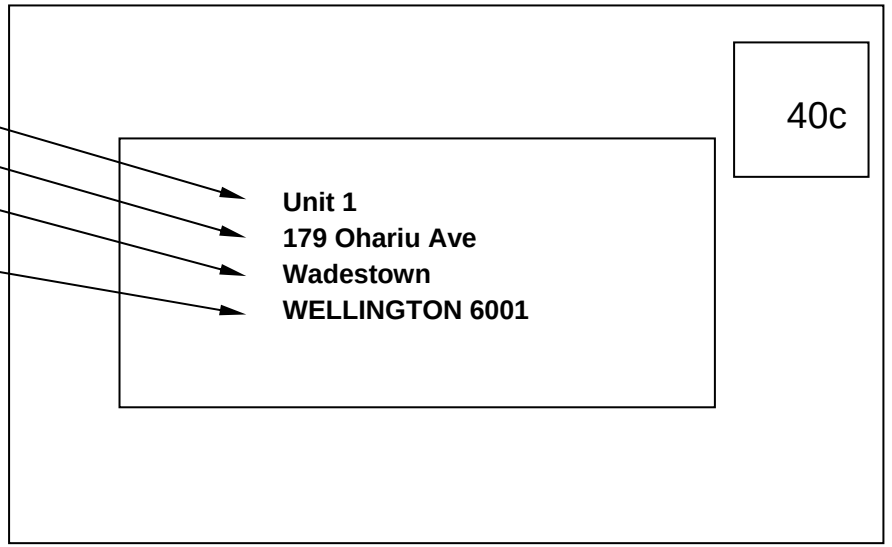
- HL7 standard version 2.1;
- HL7 standard version 2.2 (Ballot 24 July 1994);
- HL7 standard version 2.3 (Ballot #2 - 17 October 1996);
- NZHIS IT92-003.5 standard as defined by the Ministry of Health (MOH);
- The NZ GOSIP version 2.0 standard.

Appendix B. Data Requirement Notes

New Zealand Health Address Standard

The following envelope is an example of how addresses should be extracted to the HL7 Address Data Type. Note that all addresses are assumed to be of New Zealand origin, so country is not required.

Sub Component	NZ Usage	Notes	
<street address> ^	ST(35)	Address line 1	optional
<other designation> ^	ST(30)	Address line 2	mandatory
<city> ^	ST(30)	Suburb	preferable (where applicable)
<state or province> ^	ST(30)	City/Town	mandatory (Post Code Optional)
<zip> ^	(not used)		
<country> ^	(not used)	Country	
<type>^	(not used)	"C" - current or temporary "P" - permanent "M" - mailing "B" - business	
<other geographic designation>	ST(4)	New Zealand domicile code	



NOTE : From the point of view of the application logic, the presence or absence of components of the address or even the address itself is immaterial, as processing is based on the value of the Uncertainty Code, which will be provided either by batch processing of geo-codes by Critchlows or by point-of-contact geo-coding by Organisations. A value less than or equal to 4 indicates that the address is good and the patient record can be processed further.

However, from the point of view of the Organisation, the above is provided as a guideline to ensure a "better" Uncertainty Code is assigned to a Patient Address.

New Zealand Address Examples

AddressLine1	Addressline2	Suburb	City/Town
Unit 1	179 Ohariu Ave	Wadestown	WELLINGTON 6001
Flat 4	19 Tokomanu Rd		TE KUITI
	185 Beech St	Petone	LOWER HUTT
	177 Ohiro Rd	Tamahere	HAMILTON
Unit 19	44 Queen St	Auckland Central	AUCKLAND
	15 Nile St	Nelson East	NELSON
Flat B	2 Turner Pl	Papanui	TOKOROA
4354 Chisholm Farm (In this case 4354 is a rapid addressing number and not a house number)		Papanui	TOKOROA

