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# DHB Primary Maternity Service Data Collection System MAT ODS

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## File Specification

<b>Document Version</b>	4.3
<b>Date</b>	22 Feb 2023
<b>Owner</b>	Technology and Digital Services Ministry of Health
<b>Status</b>	Final

Citation: Ministry of Health. 2016. DHB Primary Maternity Service Data Collection System MAT ODS File Specification

Published in 2016 by the  
Ministry of Health  
PO Box 5013, Wellington, New Zealand

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



MANATŪ HAUORA

## Table of Contents

<b>1.</b>	<b>Front Matter .....</b>	<b>6</b>
1.1.	Reproduction of material .....	6
1.2.	Disclaimer .....	6
1.3.	Publications .....	6
<b>2.</b>	<b>Introduction .....</b>	<b>7</b>
2.1.	Purpose of this document .....	7
2.2.	Intended audience .....	7
2.3.	Related documents .....	7
2.4.	National Health Information Principles .....	7
2.5.	Compliance with standards .....	8
2.6.	Date standards .....	8
2.7.	Connection to national systems.....	8
2.8.	Authority for collection of health information .....	8
2.9.	Contact .....	8
<b>3.</b>	<b>Overview of National Maternity Collection .....</b>	<b>9</b>
<b>4.</b>	<b>File Processing.....</b>	<b>11</b>
4.1.	Input File Types .....	11
4.1.1	Extract File.....	11
4.1.2	Reversal Request File .....	11
4.2.	Output File Types .....	12
4.2.1	Extract Acknowledgement File .....	12
4.2.2	Extract Report File.....	12
4.2.3	Reversal Request Acknowledgement File.....	12
4.3.	Extract File Processing Overview .....	13
4.4.	Extract File Processing Steps.....	13
4.5.	Reversal Request File processing steps .....	14
<b>5.</b>	<b>MAT File Structure &amp; Data Relationships .....</b>	<b>16</b>
5.1.	MAT Extract File XML Message Structure/ Format .....	16
5.1.1	DHB_Primary_Maternity_Data_Collection (Root Entity) .....	17
5.1.2	DHB_Details .....	17
5.1.3	Create_Request .....	18
5.1.4	Replace_Request .....	18
5.1.5	Pregnancy_Details .....	19
5.1.6	Woman-Details .....	19
5.1.7	Baby_Details .....	20
5.1.8	Woman-Identity .....	20
5.1.9	Allocation .....	21
5.1.10	Antenatal.....	22
5.1.11	Labour_And_Birth.....	23
5.1.12	Postnatal.....	24
5.1.13	Baby_Identity .....	25
5.1.14	Labour_And_Birth_Baby_Details .....	25
5.1.15	Postnatal_Baby_Details .....	26
5.2.	MAT Acknowledgment File XML Message Structure/ Format.....	27
5.2.1	DHB_Primary_Maternity_Data_Collection_Acknowledgement (Root Entity) ....	27
5.2.2	Error.....	28
5.2.3	Rejected_Create_Request .....	29
5.2.4	Rejected_Replace_Request.....	30
5.2.5	Rejected_Delete_Request.....	30
5.2.6	Rejected Segments .....	31
5.2.7	Explanation of the Error Segment .....	31
5.3.	MAT Reversal Request XML Message Structure/ Format .....	33
5.3.1	DHB_Primary_Maternity_Data_Collection_Reversal (Root Entity).....	33

5.4.	MAT Reversal Acknowledgement File XML Message Structure/ Format .....	33
5.4.1	DHB_Primary_Maternity_Data_Collection_Reversal_Acknowledgement (Root Entity) 34	
<b>6.</b>	<b>Initial Input File Validation .....</b>	<b>35</b>
6.1.	Input file name format and file attributes .....	35
6.1.1	Input file name code set attributes .....	36
6.1.2	Antenatal.....	36
6.1.3	Input file initial validation rules.....	36
6.1.4	Input file initial validation error messages .....	37
<b>7.</b>	<b>MAT Segment Formats, Code Sets and Validation Rules.....</b>	<b>39</b>
7.1.	Extract file root segment.....	39
7.1.1	Extract file root segment data attributes .....	39
7.1.2	Extract file root segment rules .....	39
7.1.3	Extract file root segment error messages.....	39
7.2.	DHB Details Segment.....	40
7.2.1	DHB Details segment data elements .....	40
7.2.2	DHB Details segment code set elements.....	40
7.2.3	DHB Details segment rules .....	40
7.2.4	DHB Details segment error messages .....	41
7.3.	Request segment.....	42
7.3.1	Request segment data attributes .....	42
7.3.2	Request segment rules.....	42
7.3.3	Request Type segment error messages .....	42
7.4.	Woman Identity segment.....	43
7.4.1	Woman Identity segment data elements .....	43
7.4.2	Woman Identity segment rules.....	43
7.4.3	Woman Identity segment error messages.....	44
7.5.	Allocation segment .....	45
7.5.1	Allocation data elements .....	45
7.5.2	Allocation segment code sets.....	45
7.5.3	Allocation segment rules .....	46
7.5.4	Allocation segment error messages .....	47
7.6.	Antenatal segment.....	48
7.6.1	Antenatal data elements.....	48
7.6.2	Antenatal segment code sets .....	48
7.6.3	Antenatal segment rules.....	49
7.6.4	Antenatal segment error messages .....	50
7.7.	Labour and Birth segment .....	51
7.7.1	Labour and Birth data elements .....	51
7.7.2	Labour and Birth segment code sets.....	51
7.7.3	Labour and Birth segment rules .....	51
7.7.4	Labour and Birth segment error messages .....	52
7.8.	Postnatal segment.....	53
7.8.1	Postnatal data elements .....	53
7.8.2	Postnatal segment code sets .....	53
7.8.3	Postnatal segment rules .....	53
7.8.4	Postnatal segment error messages.....	56
7.9.	Baby Details segment.....	57
7.9.1	Baby Details segment data elements.....	57
7.9.2	Baby Details segment rules.....	57
7.9.3	Baby Details segment error messages .....	57
7.10.	Baby Identity segment .....	58
7.10.1	Baby Identity segment data elements .....	58
7.10.2	Baby Identity segment code set elements.....	58
7.10.3	Baby Identity segment rules .....	58
7.10.4	Baby Identity segment error messages.....	59
7.11.	Labour and Birth Baby Details segment.....	60
7.11.1	Labour and Birth Baby Details data elements .....	60

7.11.2	Labour and Birth Baby Details segment code sets .....	60
7.11.3	Labour and Birth Baby Details segment rules .....	61
7.11.4	Labour and Birth Baby Details segment error messages.....	62
7.12.	Postnatal Baby Details segment.....	62
7.12.1	Postnatal Baby Details data elements.....	62
7.12.2	Postnatal Baby Details segment code sets .....	63
7.12.3	Postnatal Baby Details segment rules.....	63
7.12.4	Postnatal Baby Details segment error messages .....	64
7.13.	Reverse file root segment.....	65
7.13.1	Reverse file root segment rules.....	65
7.13.2	Reverse file root segment error messages .....	65
7.14.	Reversal segment.....	65
7.14.1	Reversal data elements.....	65
7.14.2	Reversal segment rules.....	65
7.14.3	Reversal segment error messages .....	66
<b>8.</b>	<b>MAT Extract File Record Types .....</b>	<b>67</b>
8.1.	Extract file record request processing rules .....	68
8.2.	Extract file record request processing error messages .....	69
<b>9.</b>	<b>MAT Extract File Reversal.....</b>	<b>71</b>
9.1.	Reverse file initial processing rules .....	71
9.2.	DHB Details .....	71
9.3.	Extract file reversal request processing rules.....	71
9.4.	Extract file reversal request processing error messages .....	71
<b>10.</b>	<b>Data model.....</b>	<b>72</b>
<b>Appendix A: Definitions, Glossary and References .....</b>		<b>73</b>
<b>Appendix B: NHI Number Validation .....</b>		<b>75</b>
<b>Appendix C: Ethnicity Data Protocols.....</b>		<b>77</b>
<b>Appendix D: Extract File Structure Summary .....</b>		<b>81</b>
<b>Appendix E: System Errors .....</b>		<b>85</b>
<b>Appendix F: Related Documents/Files .....</b>		<b>85</b>
<b>Appendix G: Examples .....</b>		<b>86</b>
G.1	File rejected because of XSD schema errors .....	86
G1.1	Extract file .....	86
G1.2	Response file .....	88
G1.3	Report .....	92
	DHB Primary Maternity Service Data Collection File Submission Report.....	92
G.2	File with valid data.....	94
G2.1	Extract file .....	94
G2.2	Response file .....	100
G2.3	Report .....	102
	DHB Primary Maternity Service Data Collection File Submission Report.....	102
<b>Appendix H: Reverse File Example .....</b>		<b>103</b>
<b>Appendix I: File Specification Version History .....</b>		<b>104</b>

## 1. Front Matter

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Published by Ministry of Health

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## 2. Introduction

### 2.1. Purpose of this document

This Ministry of Health File Specification defines the file format used to send information to the Ministry for inclusion in the DHB Primary Maternity Service Data Collection (MAT). The document includes the following information:

- XML Messaging Specification
- Data Formats
- Data Code Ranges
- Global Business Rules
- Validation Rules
- Logical Data Model

### 2.2. Intended audience

The intended audience for this document is:

- Ministry and DHB business and data quality analysts involved in supporting and maintaining the DHB Primary Maternity Service Data Collection System and the National Maternity Collection.
- DHB staff or their representatives responsible for submitting DHB primary maternity service care data to the Ministry of Health.
- PMS Vendors and Middleware Software Solutions Suppliers to DHBs who are responsible for developing or delivering the technical capability to enable DHBs or their representatives to submit DHB primary maternity service care data to the Ministry of Health for loading into the DHB Primary Maternity Service Data Collection System.

### 2.3. Related documents

This document should be read in conjunction with the National Maternity Collection Data Dictionary.

### 2.4. National Health Information Principles

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

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

## **2.5. Compliance with standards**

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

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

## **2.6. Date standards**

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

## **2.7. Connection to national systems**

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

Direct access provides:

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

## **2.8. Authority for collection of health information**

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

## **2.9. Contact**

If you have any queries regarding this file layout or the DHB Primary Maternity Service Data load process, please e-mail [compliance@moh.govt.nz](mailto:compliance@moh.govt.nz).



### 3. Overview of National Maternity Collection

<b>Purpose</b>	The National Maternity Collection (MAT) provides statistical, demographic and clinical information about selected publicly-funded maternity services up to nine months before and three months after a birth. MAT is used for strategy and policy development, supporting clinical intervention, maternity service evaluation and quality assurance, to assist clinical governance and for research.
<b>Content</b>	MAT integrates health information from three sources. MAT contains data on primary maternity services provided under Section 88 of the New Zealand Public Health and Disability Act 2000. This information is sourced from Lead Maternity Carer (LMC) claims for payment and from DHBs providing primary maternity services. MAT also contains inpatient and day-patient health event data during pregnancy, birth and the postnatal period for mother and baby, sourced from the National Minimum Dataset (NMDS).
<b>Start date</b>	
<b>Collection methods</b>	<p>Information on primary maternity services provided by Lead Maternity Carers, GPs and specialists is reported to the Ministry of Health on standard forms by the providers. This data is entered into the Ministry of Health maternity claims system. The data can also be submitted online via Online Maternity Claiming (OMC).</p> <p>DHBs report information on last resort primary maternity services provided by DHB midwives. This data is submitted electronically to the Ministry of Health in an agreed electronic file format.</p> <p>Publicly-funded hospital event information is provided to the Ministry of Health in an agreed electronic file format for public and larger private hospitals. Paper forms and a cut-down electronic file format are forwarded by smaller private facilities and primary birthing units and are manually processed by the Ministry of Health.</p>
<b>Frequency of updates</b>	The MAT Collection receives weekly extracts from the NMDS, NHI, the Ministry of Health maternity claims system and the DHB Primary Maternity Services data Collection System.

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<b><i>Security of data</i></b>	<p>The MAT Collection is only accessed by authorised staff for maintenance, data quality, audit and analytical purposes.</p> <p>Requests for information can be made to the Analytical Services team using the contact information above.</p>
<b><i>Privacy issues</i></b>	<p>When a woman registers with a Lead Maternity Carer she signs a waiver that allows health data to be used for research under the Health Information Privacy Code 1994.</p> <p>The Ministry of Health is required to ensure that the release of information meets the conditions of any legislation related to the privacy of health information, in particular the Official Information Act 1982, the Privacy Act 1993, the Health Information Privacy Code 1994 and the Adult Adoption Information Act 1985.</p> <p>Information available to the general public is of a statistical and non-identifiable nature. Access to identifiable information is restricted. Adoption legislation places more rigorous restrictions on release of this information than standard health information privacy legislation. Each case for identifiable data release will be considered separately. In addition, researchers requiring identifiable data will usually need approval from an approved Ethics Committee.</p>
<b><i>National reports and publications</i></b>	<p>The MAT Collection is the primary source of data for the Annual Report on Maternity produced by the Ministry of Health. This is available in hard copy and on the Ministry of Health web site <a href="http://www.health.govt.nz">www.health.govt.nz</a>. In addition Ministry of Health publishes selected provisional maternity data to facilitate planning and service reviews in a timely manner.</p>
<b><i>Data provision</i></b>	<p>Customised datasets or summary reports are available on request, either electronically or on paper. Staff from the Ministry of Health Analytical Services team can help to define the specifications for a request and are familiar with the strengths and weaknesses of the data. As some data elements have been added or deleted, consistent time-series data may not be able to be provided.</p> <p>The Ministry of Health Analytical Services team also offers a peer review service to ensure that Ministry of Health data is reported appropriately when published by other organisations.</p> <p>There may be charges associated with data extracts.</p>

## 4. File Processing

### 4.1. Input File Types

#### 4.1.1 Extract File

An Extract File contains primary care pregnancy data that is being submitted to the Ministry by a DHB or an organisation submitting data on behalf of a DHB. (Either are referred to as Submitters – see Definitions, Glossary and References in Appendix A)

Submitters should note the following when submitting data on the extract file:

- Primary Maternity data is to be provided as an XML file. The extracted data must be validated against the XML Schema provided by the Ministry. The XML Schema is available at <provide link>
- An extract file must only contain data for one DHB of Service.
- Data for multiple pregnancies can be submitted on one file.
- A complete record of services for an entire pregnancy must be provided.
- Each pregnancy must be given a unique identifier by the Submitter. This unique identifier must be a globally unique identifier (GUID)
- DHBs should submit data relating only to the modules for which they provided care.
- Valid pregnancy data is accepted into the MAT ODS database. Invalid data is rejected. Refer to Chapters 6 and 7 of this document for the validation rules.
- A file should contain a maximum of one thousand pregnancy records.

The file name for a MAT Extract file should use the following structure:

AAAA\_MATYYYYMMDD\_XXXX\_nnn\_EXTRACT.xml

Where:

- AAAA denotes the target system, e.g. PROD for production.
- YYYYYMMDD is the extract date
- XXXX is the Submitter code (refer to 6.1.2 for code set)
- nnn denotes a sequential number to allow for multiple extracts to occur on the same day. For the first extract of the day this should be 001, for the second 002 providing that 001 was accepted, and so on.

Refer to Section 5.1 for the definition of the xml message structure.

#### 4.1.2 Reversal Request File

If an extract file has been mistakenly loaded into the MAT ODS, the Submitter can request the Ministry to reverse the file.

The file name for a Reversal Request file will use the following structure:

AAAA\_MATYYYYMMDD\_XXXX\_nnn\_REVERSE.xml

Refer to Section 5.3 for the definition of the xml message structure.

## **4.2. Output File Types**

### **4.2.1 Extract Acknowledgement File**

An XML Acknowledgement file will be created for each received Extract file.

The File name for an Acknowledgement file will use the following structure:

AAAA\_MATYYYYMMDD\_XXXX\_nnn\_RESPONSE.xml

Refer to Section 5.2 for the definition of the xml message structure.

### **4.2.2 Extract Report File**

An Extract Report file will be created for each received Extract file.

The File name for an Extract Report file will use the following structure:

AAAA\_MATREPYYYYYMMDD\_XXXX\_nnn\_REPORT.htm

### **4.2.3 Reversal Request Acknowledgement File**

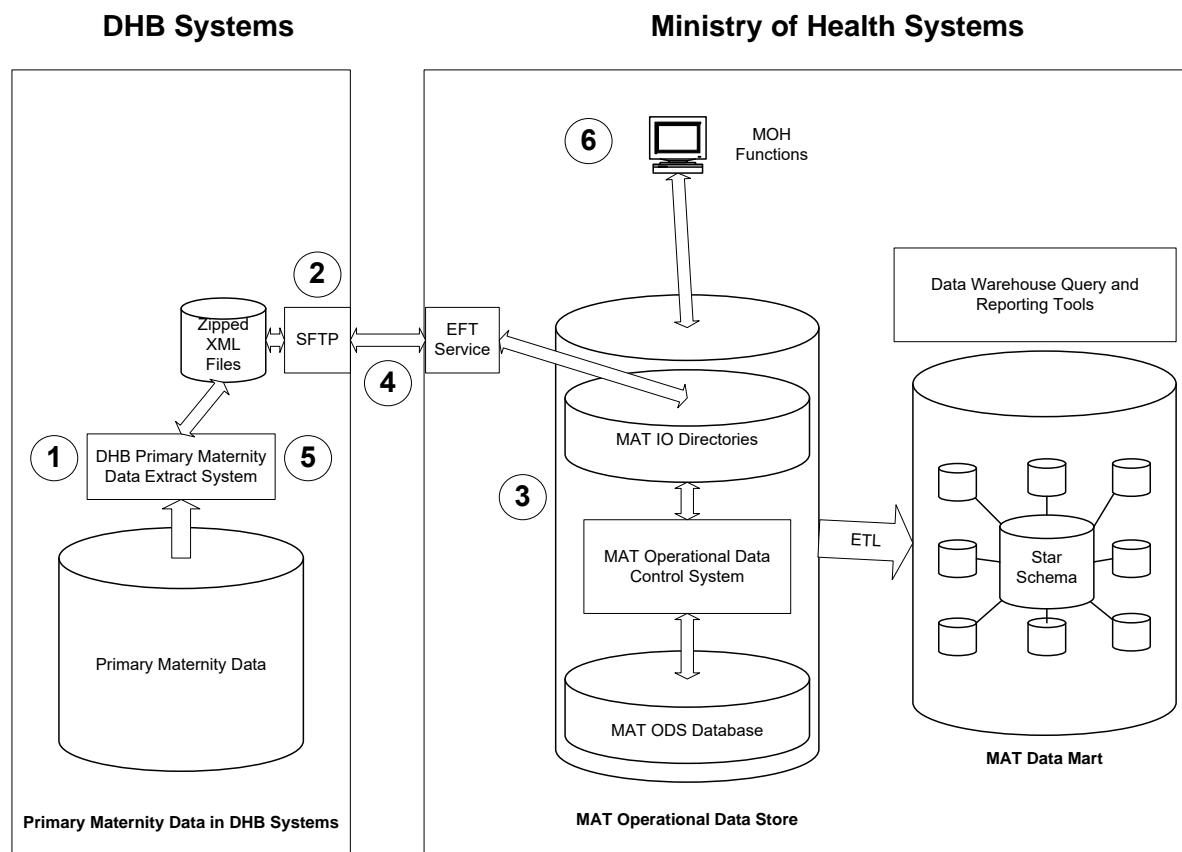
An XML Reversal Request Acknowledgement file will be created for each received Reversal Request file.

The Reversal Request Acknowledgement file has a file name structure of

AAAA\_MATYYYYMMDD\_XXXX\_nnn\_REVRESPONSE.xml

Refer to Section 5.4 for the definition of the xml message structure.

### 4.3. Extract File Processing Overview



The above diagram is a conceptual representation only. The numbers in this diagram are explained in the step/action table in the section below.

### 4.4. Extract File Processing Steps

Step	Processing Action
1	<b>Extract:</b> <ul style="list-style-type: none"> <li>Primary Maternity data is extracted from the Submitter’s system.</li> <li>Extract file is zipped into a zip file</li> </ul>
2	<b>Send:</b> <ul style="list-style-type: none"> <li>The zip file is sent to the Ministry by SFTP.</li> </ul>
3	<b>Receive and Process:</b> <ul style="list-style-type: none"> <li>When the file is received by the Ministry it is fully validated by the MAT Operational Data Control System (ODS).</li> </ul>

	<ul style="list-style-type: none"> <li>• Firstly compliance with the XSD Schema rules is checked. If there are any XSD errors, the file is rejected.</li> <li>• Secondly compliance with business rules is checked. If errors are found while processing a pregnancy record, the data for the whole pregnancy is rejected. The rejected data is written to the Acknowledgment File together with appropriate error messages.</li> <li>• Valid pregnancy details are inserted into the ODS database.</li> </ul>
4	<p><b>Acknowledgement:</b></p> <ul style="list-style-type: none"> <li>• An XML Extract Acknowledgement file is created for each received Extract file. The Extract Acknowledgment file also returns counts of the number of records received and rejected for each request type.</li> <li>• An Extract Report file is created for each received Extract file. The Report file contains statistics of the error rate and counts by error number.</li> <li>• MAT ODS sends an email alert to the Submitter when the Extract Acknowledgement and Report files have been created. The DHB will retrieve the files using SFTP.</li> </ul>
5	<p><b>Acknowledgement Reconciliation:</b></p> <ul style="list-style-type: none"> <li>• On receipt of Extract Acknowledgement file, the Submitter should verify that the extracted items have been acknowledged and all processed correctly.</li> <li>• Errors should be corrected and the associated XML records resubmitted as appropriate. If a record has data outside the expected range of values and the DHB has verified that the values provided are correct, the pregnancy details should be resubmitted with the verified attribute set on the relevant data element(s)</li> </ul>
6	<p><b>MOH Functions</b> Administrative monitoring tools and reports</p>

## 4.5. Reversal Request File processing steps

The steps involved in the ODS for reversing a file are:

1. Get all the Pregnancy Details records from the ODS with an Import File ID that matches with the ID of the file being reversed
2. For each Pregnancy Details record

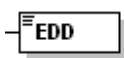


- If there is another Pregnancy Details record with the same unique identifier that has a later creation date and time than the processing date and time of the file being reversed, don't do anything
  - If the record is marked as deleted, set it to active again
  - If the record is active, mark as deleted.
3. Generate a Reversal Acknowledgement file.

## 5. MAT File Structure & Data Relationships

This chapter includes diagrams and XML fragments to illustrate the structure of the MAT XML files.

The complete schema definitions are downloadable from the following link: *(provide link)*

### Notation

0..∞	Zero to unlimited occurrences
[0..*]	Zero to unlimited occurrences
[0..1]	Zero to one occurrences
Solid outline 	Mandatory (must be provided)
Dotted outline 	Non mandatory however there may be rules for when the item must be provided
	Expands to another level

### 5.1. MAT Extract File XML Message Structure/ Format

The following sections detail the structure and the entity types defined in the XML schema document for the MAT Extract File.

The schema document defines the expected format and structure of the extract file. Some data-type restrictions are defined in the schemas but these are not exhaustive.