Appendix C. Sample Files in HL7 Format

C.1 Sample Register File

```
MSH|^~\&|The Organisation Application|The Little Organisation|CBF|HealthPAC|20010829152500||REG^C90|
    CBFHL7IN212345082915|P|2.3|||||

ZPC|212345|123456|376542|20010701|30|250|Rotorua Medical

ZCT|CF|||||||||

ZPR|Rotorua City Practice|127984|375599

PRD|M^P|Bloggs^Joanne^E^^Miss^^||||||245769||

PID||ABC1234^^^^|51||Omtib^Chris^E^^Mr^^||19500315|M|^^^^^^||152 Victoria Street^^^Rotorua^^^ ^1234||||||||||11~30||||||||

ZRD|^^^^^^|-41.69417|171.792698|Y|16 Downs
    Street^^^Rotorua^^^C^142||19990512||20010829|E|||0000070323017049|20020829|1234567|2||Y|20040327|20050228

ZPR|Lakes Care Practice|127974|375589

PRD|M^P|Flogg^Shemy^A^^Miss^^||||||145859||

PID||ABC1237^^^^|5||Amoy^Felicity^A^^Miss^^||19700817|F|^^^^^^||20 Victoria Street^^^Rotorua^^^ ^1234||||||||||11||||||||

ZRD|Jones^Karin^^^Mrs^^|-41.664178|171.792696|Y|20 Victoria Street^^^Rotorua^^^
    ^142||19990512||20010829|E|||0000001313395004|20020829|1234542|3|||||

PID||AKA5543^^^^|20||Babot^Sam^E^^Mr^^||19720807|M|^^^^^^||20 Smitt Drive^^^Rotorua^^^ ^124||||||||||98||||||||

ZRD|^^^^^^|-41.664177|171.792695|Y|20 Smitt Drive^^^Rotorua^^^ ^142||19990512||20010829|E|221856|20011031|||1334542|4||N|||
```

C.2 Sample Acknowledgment Files

C.2.1 Accept Acknowledgement :

```
MSH|^~\|GTPS:CBF|Health PAC|The Organisation Application|The Little
    Organisation|20010829152500||ACK^C90|CBFHL7OUT_999999_080810|L|2.3|||||
MSA|AA|CBFHL7IN_999999_080810||||0001^Register is Accepted
```

C.2.2 Reject Acknowledgement :

NOTE : In the following examples, some of the ZER segments contain the "field-level error text" component with information down to the component level. This may not be provided in actuality.

Example 1 - File Format Error - File Reject

The following error indicates a file that is unable to be read by the CBF system. The Reject Acknowledgement will include the file name as message control id as the message header is unable to be read. Note that if HL7 definition is followed, the message control id is the file name.

```
MSH|^~\&|CBF|HealthPAC|Organisation App Name|Organisation Name|ACK|Unique HB ID|L||2.3|||||
MSA|AR|MSG00001|0001^Invalid file format or file is corrupt:^CBF

In this case no other segments are returned.
```

Example 2 - Error - File Reject

The following error indicates a file which has rejected due to not arriving within submission period.

```
MSH|^~\&|GTPS:CBF|Health PAC|Organisation App Name|Organisation
Name|20020811140713||ACK^C90|CBFHL7OUT_999999_080810|L||2.3|||||
MSA|AR|CBFHL7IN_999999_080810||||0003^ Register not submitted within contracted time^CBF

In this case no other segments are returned.
```

Example 3 – Register has invalid ZPC segment and missing ZRD segments

```
MSH|^~\|GTPS:CBF|Health PAC|The Organisation Application|The Little
    Organisation|20010829152500||ACK^C90|CBFHL7OUT_999999_080810|L|2.3|||||
MSA|AR|CBFHL7IN_999999_080810||||0002^Register is Rejected
ZPC|212345|123456|376542|20020401|30|250|The Little Organisation
ZER|1003^Segment Missing or Invalid: PCO Details(ZPC)^PCO ID not Found[212345]
ZER|1003^Segment Missing or Invalid: PCO Details(ZPC)^Contract Number[123456] not found.
ZPR|Central Medical Clinic|1105|
PID||^^^|22||Xyz^^^^^^||20010902||||^^^Auckland^^^C^||||||||||||^^||||||
```

```
ZER|1007^Segment Missing or Invalid: Patient(PID)^Error unmarshalling segment[PID] : Incorrect number of components for
     PI field (^^^) : definition[5], field[4]
PID||^^^|23|| Timberly^^^^Miss^^||19650903|F|||^^^Auckland^^^C^||||||||||^^||||||
ZER|1007^Segment Missing or Invalid: Patient(PID)^Error unmarshalling segment[PID] : Incorrect number of components for
     PI field (^^^) : definition[5], field[4]

      More of the same ...

PID||^^^|8||Ngata^Henik^^^Mr^^||19000101|M|||^19 Blog Place^Birkenhead^Auckland^^^C^||||||||||21^^||||||
ZER|1007^Segment Missing or Invalid: Patient(PID)^Error unmarshalling segment[PID] : Incorrect number of components for
     PI field (^^^) : definition[5], field[4]
```