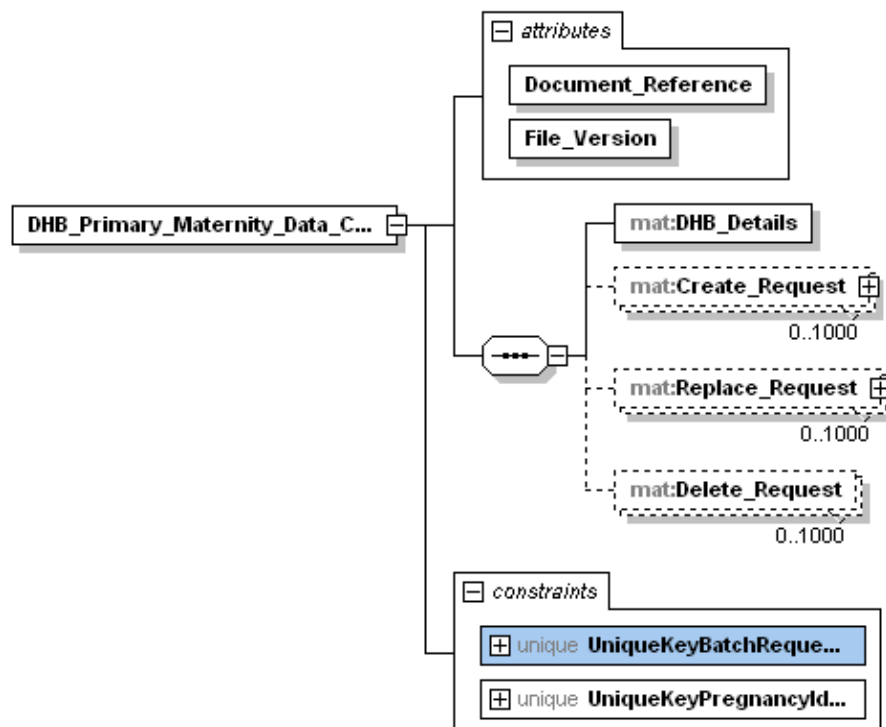
Chapter 6 defines the domains and detailed formats of the data values expected and the business validation rules around them.

For a summary of the Extract File structure refer to Appendix D: Extract File Structure Summary



5.1.1 DHB\_Primary\_Maternity\_Data\_Collection (Root Entity)

Entity Structure

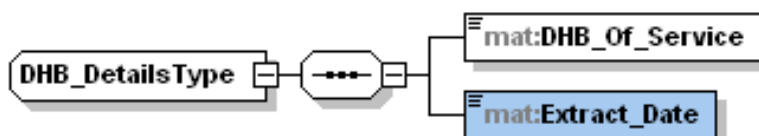


XML Instance Representation

```
<DHB_Primary_Maternity_Data_Collection Document_Reference="xs:string" File_Version =
"xs:string">
  <DHB_Details>DHB_DetailsType</DHB_Details>
  <Create_Request> Create_RequestType</Create_Request>[0..1000]
  <Replace_Request> Replace_RequestType</Replace_Request>[0..1000]
  <Delete_Request>Delete_RequestType</Delete_Request>[0..1000]
</DHB_Primary_Maternity_Data_Collection>
```

5.1.2 DHB\_Details

Entity Structure



---

**XML Instance Representation**     <DHB\_Details>  
   <DHB\_Of\_Service>DHBType</DHB\_Of\_Service>  
   <Extract\_Date>xs:date</Extract\_Date>  
   </DHB\_Details>

---

### 5.1.3     Create\_Request

#### Entity Structure



---

**XML Instance Representation**     <Create\_Request>  
   <Pregnancy\_Details> Pregnancy\_DetailsType</ Pregnancy\_Details>  
   </Create\_Request>

---

### 5.1.4     Replace\_Request

#### Entity Structure



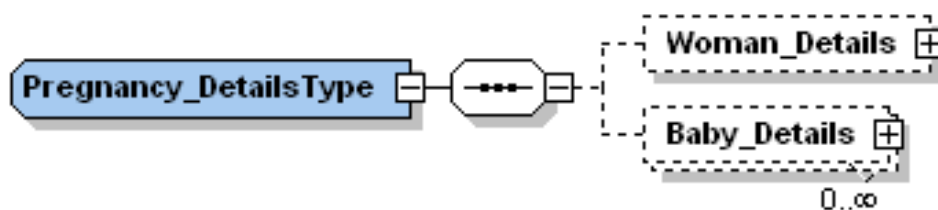
---

**XML Instance Representation**     <Replace\_Request>  
   <Pregnancy\_Details> Pregnancy\_DetailsType</ Pregnancy\_Details>  
   </Replace\_Request>

---

### 5.1.5 Pregnancy\_Details

#### Entity Structure

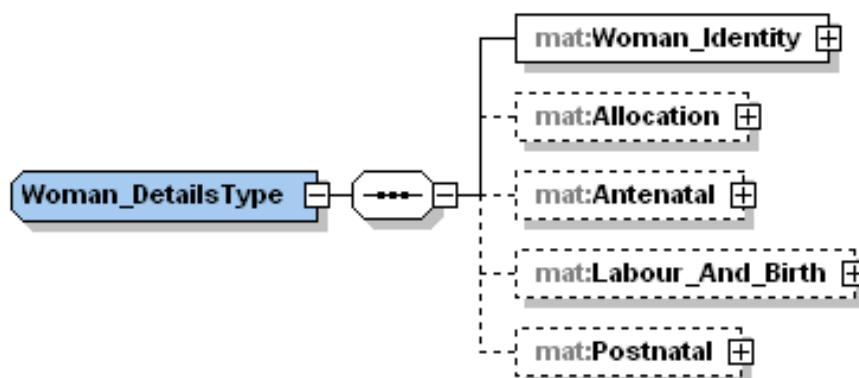


#### XML Instance Representation

```
<Pregnancy_Details>
  <Woman_Details>Woman_DetailsType</Woman_Details>[0..1]
  <Baby_Details>Baby_DetailsType</Baby_Details> [0..*]
</Pregnancy_Details>
```

### 5.1.6 Woman-Details

#### Entity Structure

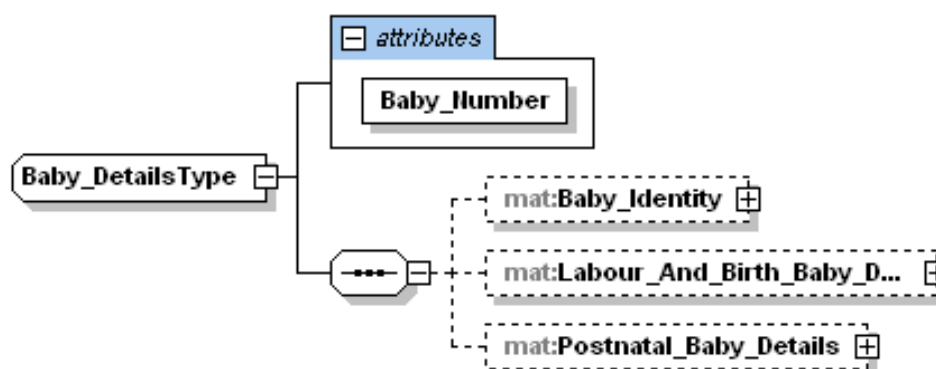


#### XML Instance Representation

```
<Woman_Details>
  <Woman_Identity>Woman_IdentityType</Woman_Identity>
  <Allocation>AllocationType</Allocation>[0..1]
  <Antenatal>AntenatalType</Antenatal>[0..1]
  <Labour_And_Birth>Labour_And_BirthType</Labour_And_Birth>[0..1]
  <Postnatal>PostnatalType</Postnatal>[0..1]
</Woman_Details>
```

### 5.1.7 Baby\_Details

#### Entity Structure

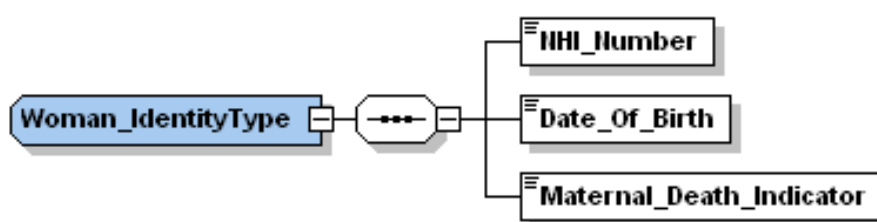


#### XML Instance Representation

```
<Baby_Details Baby_Number="xs:positiveInteger">
  <Baby_Identity>Baby_IdentityType</Baby_Identity>[0..1]
  <Labour_And_Birth_Baby_Details>Labour_And_Birth_Baby_DetailsType
    </Labour_And_Birth_Baby_Details>[0..1]
  <Postnatal_Baby_Details>Postnatal_Baby_DetailsType</Postnatal_Baby_Details>[0..1]
</Baby_Details>
```

### 5.1.8 Woman-Identity

#### Entity Structure



#### XML Instance Representation

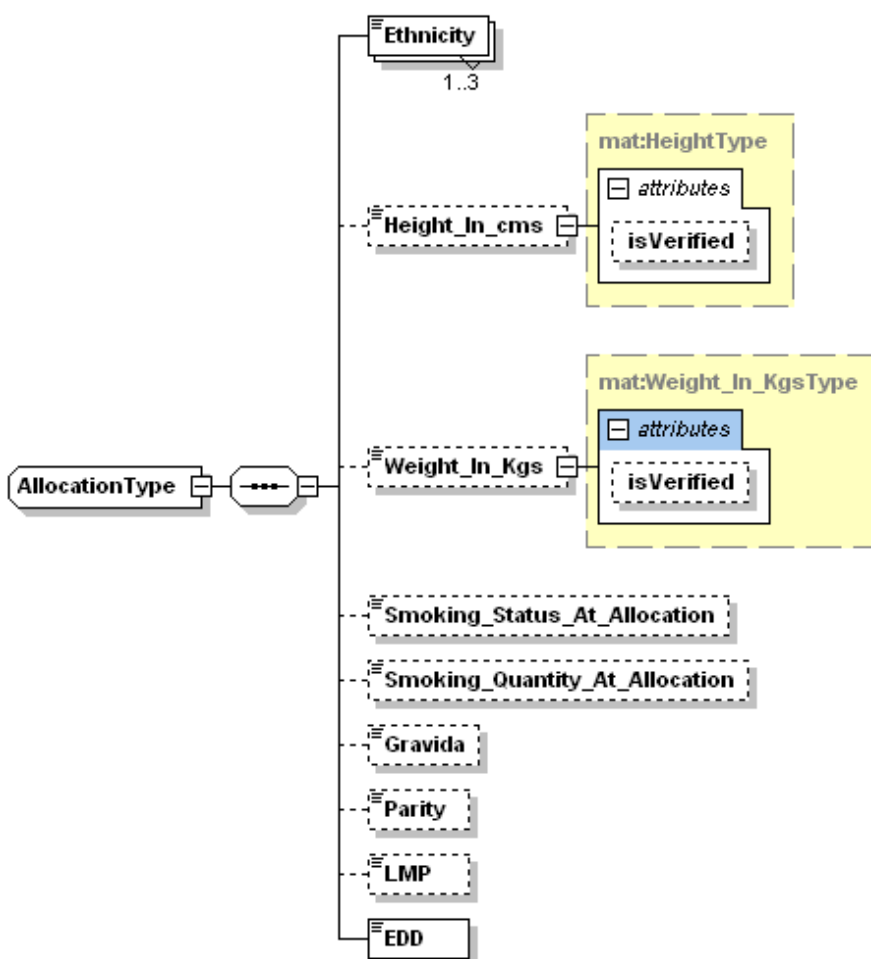
```
<Woman_Identity>
  <NHI_Number>NHIType</NHI_Number>
  <Date_Of_Birth>xs:date</Date_Of_Birth>
  <Maternal_Death-Indicator>xs:boolean</Maternal_Death_Indicator>
</Woman_Identity>
```

**Important Note:** In the case where the DHB is only supplying postnatal services to the baby, the woman's identity and any other details relating to services to the woman would not be provided.

An example of this is where a woman died in childbirth. The baby is taken by a guardian to a different DHB district. The new DHB district provides postnatal services to the baby. The new DHB would only supply Baby Identity and Postnatal Baby Details segments in the pregnancy record.

### 5.1.9 Allocation

#### Entity Structure



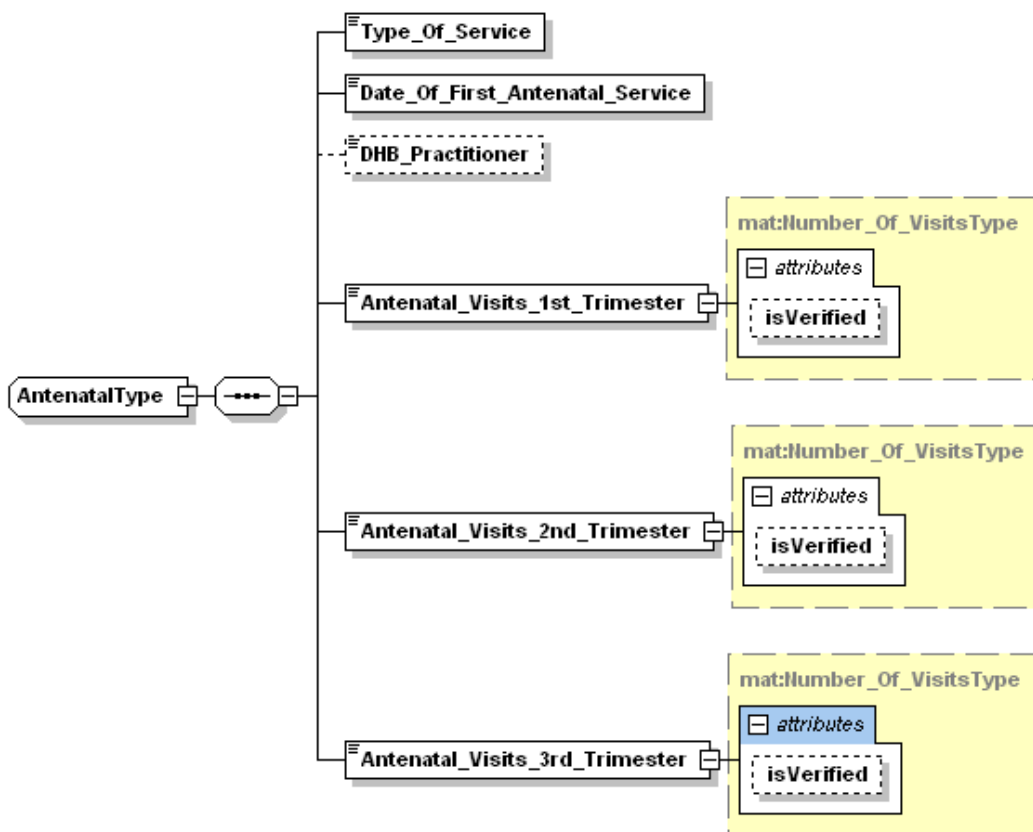
**XML Instance Representation**

```

<Allocation>
  <Ethnicity>xs:positiveInteger</Ethnicity>[1..3]
  <Height_In_cms isVerified="xs:boolean">xs:positiveInteger</Height_In_cms>[0..1]
  <Weight_In_Kgs isVerified="xs:boolean">xs:decimal</Weight_In_Kgs>[0..1]
  <Smoking_Status_At_Allocation>xs:boolean</Smoking_Status_At_Allocation>[0..1]
  <Smoking_Quantity_At_Allocation>xs:string</Smoking_Quantity_At_Allocation>[0..1]
  <Gravida>xs:positiveInteger</Gravida>[0..1]
  <Parity> xs:nonNegativeInteger </Parity>[0..1]
  <LMP>xs:date</LMP>[0..1]
  <EDD>xs:date</EDD>
</Allocation>
  
```

**Important Note:** If the Allocation segment is supplied, the Antenatal segment must also be supplied.

**5.1.10 Antenatal Entity Structure**



**XML Instance Representation**

```

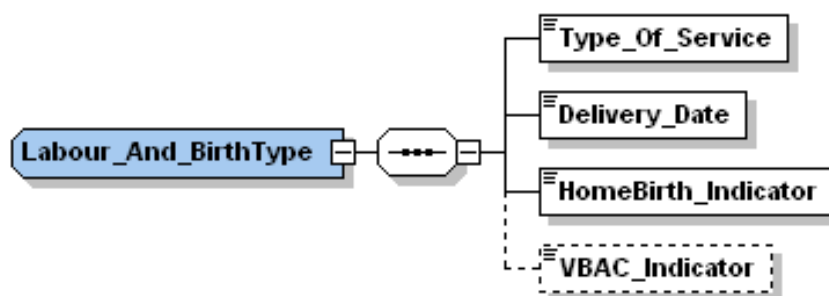
<Antenatal>
  <Type_Of_Service>xs:integer</Type_Of_Service>
  <Date_Of_First_Antenatal_Service>xs:date</Date_Of_First_Antenatal_Service>
  <DHB_Practitioner>xs:string</DHB_Practitioner>[0..1]
  <Antenatal_Visits_1st_Trimester isVerified="xs:boolean">xs:integer</Antenatal_Visits_1st_Trimester>
  <Antenatal_Visits_2nd_Trimester isVerified="xs:boolean">xs:integer</Antenatal_Visits_2nd_Trimester>
  <Antenatal_Visits_3rd_Trimester isVerified="xs:boolean">xs:integer</Antenatal_Visits_3rd_Trimester>
</Antenatal>

```

**Important Note:** If the Antenatal segment is supplied, the Allocation segment must also be supplied.

### 5.1.11 Labour\_And\_Birth

#### Entity Structure



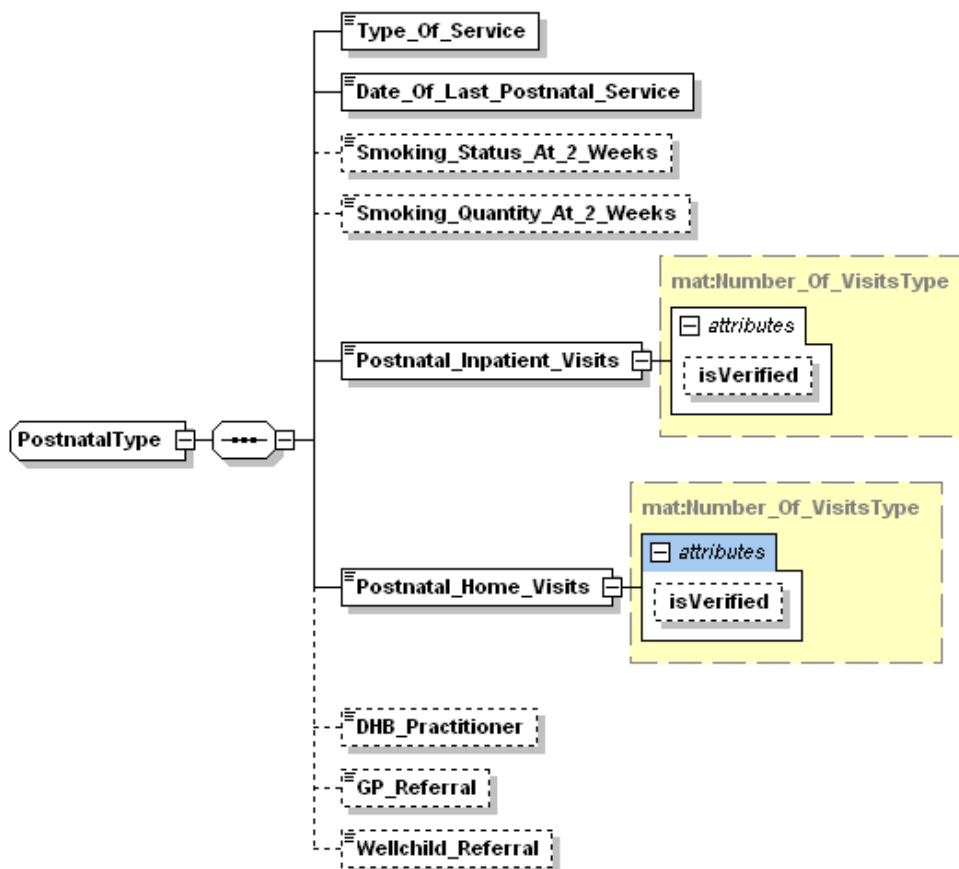
**XML Instance Representation**

```

<Labour_And_Birth>
  <Type_Of_Service>xs:integer</Type_Of_Service>
  <Delivery_Date>xs:date</Delivery_Date>
  <HomeBirth_Indicator>xs:boolean</HomeBirth_Indicator>
  <VBAC_Indicator>xs:boolean</VBAC_Indicator>[0..1]
</Labour_And_Birth>

```

5.1.12 Postnatal  
Entity Structure



XML Instance Representation

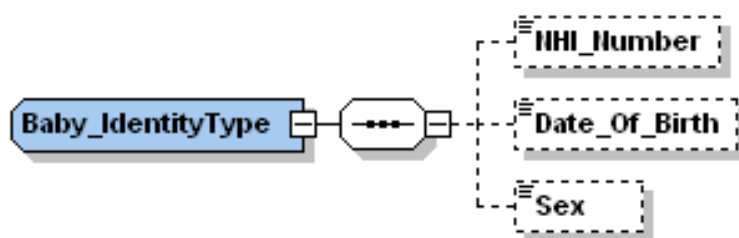
```

<Postnatal>
  <Type_Of_Service>xs:integer</Type_Of_Service>
  <Date_Of_Last_Postnatal_Service>xs:date</Date_Of_Last_Postnatal_Service>
  <Smoking_Status_At_2_Weeks>xs:boolean</Smoking_Status_At_2_Weeks>[0..1]
  <Smoking_Quantity_At_2_Weeks>xs:string</Smoking_Quantity_At_2_Weeks>[0..1]
  <Postnatal_Inpatient_Visits isVerified="xs:boolean">xs:integer</Postnatal_Inpatient_Visits>
  <Postnatal_Home_Visits isVerified="xs:boolean">xs:integer</Postnatal_Home_Visits>
  <DHB_Practitioner>xs:string</DHB_Practitioner>[0..1]
  <GP_Referral>xs:string</GP_Referral>[0..1]
  <Wellchild_Referral>xs:string</Wellchild_Referral>[0..1]
</Postnatal>
  