Example 4 –Register is valid but the Practice and Patient count does not match with fields in ZPC segment

```
MSH|^~\|GTPS:CBF|Health PAC|LinkTech|A New Zealand PHO|20020808103627||ACK^C90|CBFHL7OUT_999999_080730|T|2.3|||||
MSA|AR|CBFHL7IN_999999_080810||||0002^Register is Rejected
ZPC|999999|999999|123456|20020701|00000002|00000817|A New Zealand PHO
ZER|1010^File Invalid^Practice Total mismatch - Header[2], Actual[1]
ZER|1010^File Invalid^Patient Total mismatch - Header[817], Actual[6]
```

C.2.3 Error Acknowledgement

Example 1 – Register has some Patients not satisfying Business Rules

```
MSH|^~\|GTPS:CBF|Health PAC|LinkTech|A New Zealand PHO|20020808103627||ACK^C90|CBFHL7OUT_999999_080810|T|2.3|||||
MSA|AE|CBFHL7IN_999999_080810||||9998^Patient Record Error: Patient Record Errors found: Patients with Errors have been
     removed from register^CBF^^
ZPR|Health Technology Medical Centre|HTL|999992
ZSA|3001^Patient Record Error: Patients have been removed from register^CBF^^
PID||NYJ1111^^^^|w0000DB||RIMIY ^LINK ^DONG ^^^^||19440512|M|||11 BELL AVE^^TORBAY^AUCKLAND^^^^||||||||||99||||||||
```

```
ZER|2010^Last Patient Contact not within 3 years^
ZRD||-36.81551560|174.74792163|Y|||19961005||19990802|R|||||0360600|2|^||||
ZPR|MedTech Software Medical Centre|MTSW|999991
ZSA|3001^Patient Record Error: Patients have been removed from register^CBF^^
PID||NY1111^^^^|w0000DB||RIMIY ^LINK ^DONG ^^^^||19440512|M|||11  BELLAVE^^TORBAY^AUCKLAND^^^^||||||||||99||||||||
ZER|2010^Last Patient Contact not within 3 years^
ZRD||-36.81551560|174.74792163|Y|||19961005||19990802|R|||||0360600|2|^||||
```