```



### 5.1.13 Baby\_Identity

#### Entity Structure



#### XML Instance Representation

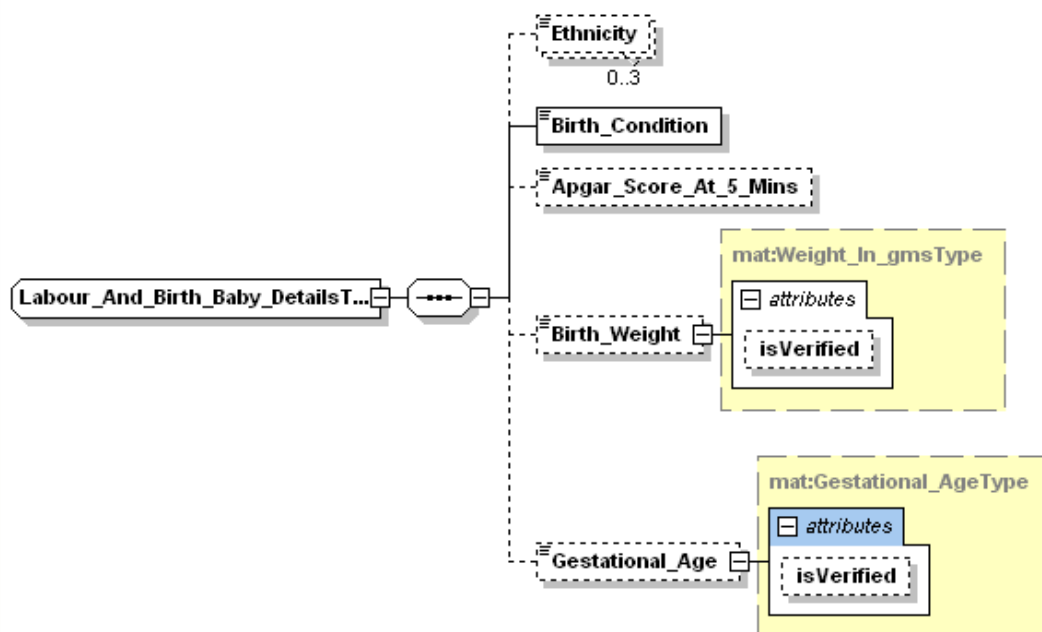
```

<Baby_Identity>
  <NHI_Number>xs:token</NHI_Number>[0..1]
  <Date_Of_Birth>xs:date</Date_Of_Birth>[0..1]
  <Sex>xs:string</Sex>[0..1]
</Baby_Identity>
  
```

**Important Note:** Baby Identity must be supplied for a live birth and when a Postnatal Baby segment is supplied.

### 5.1.14 Labour\_And\_Birth\_Baby\_Details

#### Entity Structure



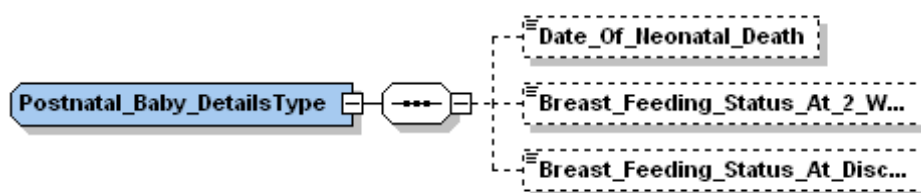
**XML Instance Representation**

```

<Labour_And_Birth_Baby_Details>
  <Ethnicity>xs:positiveInteger</Ethnicity>[0..3]
  <Birth_Condition>xs:string</Birth_Condition>
  <Apgar_Score_At_5_Mins>xs:nonNegativeInteger</Apgar_Score_At_5_Mins>[0..1]
  <Birth_Weight isVerified="xs:boolean">xs:positiveIntegerS</Birth_Weight>[0..1]
  <Gestational_Age isVerified="xs:boolean">xs:positiveInteger</Gestational_Age>[0..1]
</Labour_And_Birth_Baby_Details>
    
```

### 5.1.15 Postnatal\_Baby\_Details

#### Entity Structure



**XML Instance Representation**

```

<Postnatal_Baby_Details>
  <Date_Of_Neonatal_Death>xs:date</Date_Of_Neonatal_Death>
  <Breast_Feeding_Status_At_2_Weeks>Breast_Feeding_StatusType
  </Breast_Feeding_Status_At_2_Weeks>[0..1]
  <Breast_Feeding_Status_At_Discharge>Breast_Feeding_StatusType
  </Breast_Feeding_Status_At_Discharge>[0..1]
</Postnatal_Baby_Details>
    
```

## 5.2. MAT Acknowledgment File XML Message Structure/ Format

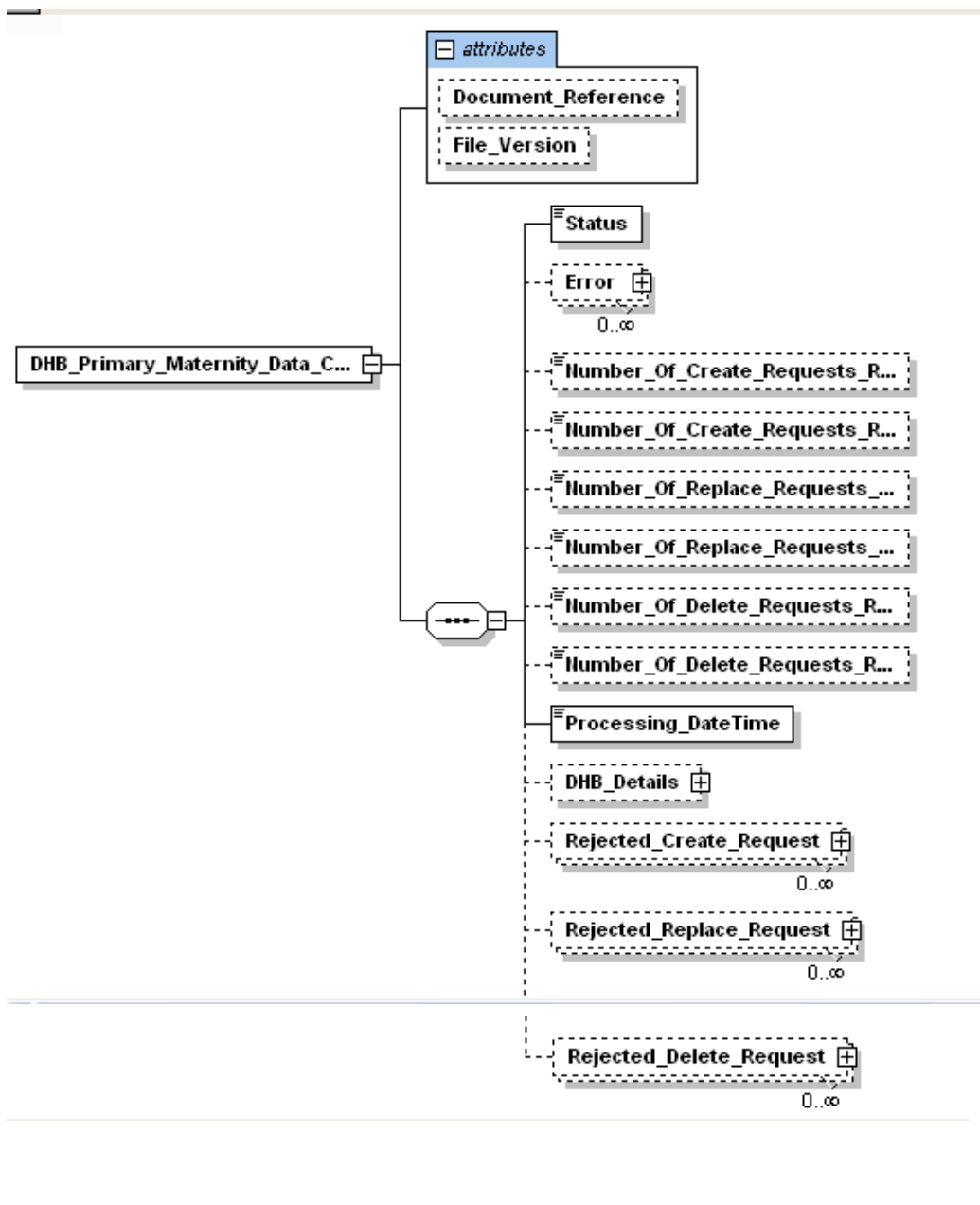
An XML Acknowledgement file will be created for each received Extract XML file, incorporating any errors.

The Submitter will be able to retrieve the Acknowledgement file using SFTP.

The following sections detail the structure and the entity types defined in the XML schema document for the MAT Acknowledgment file.

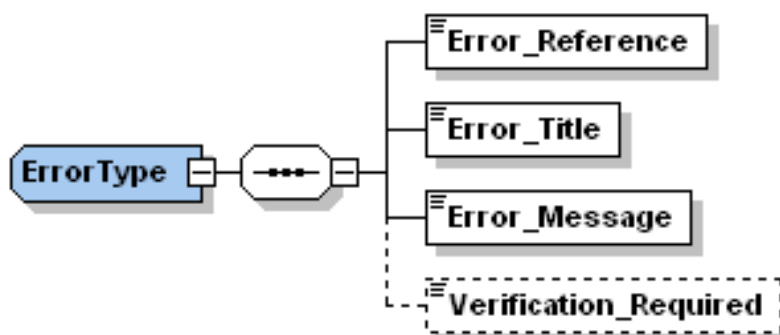
### 5.2.1 DHB\_Primary\_Maternity\_Data\_Collection\_Acknowledgement (Root Entity)

#### Entity Structure



**XML Instance Representation** <DHB\_Primary\_Maternity\_Data\_Collection\_Acknowledgement Document\_Reference="xs:string" File\_Version = "xs:string">  
 <Status> xs:string</Status>  
 <Error>ErrorType</Error>[0..\*]  
 <!-- Errors reported at this level are file errors -->  
 <Number\_Of\_Create\_Requests\_Received>xs:nonNegativeInteger</Number\_Of\_Create\_Requests\_Received>  
 <Number\_Of\_Create\_Requests\_Rejected>xs:nonNegativeInteger</Number\_Of\_Create\_Requests\_Rejected>  
 <Number\_Of\_Replace\_Requests\_Received>xs:nonNegativeInteger</Number\_Of\_Replace\_Requests\_Received>  
 <Number\_Of\_Replace\_Requests\_Rejected>xs:nonNegativeInteger</Number\_Of\_Replace\_Requests\_Rejected>  
 <Number\_Of\_Delete\_Requests\_Received>xs:nonNegativeInteger</Number\_Of\_Delete\_Requests\_Received>  
 <Number\_Of\_Delete\_Requests\_Rejected>xs:nonNegativeInteger</Number\_Of\_Delete\_Requests\_Rejected>  
 <Processing\_DateTime>xs:dateTime</Processing\_DateTime>  
 <File\_Version>xs:string</File\_Version>  
 <DHB\_Details> DHB\_DetailsType</DHB\_Details>  
 <Rejected\_Create\_Request>Rejected\_Create\_RequestType</Rejected\_Create\_Request> [0..\*]  
 <Rejected\_Replace\_Request>Rejected\_Replace\_RequestType</Rejected\_Replace\_Request> [0..\*]  
 <Rejected\_Delete\_Request>Rejected\_Delete\_RequestType</Rejected\_Delete\_Request> [0..\*]  
 </DHB\_Primary\_Maternity\_Data\_Collection\_Acknowledgement>

**5.2.2 Error Entity Structure**



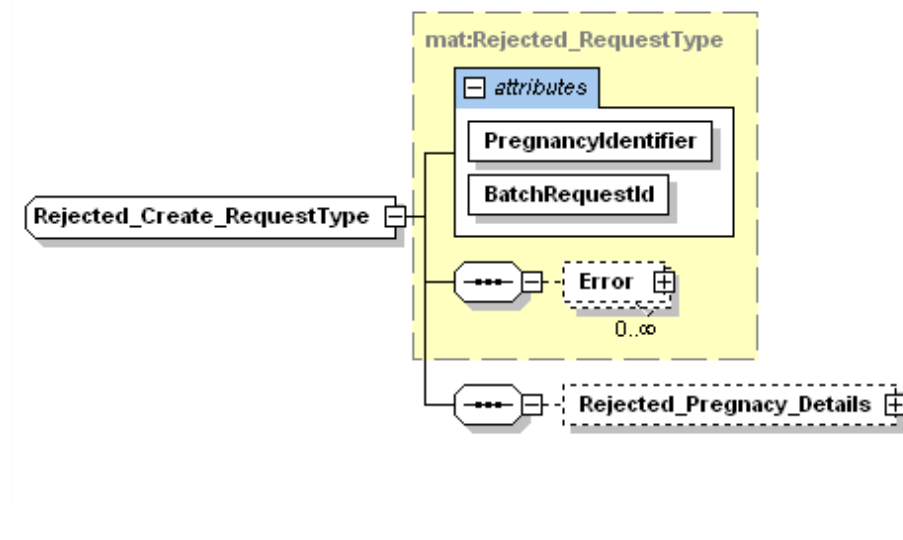
**XML Instance Representation**

```

<Error>
  <Error_Reference>xs:string</Error_Reference>
  <Error_Title> xs:string </Error_Title>
  <Error_Message> xs:string </Error_Message>
  <Verification_Required>xs:boolean</Verification_Required>[0..1]
</Error>
  
```

---

**5.2.3 Rejected\_Create\_Request**  
**Entity Structure**



**XML Instance Representation**

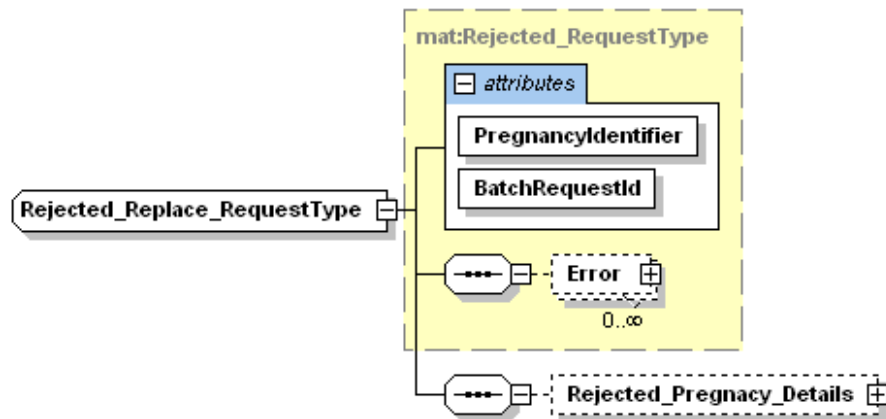
```

<Rejected_Create_Request Pregnancy_Identifier="guid" BatchRequestId=xs:integer>
  <Error>ErrorType</Error>[0..*]
  <Rejected_Pregnancy_Details>Rejected_Pregnancy_DetailsType</Rejected_Pregnancy_
    Details>
</Rejected_Create_Request>
  
```

---

### 5.2.4 Rejected\_Replace\_Request

#### Entity Structure

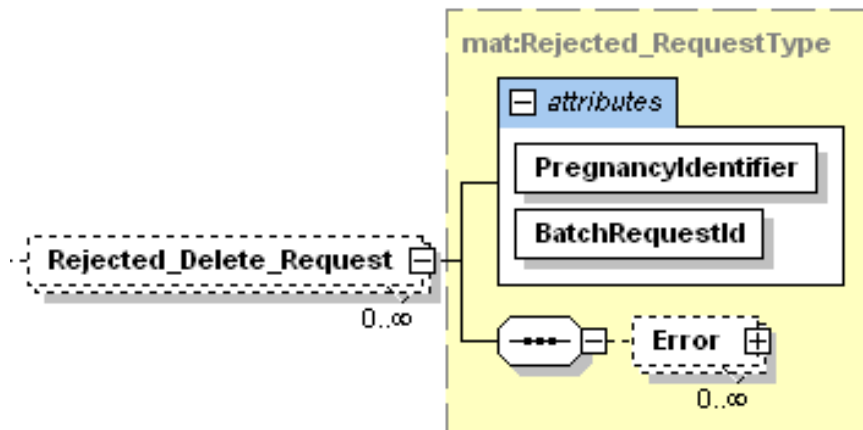


#### XML Instance Representation

```
<Rejected_Replace_Request Pregnancy_Identifier="guid" BatchRequestId=xs:integer >
  <Error>ErrorType</Error>[0..*]
  <Rejected_Pregnancy_Details>Rejected_Pregnancy_DetailsType</Rejected_Pregnancy_
    Details>
</Rejected_Replace_Request>
```

### 5.2.5 Rejected\_Delete\_Request

#### Entity Structure



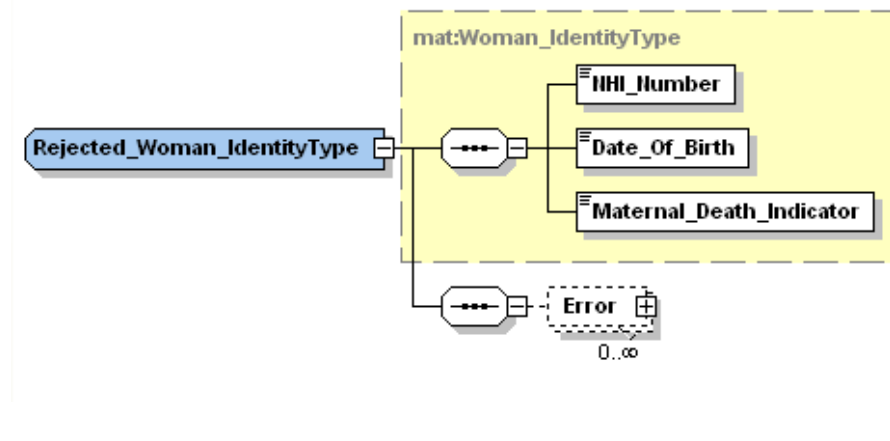
#### XML Instance Representation

```
<Rejected_Delete_Request Pregnancy_Identifier="guid" BatchRequestId=xs:integer >
  <Error>ErrorType</Error> [0..*]
</Rejected_Delete_Request>
```

### 5.2.6 Rejected Segments

Rejected segments have the same structure as the corresponding segment on the input file with one or more Error segments appended. Below is an example of the Rejected Woman Identity segment.

#### Entity Structure



#### XML Instance Representation

```
<Rejected_Woman_Identity>
  <NHI_Number>NHIType</NHI_Number>
  <Date_Of_Birth>xs:date</Date_Of_Birth>
  <Maternal_Death-Indicator>xs:boolean</Maternal_Death_Indicator>
  <Error>ErrorType</Error>[0..*]
</ Rejected_Woman_Identity>
```

### 5.2.7 Explanation of the Error Segment

When errors are detected by the validation process Error segments are inserted in the acknowledgement file, one Error segment per error.

A Verification Required element indicates whether the data submitted for rejected item needs to be checked by the DHB and resubmitted if the data is correct as recorded.

#### Example:

```
<mat:Rejected_Labour_And_Birth_Baby_Details>
  <mat:Ethnicity>10000</mat:Ethnicity>
  <mat:Birth_Condition>LB</mat:Birth_Condition>
  <mat:Apgar_Score_At_5_Mins>6</mat:Apgar_Score_At_5_Mins>
  <mat:Gestational_Age>45</mat:Gestational_Age>
  <mat:Error>
    <mat:Error_Reference>RM-M61-12</mat:Error_Reference>
    <mat:Error_Title>Error – Missing conditional data</mat:Error_Title>
    <mat:Error_Message>The Birth Weight has not been supplied in the Labour
      and Birth Baby Details segment. It must be supplied when Birth
```

---

```
        Condition = 'LB'</mat:Error_Message>
    </mat:Error>
    <mat:Error>
        <mat:Error_Reference>RM-M61-16</mat:Error_Reference>
        <mat:Error_Title>Error – Value not within range</mat:Error_Title>
        <mat:Error_Message>The Gestational Age in the Labour and Birth Baby
            Details segment is not within the range of probable values 20 – 44
            weeks. Please review and confirm as correct.</mat:Error_Message>
        <mat:Verification_Required>true</mat:Verification_Required>
    </mat:Error>
</mat:Labour_And_Birth_Baby_Details>
```



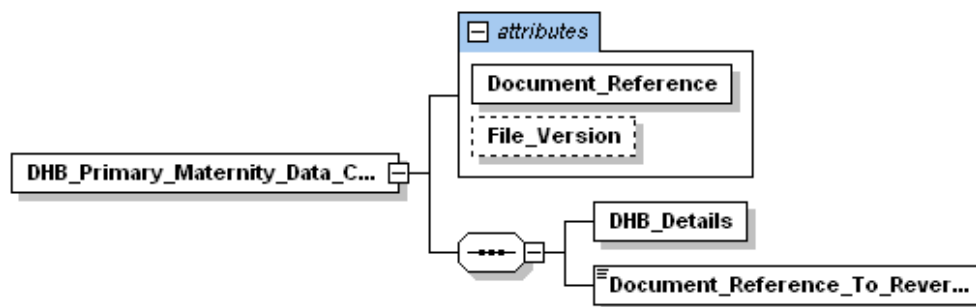
### 5.3. MAT Reversal Request XML Message Structure/ Format

The following sections detail the structure and the entity types defined in the XML schema document for the MAT Reversal Request.

The schema document defines the format and structure of the reversal request file expected.

#### 5.3.1 DHB\_Primary\_Maternity\_Data\_Collection\_Reversal (Root Entity)

##### Entity Structure



##### XML Instance Representation

```
<DHB_Primary_Maternity_Data_Collection_Reversal Document_Reference="xs:string" File_Version
="xs:string">
  <DHB_Details>DHB_DetailsType</DHB_Details>
  <Document_Reference_To_Reverse>xs:string </ Document_Reference_To_Reverse>
</DHB_Primary_Maternity_Data_Collection_Reversal>
```

### 5.4. MAT Reversal Acknowledgement File XML Message Structure/ Format

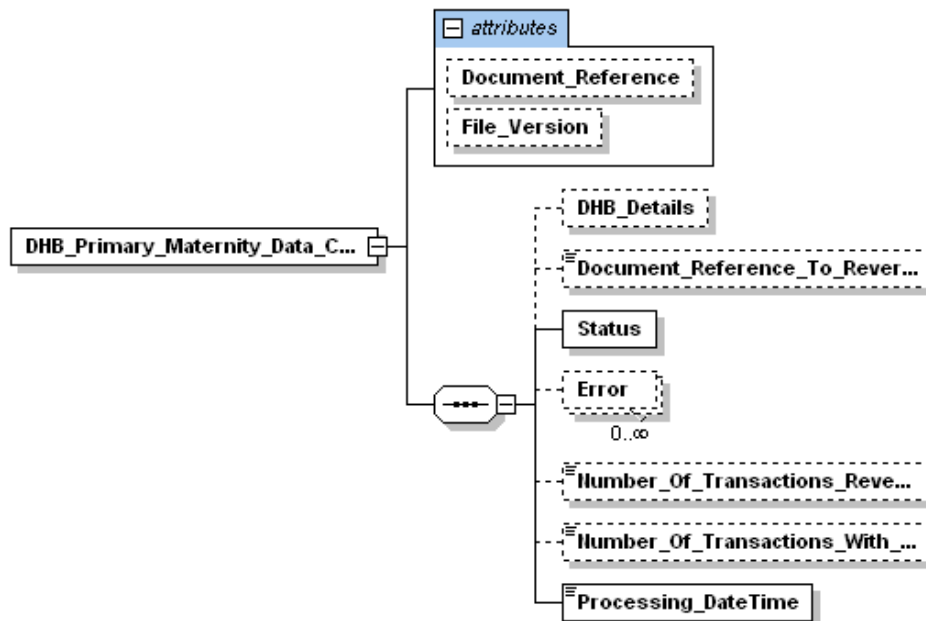
An XML Acknowledgement file will be created for each received Extract Reversal Request XML file, incorporating any errors.

The Submitter will be able to retrieve the Extract Reversal Request Acknowledgement file using SFTP.

The following sections detail the structure and the entity types defined in the XML schema document for the MAT Extract Reversal Request Acknowledgment file.