C.2.4 Validation Acknowledgement

Example 1 – Register has some Patients not satisfying Business Rules

```
MSH|^~\&|GTPS:CBF|Health PAC|||20020811140713||ACK^C90|CBFHL7OUT_999999_080810|P|2.3|||||
MSA|AV|CBFHL7IN_999999_080810||||3002^Validated Details Returned: Patient will be included in payment^CBF^^
ZPC|247317|999999|123456|20020701|2|1916|PHO X
ZPR|Kuirau Medical Centre|01|0
ZSA|3002^Validated Details Returned: Patient will be included in payment^CBF^^
PID||FPA3333^^^^|4588||Timbuktu^Robin ^^^^^||19920318|M|^^^^^^||54 Sun Road^^^ROTORUA^^^^||||||||||11||||||||
ZRD|^^^^^^|0.0|0.0|Y|^^^^^^^^||19940929||20000913|R|0||0||0|0||LKS
PID||FKA4444 ^^^^|5249||Timbuktu^Mary ^^^^^||19651231|F|^^^^^^||54 Sun Road^^^ROTORUA^^^^||||||||||11||||||||
ZRD|^^^^^^|0.0|0.0|Y|^^^^^^^^||19950615||20010905|R|0||0||0|0||LKS|||
PID||FHA5555 ^^^^|4459||Timbuktu^Sally ^^^^^||19900713|F|^^^^^^||54 SunRoad^^^ROTORUA^^^^||||||||||11||||||||
ZRD|^^^^^^|0.0|0.0|Y|^^^^^^^^||19940811||20000913|R|0||0||0|0||LKS|||
PID||THK6666 ^^^^|4976||Adolph^Barney Harry ^^^^^||19450503|M|^^^^^^||16 Pender
    Drive^^^ROTORUA^^^^||||||||||11|||||||||
ZRD|^^^^^^|0.0|0.0|Y|^^^^^^^^||19950306||20010817|R|0||0||0|0||LKS|||

      More of the same of validated patients ...

ZSA|3003^Duplicate Patient Found: Patient has been removed from register^CBF^^
PID||FHA7777^^^^|9345||Tommy^Mark James ^^^^^||19630725|M|^^^^^^||18 GilbertStreet^^^ROTORUA^^^^||||||||||34||||||||
ZRD|^^^^^^|0.0|0.0|Y|^^^^^^^^||20000301||20000301|R|0||0||0|0||LKS|||
ZPR|The Owhata Surgery|02|0
ZSA|3002^Validated Details Returned: Patient will be included in payment^CBF^^
```

```
PID||BBB8888^^^^|12859||Arson^Amy^^^^^||19690513|F|^^^^^^||25 Limley Road^^Lynmore^ROTORUA^^^^||||||||||21|||||||
ZRD|^^^^^^|0.0|0.0|Y|^^^^^^^^||19990429||20011130|R|0||0||0|0||LKS|||
PID||EEE9999^^^^|30||Arson^Magan^^^^^||19680106|F|^^^^^^||16 Bim Place^^Owhata^ROTORUA^^^^||||||||||21|||||||
ZRD|^^^^^^|0.0|0.0|Y|^^^^^^^^||19911209||20010827|R|0||0||0|0||LKS|||
```

And more of the same, ... with the “The Owhata Surgery” Practice having all of its patients validated.

Appendix D. Error Codes Listing

D.1 Error Types

NOTE : Not all error identifiers are used to indicate errors. Some are used to provide acknowledgement response (e.g. 0001 and 9999).

NOTE : Errors are presented in the MSA, ZSA and ZER segments, in the "Error Condition", "Grouping Message" and "Error Message" components respectively.

The level in the Register Structure at which the error occurs is used to classify errors, and Error Identifier ranges are defined accordingly.

Identifier Range	Level at which error occurs	Which Acknowledgement message	In which segment presented	Comments
0001 to 0999	Register as a whole	Accept (AA) and Reject (AR)	MSA	Accept / Reject response from initial processing of Register.
1000 to 1999	Segment	Reject (AR)	ZER	These errors result in register rejection. These arise from an invalid Register structure.
9000 to 9999	Register as a whole	Error (AE) and Validation (AV)	MSA	These errors summarise the status of processing of the Register as a whole, after the Accept / Reject acknowledgement has been sent.
2000 to 2999	Field	Reject (AR) and Error (AE)	ZER	These errors result in the rejection of affected segments (practice, practitioner or patient). These arise from application of Business Rules, mandatory field checking, etc.
3000 to 3999	Practice Segment	Error (AE) and Validation (AV)	ZSA	These classify the group into which succeeding practitioners or patients of the practice fall. Refer Table D5.

-	Component	Reject (AR) and Error (AE)	ZER	These are not presented as separate errors, but are appended to the higher level 1??? or 2??? Error Codes presented in the ERR segment. **NOTE : This level of detail may not be provided in actuality.**

Table D.1: Error Types and their identifier ranges

D.2 Error Lists

NOTE : The content of the "Error Type" (or Message Type) is used in the "Error text" (or Message Text) component, but the exact wording may differ.