5.4.1 DHB\_Primary\_Maternity\_Data\_Collection\_Reversal\_Acknowledgement (Root Entity)

Entity Structure



XML Instance Representation

```

<DHB_Primary_Maternity_Data_Collection_Reversal_Acknowledgement
Document_Reference="xs:string" File_Version = "xs:string">
  <DHB_Details>DHB_DetailsType</DHB_Details>[0..1]
  <Document_Reference_To_Reverse>xs:string </Document_Reference_To_Reverse>[0..1]
  <Status> StatusType</Status>
  <Error>ErrorType</Error>[0..*]
  <Number_Of_Transactions_Reversed>xs:nonNegativeInteger</Number_Of_Transactions_
    Reversed >[0..1]
  <Number_Of_Transactions_With_Subsequent_Updates>xs:nonNegativeInteger</Number_Of_
    Transactions_With_Subsequent_Updates >[0..1]
  <Processing_Datetime>xs:dateTime</Processing_Datetime>
</DHB_Primary_Maternity_Data_Collection_Acknowledgement>
  
```

## 6. Initial Input File Validation

This section describes the initial validation of the input file where the file name, file version, conformance to schema and authorisation to load data are checked.

### 6.1. Input file name format and file attributes

The format of the Input file name is:

AAAA\_MATYYYYMMDD\_XXXX\_nnn\_ZZZZZZ.xml

Where:

- AAAA denotes the target system.
- ZZZZZZ denotes the input file type
- YYYYMMDD is the extract date
- XXXX is the Submitter code (refer to 6.1.2 for code set)
- nnn denotes a sequential number to allow for multiple extracts to occur on the same day. For the first extract of the day this should be 001, for the second 002 and so on.

The attributes of the Input file are listed below.

<b>Input File Attributes</b>				
<b>Attribute</b>	<b>Type</b>	<b>Format</b>	<b>M/O/C</b>	<b>Coded</b>
Target system	Code	AAAA	M	Y
Input file type	Code	Char(7)	M	Y
Extract date	Date	YYYY-MM-DD	M	-
Submitter	Code	NNNN	M	Y
Sequence number	Positive Integer	NNN	M	-
Document reference	String	AAAA_MATYYYYMMDD_XXXX _NNN_ZZZZZZ	M	-
File version	String	NNNNN.NN	M	-

### 6.1.1 Input file name code set attributes

The attributes of the Input file name that have coded values are listed below.

<i>Input File Name Code Set</i>			
<b>Coded Data Element</b>	<b>Range</b>	<b>Description</b>	<b>Submitter Type</b>
Target system	PROD COMP	Production Compliance	
Input file type	EXTRACT REVERSE	Extract Reversal	
Submitter	1011 1021 1022 1023 2031 2042 2047 2051 2071 3061 3081 3082 3091 3092 3093 3101 4111 4121 4123 4160 7999	Northland DHB Waitemata DHB Auckland DHB Counties Manakau DHB Waikato DHB Lakes DHB Bay of Plenty DHB Tairāwhiti DHB Taranaki DHB Hawkes Bay DHB MidCentral DHB Wanganui DHB Capital and Coast DHB Hutt Valley DHB Wairarapa DHB Nelson Marlborough DHB West Coast DHB Canterbury DHB South Canterbury DHB Southern DHB Clevermed Limited	DHB VEN
File Version	00000.01  00001.00	Retrospective Data (1 Jan 2007 to 01 Aug 2012.)  Current file version (1 July 2011 to current date)	

**Important Note:** The files submitted by Clevermed Limited must have version 00001.00.

### 6.1.3 Input file initial validation rules

The following rules identify the requirements for the initial validation of MAT Input files.

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M01-01	<ul style="list-style-type: none"> <li>The file name must comply with the format identified in 6.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>File name format</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-01</li> </ul>
BR-M01-02	<ul style="list-style-type: none"> <li>The elements must comply with the data code ranges identified in section 6.1.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Target system</li> <li>File type</li> <li>Submitter</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-02</li> <li>RM-M01-12</li> <li>RM-M01-03</li> </ul>
BR-M01-03	<ul style="list-style-type: none"> <li>The <i>Extract Date</i> must be less than or equal to the date the file is received.</li> </ul>	<ul style="list-style-type: none"> <li>Extract Date</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-04</li> </ul>
BR-M01-04	<ul style="list-style-type: none"> <li>The <i>Extract date</i> must be greater than or equal to the <i>Extract date</i> of the last file processed.</li> </ul>	<ul style="list-style-type: none"> <li>Extract Date</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-05</li> </ul>
BR-M01-05	<ul style="list-style-type: none"> <li>If <i>Sequence number</i> is greater than 1, then <i>Sequence number</i> must be equal to <i>Sequence number</i> of the last accepted file on <i>Extract date +1</i></li> </ul>	<ul style="list-style-type: none"> <li>Sequence number</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-06</li> </ul>
BR-M01-08	<ul style="list-style-type: none"> <li>The <i>Submitter</i> must be certified to submit the file version to the Target system</li> </ul>	<ul style="list-style-type: none"> <li>Target system</li> <li>File version</li> <li>Submitter</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-09</li> </ul>
BR-M01-13	<ul style="list-style-type: none"> <li>The file must be readable (The root segment must be present in the extract file.) (The <i>File version</i> must be the present in the Extract file)</li> </ul>	<ul style="list-style-type: none"> <li>File</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-15</li> </ul>
BR-M01-16	<ul style="list-style-type: none"> <li>The data elements must be in the correct order</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M01-17	<ul style="list-style-type: none"> <li>The Target system in the input file name must match the processing system</li> </ul>	<ul style="list-style-type: none"> <li>Target system</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-19</li> </ul>
BR-M01-18	<ul style="list-style-type: none"> <li>The <i>Extract Date</i> must be a valid date</li> </ul>	<ul style="list-style-type: none"> <li>Extract Date</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-21</li> </ul>
BR-M01-19	<ul style="list-style-type: none"> <li>The file must be in the correct Submitter input folder</li> </ul>	<ul style="list-style-type: none"> <li>Submitter</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-20</li> </ul>

#### 6.1.4 Input file initial validation error messages

The following rule responses apply to the Validation process:

##### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-01	Error	Error – Incorrect Data Format	<ul style="list-style-type: none"> <li>The <i>Input file name</i> does not comply with the correct format.</li> </ul>
RM-M01-02	Error	Error – Incorrect Code Range	<ul style="list-style-type: none"> <li>The <i>Target system</i> in the Input file name is not within the correct code range.</li> </ul>
RM-M01-03	Error	Error – Incorrect Code Range	<ul style="list-style-type: none"> <li>The <i>Submitter</i> in the Input file name is not within the correct code range.</li> </ul>
RM-M01-04	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The <i>Extract date</i> in the Input file is not less than or equal to the date the file is received by MOH.</li> </ul>
RM-M01-05	Error	Error – Invalid Sequence	<ul style="list-style-type: none"> <li>The <i>Extract date</i> in the Input file is not greater than or equal to the <i>Extract date</i> of the last file processed by MOH.</li> </ul>
RM-M01-06	Error	Error – Invalid Sequence	<ul style="list-style-type: none"> <li>The <i>Sequence number</i> in the Input file is not greater than the <i>Sequence number</i> of the last accepted file accepted by MOH.</li> </ul>
RM-M01-08	Error	Error – XSD Validation	<ul style="list-style-type: none"> <li>A system generated contextual XSD error message is provided</li> </ul>
RM-M01-09	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The <i>Submitter</i> in the Input file name is not certified to submit this file version to the Target System</li> </ul>
RM-M01-12	Error	Error – Incorrect Code Range	<ul style="list-style-type: none"> <li>The <i>Input file type</i> in the Input file name is not within the correct code range.</li> </ul>
RM-M01-15	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The file is unreadable</li> </ul>
RM-M01-19	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>Input file has been submitted to wrong <i>Target system</i></li> </ul>
RM-M01-20	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The <i>Submitter</i> in the input file name does not match the <i>Submitter</i> in the input folder name</li> </ul>
RM-M01-21	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The <i>Extract date</i> in the Input file is not a valid date</li> </ul>

## 7. MAT Segment Formats, Code Sets and Validation Rules

### 7.1. Extract file root segment

#### 7.1.1 Extract file root segment data attributes

The attributes of the Root segment are listed below.

Table Key: M = Mandatory. O = Optional. C = Conditional.

<b>Root segment Attributes</b>				
<b>Attribute</b>	<b>Type</b>	<b>Format</b>	<b>M/O/C</b>	<b>Coded</b>
Document reference	String	AAAA_MATYYYYMMDD_XXXX _NNN_ZZZZZZZ	M	-
File version	String	NNNNN.NN	M	-

#### 7.1.2 Extract file root segment rules

The following rules apply to the data associated with the Validation process.

<b>Rule Reference</b>	<b>Rule Description</b>	<b>Affected Data</b>	<b>Response Message Reference</b>
BR-M01-09	<ul style="list-style-type: none"> <li>The <i>Document reference</i> must be present in the Extract file</li> </ul>	<ul style="list-style-type: none"> <li>Document reference</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M01-10	<ul style="list-style-type: none"> <li>The <i>Document reference</i> must be the same as the <i>File name</i></li> </ul>	<ul style="list-style-type: none"> <li>Document reference</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-14</li> </ul>
BR-M01-15	<ul style="list-style-type: none"> <li>The <i>File version</i> must comply with the data format identified in section 7.1.1</li> </ul>	<ul style="list-style-type: none"> <li>File version</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>

#### 7.1.3 Extract file root segment error messages

The following rule responses apply to the Validation process:

##### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-08	Error	Error – XSD Validation	▪ A system generated contextual XSD error message is provided
RM-M01-14	Error	Error – Invalid Data	▪ The <i>Document reference</i> and the file name are not the same

## 7.2. DHB Details Segment

### 7.2.1 DHB Details segment data elements

The data elements of the DHB Details segment are listed below.

Table Key: M = Mandatory. O = Optional. C = Conditional.

<i>DHB Details Elements</i>				
Data Element	Type	Format	M/O/C	Coded
DHB of Service	Code	NNNN	M	Y
Extract Date	Date	YYYY-MM-DD	M	-

### 7.2.2 DHB Details segment code set elements

The data elements of the DHB Details segment that have coded values are listed below.

<i>DHB Details Code Set</i>		
Coded Data Element	Range	Description
DHB of Service	1011	Northland DHB
	1021	Waitemata DHB
	1022	Auckland DHB
	1023	Counties Manakau DHB
	2031	Waikato DHB
	2042	Lakes DHB
	2047	Bay of Plenty DHB
	2051	Tairāwhiti DHB
	2071	Taranaki DHB
	3061	Hawkes Bay DHB
	3081	MidCentral DHB
	3082	Wanganui DHB
	3091	Capital and Coast DHB
	3092	Hutt Valley DHB
	3093	Wairarapa DHB
	3101	Nelson Marlborough DHB
	4111	West Coast DHB
	4121	Canterbury DHB
4123	South Canterbury DHB	
4131	Otago District Health Board (merged to 4160)	
4141	Southland District Health Board (merged to 4160)	
4160	Southern DHB	

### 7.2.3 DHB Details segment rules

The following rules apply to the data associated with the Validation process.