NOTE : The "Description of Cause to Error" column in the following sections corresponds to an error at the level of the field and is (more or less as is) the error description text that is appended to the "error text" / "message text" component of the "Error Condition", "Grouping Message" and "Error Message" fields of MSA, ZSA and ZER segments respectively.

D.2.1 Error Identifiers at Register level

Identifier	Ack Type	Error Type	Description of Cause to Error	Organisation Action
0001	Accept	Register is accepted.		Register is accepted, processing will continue with errors possibly following at a later time.
0002	Reject	Invalid file format or file is corrupt:		Register is rejected. Review errors that follow this acknowledgement, fix and resubmit within three business days or no register will be processed.
0003	Reject	Register not submitted within contracted time		Register will not be processed this quarter. Organisation must submit next patient register at least one month before the quarter start date. NOTE : This was Error Identifier 1001

Identifier	Ack Type	Error Type	Description of Cause to Error	Organisation Action
9997	Errors	No Patient Errors Found		Register is accepted and no errors have been found. Register will process as sent.
9998	Errors	Patient Record Errors found: Patients with Errors have been removed from register		Register has been processed. What follows are the errors and associated patient records that will be removed from the register for processing. Review these errors, fix and resubmit within three business days or register will be processed less these patient records.
9999	Validation	Validated Details Returned: Patient included in payment, and Duplicate Patient removed from register		Register has been processed. What follows is the validated data for claimants upload and/or analysis, AND the patient records which have been found on multiple registers and which will not be included for payment calculation on this register.

Table D.2: Error Identifiers at Register level

D.2.2 Error Identifiers at Segment Level

The following errors indicate a problem in the original file which prohibits processing of the entire message, resulting in a Reject Acknowledgement.

Identifier	Ack Code	Error Type	Description of Cause to Error	Organisation Action
1000	AR	Invalid format or file is corrupt - *<filename.ext>*		Resubmit file in accordance with CBF HL7 Message Standard Definition.

Identifier	Ack Code	Error Type	Description of Cause to Error	Organisation Action
1002	AR	Segment Missing or Invalid: Message Header (MSH)	• Segment Missing • Out of Sequence • HL7 Unmarshall Error • Encoding Characters Required • Sending Application Required • Sending Facility Required • Receiving Application Required • Receiving Facility Required • Date/Time of Message Required • Date/Time of Message Invalid • Invalid Message Type • Invalid Message Type/trig Event • Control ID Required • Processing ID Required • Version ID Required	Organisation to resubmit entire register within 3 business days.

Identifier	Ack Code	Error Type	Description of Cause to Error	Organisation Action
1003	AR	Segment Missing or Invalid: Organisation Details (ZPC)	• Payment Period Start Date Invalid • Out of Sequence • HL7 Unmarshall Error • Organisation ID Required • Organisation ID not found <number> • Organisation ID Not Numeric • Contract Number Required • Contract Number not found <number> • Payee Number Required • Payment Period Required • Payment Period Invalid • Total Practices Cannot be 0 • Total Patients Cannot be 0 • Organisation Name Required • Valid Payment Reference Data for Organisation not found	Organisation to resubmit entire register within 3 business days.
1004	AR	Segment Missing or Invalid: Claim Type (ZCT)	• Out of Sequence • HL7 Unmarshall Error	Organisation to resubmit entire register within 3 business days.
1005	AR	Segment Missing or Invalid: Practice (ZPR)	• Out of Sequence • Practice ID Required • • Practice ID Not Numeric	Organisation to resubmit entire register within 3 business days.

Identifier	Ack Code	Error Type	Description of Cause to Error	Organisation Action
			• HL7 Unmarshall Error • Practice Exception for Organisation absent in Register	
1006	AR	Segment Missing or Invalid: Practitioner Identifier (PRD)	• Out of Sequence • HL7 Unmarshall Error	Organisation to resubmit entire register within 3 business days.
1007	AR	Segment Missing or Invalid: Patient (PID)	• Out of Sequence • HL7 Unmarshall Error	Organisation to resubmit entire register within 3 business days.
1008	AR	Segment Missing or Invalid: Patient (ZRD)	• Out of Sequence • HL7 Unmarshall Error	Organisation to resubmit entire register within 3 business days.
1009	AR	Segment Invalid	• Invalid segment ID <text>	Organisation to resubmit entire register within 3 business days.
1010	AR	File Count Mismatch	• Practice Total Mismatch - Header <number>, Actual <number> • Patient Total Mismatch - Header <number>, Actual <number>	Organisation to resubmit entire register within 3 business days. ***NOTE :*** *This error will be provided only if there are no other errors.*
1011	AR	Threshold not met: NHI		Organisation to resubmit entire register within 3 business days.
1012	AR	Threshold not met: Residential Address		Organisation to resubmit entire register within 3 business days.

Table D.3: Error Identifiers at Segment Level

D.2.3 Error Identifiers at Field Level

The following errors, also known as Data Errors, indicate a problem in the original file that prohibits the processing of certain segments (practice, practitioner or patient).

Identifier	Ack Code	Error Type	Description of Cause to Error	Organisation Action
2001	AE	Patient ID (Internal) Missing or Invalid		Organisation to resubmit register within three business days or this patient record will be rejected.

Identifier	Ack Code	Error Type	Description of Cause to Error	Organisation Action
2002	AE	Patient Name Missing or Invalid	• Family Name field missing • First given Name field missing	Organisation to resubmit register within three business days or this patient record will be rejected.
2003	AE	Date of Birth Missing or Invalid	• Date of Birth Missing • Invalid date of Birth <date> • Date of Birth is in the future • Age must be less than 120 years old	Organisation to resubmit register within three business days or this patient record will be rejected.
2004	AE	Gender Missing or Invalid	• Gender Missing • Gender contains invalid value <x>	Organisation to resubmit register within three business days or this patient record will be rejected.
2006	AE	Date of Enrolment Missing or Invalid	• Invalid Date <string> • Date is in the future <date>	Organisation to resubmit register within three business days or this patient record will be rejected.
2008	AE	Registration Status Missing or Invalid	• Registration Status Missing • Registration Status Invalid <x>	Organisation to resubmit register within three business days or this patient record will be rejected.
2010	AE	Last patient contact not within 3 years		Organisation to resubmit register within three business days or this patient record will be rejected.
2011	AE	Practice does not have patients.	Patient segment PID and / or ZRD missing	Organisation to resubmit register within three business days or this Practice record will be ignored.

Table D.4: Error Identifiers at Field Level

NOTE : Error Identifiers 2005 and 2007 are retired and 2011 added on account of changes in Business Rules in CBF Production release 1.

D.2.4 Grouping Codes at Practice Segment level

Identifier	Ack Code	Error Type	Description of Cause to Error	Organisation Action
3000	AE	No Patient Errors Found		Patients for the Practice are accepted and no errors have been found. Patients for the practice will process as sent.

Identifier	Ack Code	Error Type	Description of Cause to Error	Organisation Action
3001	AE	Patient Record Error: Patient has been removed from register		Patients for the practice have been processed. What follows are the errors and associated patient records of the Practice that will be removed from the register for processing. Review these errors, fix and resubmit within three business days or register will be processed less these patient records.
3002	AV	Validated Details Returned: Patient will be included in payment		Register has been processed. What follows is the validated data for claimants upload and/or analysis.
3003	AV	Duplicate Patient Found: Patient has been removed from register		Register has been processed. What follows are the patient records which have been found on multiple registers and will not be included for payment calculation on this register.
3004	AV	Deceased Patient Found: Patient has been removed from register	Deceased patient was found in register of previous quarter and this was confirmed in this quarter.	Register has been processed. What follows are the records of patient who have been identified to be dead in the previous quarter and will therefore not be included for payment calculation on this register.

Table D.5: Grouping Codes at Practice Segment level

D.2.5 Component Level Error Identifiers

As mentioned in table D1, component level errors are presented as part of the field level error, to which additional descriptive text and component level reference information is appended. This takes the following form :

> ": Incorrect number of components for <field name> field (<actual field content>) : definition[<expected number of components>], field[<actual number of components>]"

NOTE : Component level error descriptions may not be provided in actuality.