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Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M11-01	<ul style="list-style-type: none"> <li>The segment must contain all mandatory data as identified in section 7.2.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>DHB of Service</li> <li>Extract Date</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M11-02	<ul style="list-style-type: none"> <li>The data elements must comply with the data formats identified in section 7.2.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>DHB of Service</li> <li>Extract Date</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M11-03	<ul style="list-style-type: none"> <li>The data elements must comply with the data code ranges identified in section 7.2.2 above.</li> </ul>	<ul style="list-style-type: none"> <li>DHB of Service</li> </ul>	<ul style="list-style-type: none"> <li>RM-M11-05</li> </ul>
BR-M11-04	<ul style="list-style-type: none"> <li>The <i>Extract Date</i> must equal to <i>Extract Date</i> in the file name</li> </ul>	<ul style="list-style-type: none"> <li>Extract Date</li> </ul>	<ul style="list-style-type: none"> <li>RM-M11-06</li> </ul>
BR-M11-05	<ul style="list-style-type: none"> <li>The segment must be present in the input file</li> </ul>	<ul style="list-style-type: none"> <li>DHB Details</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M01-14	<ul style="list-style-type: none"> <li>The <i>DHB of Service</i> must be active.</li> </ul>	<ul style="list-style-type: none"> <li>DHB of Service</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-16</li> </ul>

#### 7.2.4 DHB Details segment error messages

The following rule responses apply to the Validation process:

##### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-08	Error	Error – XSD Validation	<ul style="list-style-type: none"> <li>A system generated contextual XSD error message is provided</li> </ul>
RM-M11-05	Error	Error – Incorrect Code Range	<ul style="list-style-type: none"> <li>The <i>DHB of Service</i> in the DHB Details segment is not within the correct code range.</li> </ul>
RM-M11-06	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The <i>Extract Date</i> in the DHB Details segment is not equal to the <i>Extract Date</i> in the file name</li> </ul>
RM-M01-16	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The <i>DHB of Service</i> in the DHB Details segment is not active - You are not enabled to submit this file – please contact <a href="mailto:compliance@moh.govt.nz">compliance@moh.govt.nz</a></li> </ul>

## 7.3. Request segment

Refer also to Section 8 MAT Extract File Record Types for more details about the request types.

### 7.3.1 Request segment data attributes

The attributes of the Request segment (where request type is Create, Replace or Delete) are listed below.

Table Key: M = Mandatory. O = Optional. C = Conditional.

<i>Request Type Attributes</i>				
Attribute	Type	Format	M/O/C	Coded
Pregnancy Identifier	GUID	[0-9a-fA-F]{8}-[0-9a-fA-F]{4}- [0-9a-fA-F]{4}-[0-9a-fA-F]{4}- [0-9a-fA-F]{12}	M	-
Batch Request ID	Integer	9(5)	M	-

### 7.3.2 Request segment rules

The following rules apply to the data associated with the Validation process.

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M16-01	<ul style="list-style-type: none"> <li>The segment must contain all mandatory attributes as identified in section 7.3.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Pregnancy Identifier</li> <li>Batch Request ID</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M16-02	<ul style="list-style-type: none"> <li>The attributes must comply with the data formats identified in section 7.3.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Pregnancy Identifier</li> <li>Batch Request ID</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M16-05	<ul style="list-style-type: none"> <li>The <i>Batch Request ID</i> must be unique in the Extract File</li> </ul>	<ul style="list-style-type: none"> <li>Batch Request ID</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M16-06	<ul style="list-style-type: none"> <li>If the request type is Create or Replace <i>Pregnancy Details</i> must be present</li> </ul>	<ul style="list-style-type: none"> <li>Pregnancy Details</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M16-07	<ul style="list-style-type: none"> <li>There should be at least one Create, Replace or Delete Request present in the file</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>RM-M16-08</li> </ul>

### 7.3.3 Request Type segment error messages

The following rule responses apply to the Validation process:

#### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.

3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-08	Error	Error – XSD Validation	<ul style="list-style-type: none"> <li>A system generated contextual XSD error message is provided</li> </ul>
RM-M16-08	Error	Error – Missing Data	<ul style="list-style-type: none"> <li>The file does not contain any Create, Replace or Delete Requests</li> </ul>

## 7.4. Woman Identity segment

### 7.4.1 Woman Identity segment data elements

The data elements of the Woman Identity segment are listed below.

Table Key: M = Mandatory. O = Optional. C = Conditional.

<b>Woman Identity Elements</b>				
Data Element	Type	Format	M/O/C	Coded
NHI Number	ID	AAANNNN	M	-
Date of Birth	Date	YYYY-MM-DD	M	-
Maternal Death Indicator	Boolean	'true' or 'false'	M	-

### 7.4.2 Woman Identity segment rules

The following rules apply to the data associated with the Validation process.

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M21-01	<ul style="list-style-type: none"> <li>The segment must contain all mandatory data as identified in section 7.4.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>NHI Number</li> <li>Date of Birth</li> <li>Maternal Death Indicator</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M21-02	<ul style="list-style-type: none"> <li>The data elements must comply with the data formats identified in section 7.4.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>NHI Number</li> <li>Date of Birth</li> <li>Maternal Death Indicator</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M21-03	<ul style="list-style-type: none"> <li>The <i>NHI Number</i> must be registered on the NHI database before submission.</li> </ul>	<ul style="list-style-type: none"> <li>NHI Number</li> </ul>	<ul style="list-style-type: none"> <li>RM-M21-05</li> </ul>
BR-M21-04	<ul style="list-style-type: none"> <li>The <i>Date of Birth</i> in this segment must match the <i>Date of Birth</i> held in the NHI database for the <i>NHI Number</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Date of Birth</li> <li>NHI Number</li> </ul>	<ul style="list-style-type: none"> <li>RM-M21-06</li> </ul>
BR-M21-05	<ul style="list-style-type: none"> <li>If the <i>Woman Details</i> segment is supplied, the <i>Woman Identity</i> segment must be present</li> </ul>	<ul style="list-style-type: none"> <li>Woman Identity</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>

BR-M21-06	<ul style="list-style-type: none"> <li>▪ The <i>Sex</i> held in the NHI database for the <i>NHI Number</i> must be 'F'.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Sex</li> <li>▪ NHI Number</li> </ul>	RM-M21-10
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### 7.4.3 Woman Identity segment error messages

The following rule responses apply to the Validation process:

#### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-08	Error	Error – XSD Validation	<ul style="list-style-type: none"> <li>▪ A system generated contextual XSD error message is provided</li> </ul>
RM-M21-05	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>▪ The <i>NHI Number</i> supplied in the Woman Identity segment is not valid in the NHI Database.</li> </ul>
RM-M21-06	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>▪ The <i>Date of Birth</i> in the Woman Identity segment does not match <i>the Date of Birth</i> in the NHI Database for the <i>NHI Number</i>.</li> </ul>
RM-M21-10	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>▪ The <i>NHI Number</i> supplied in the Woman Identity segment is not registered as belonging to a woman.</li> </ul>

## 7.5. Allocation segment

### 7.5.1 Allocation data elements

The data elements of the Allocation Segment are listed below.

Table Key: M = Mandatory. O = Optional. C = Conditional.

<b>Allocation Elements</b>					
<b>Data Element</b>	<b>Type</b>	<b>Format</b>	<b>M/O/C</b>	<b>Coded</b>	<b>Verified Attribute *</b>
Ethnicity 1	Code	NNNNN	M	Y	-
Ethnicity 2	Code	NNNNN	O	Y	-
Ethnicity 3	Code	NNNNN	O	Y	-
Height in cms	Positive Integer	NNN	O	-	Y
Weight in Kgs	Decimal	NNN.N	O	-	Y
Smoking Status at Allocation	Boolean	'true' or 'false'	O	-	-
Smoking Quantity at Allocation	Code	A	O	Y	-
Gravida	Integer	NN	O	-	-
Parity	Integer	NN	O	-	-
LMP	Date	YYYY-MM-DD	O	-	-
EDD	Date	YYYY-MM-DD	M	-	-

\* The Verified attribute is a Boolean indicator that the DHB may use to confirm that the value for the element being submitted is legitimately outside the permissible range.

### 7.5.2 Allocation segment code sets

The data elements of the Allocation segment that have coded values are listed below.

<b>Allocation Code Set</b>		
<b>Coded Data Element</b>	<b>Range</b>	<b>Description</b>
Ethnicity		Refer to Appendix C for the complete list of valid Level 4 ethnicity codes and a mapping table of Level 2 codes to Level 4 codes
Smoking Quantity at Allocation	L	Less than 10 cigarettes per day
	M	10 – 20 cigarettes per day
	H	More than 20 cigarettes per day

### 7.5.3 Allocation segment rules

The following rules apply to the data associated with the Validation process.

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M31-01	<ul style="list-style-type: none"> <li>The segment must contain all mandatory data as identified in section 7.5.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Ethnicity 1</li> <li>EDD</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M31-02	<ul style="list-style-type: none"> <li>The data elements, when present, must comply with the data formats identified in section 7.5.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Ethnicity 1, 2, or 3</li> <li>Height in cms</li> <li>Weight in Kgs</li> <li>Smoking Status at Allocation</li> <li>Gravida</li> <li>Parity</li> <li>LMP</li> <li>EDD</li> <li>Verified</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M31-03	<ul style="list-style-type: none"> <li>The data elements, when present, must comply with the data code ranges identified in section 7.5.2 above.</li> </ul>	<ul style="list-style-type: none"> <li>Ethnicity 1, 2 or 3</li> <li>Smoking Quantity at Allocation</li> </ul>	<ul style="list-style-type: none"> <li>RM-M31-16</li> <li>RM-M01-08</li> </ul>
BR-M31-04	<ul style="list-style-type: none"> <li>The <i>Allocation</i> and <i>Antenatal</i> segments must be supplied together. One cannot be supplied without the other</li> </ul>	<ul style="list-style-type: none"> <li>Allocation</li> </ul>	<ul style="list-style-type: none"> <li>RM-M31-01</li> </ul>
BR-M31-05	<ul style="list-style-type: none"> <li>If not NULL or verified, <i>Height in cms</i> must be in the range 100 cm – 215 cm</li> </ul>	<ul style="list-style-type: none"> <li>Height in cms</li> </ul>	<ul style="list-style-type: none"> <li>RM-M31-19</li> </ul>
BR-M31-06	<ul style="list-style-type: none"> <li>If not NULL or verified, <i>Weight in kgs</i> must be in the range 40 kg – 180 kg</li> </ul>	<ul style="list-style-type: none"> <li>Weight in Kgs</li> </ul>	<ul style="list-style-type: none"> <li>RM-M31-20</li> </ul>
BR-M31-07	<ul style="list-style-type: none"> <li>If not NULL, <i>Gravida</i> must be between 1 and 99</li> </ul>	<ul style="list-style-type: none"> <li>Gravida</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M31-08	<ul style="list-style-type: none"> <li>If not NULL, <i>Parity</i> must be between 0 and 99</li> </ul>	<ul style="list-style-type: none"> <li>Parity</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M31-09	<ul style="list-style-type: none"> <li>If not NULL, <i>Parity</i> must be less than or equal to <i>Gravida</i></li> </ul>	<ul style="list-style-type: none"> <li>Parity</li> <li>Gravida</li> </ul>	<ul style="list-style-type: none"> <li>RM-M31-23</li> </ul>
BR-M31-10	<ul style="list-style-type: none"> <li>If not NULL, <i>LMP</i> must be less than or equal to <i>Date of First Antenatal Service</i></li> </ul>	<ul style="list-style-type: none"> <li>LMP</li> <li>Date of First Antenatal Service</li> </ul>	<ul style="list-style-type: none"> <li>RM-M31-24</li> </ul>
BR-M31-11	<ul style="list-style-type: none"> <li><i>EDD</i> must be greater than or equal to <i>Date of First Antenatal Service</i></li> </ul>	<ul style="list-style-type: none"> <li>EDD</li> <li>Date of First Antenatal Service</li> </ul>	<ul style="list-style-type: none"> <li>RM-M31-25</li> </ul>
BR-M31-12	<ul style="list-style-type: none"> <li><i>EDD</i> must be less than <i>Date of First Antenatal Service</i> + 45 weeks</li> </ul>	<ul style="list-style-type: none"> <li>EDD</li> <li>Date of First Antenatal Service</li> </ul>	<ul style="list-style-type: none"> <li>RM-M31-26</li> </ul>
BR-M31-14	<ul style="list-style-type: none"> <li>No more than three Ethnicities should be supplied.</li> </ul>	<ul style="list-style-type: none"> <li>Ethnicity</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>

## 7.5.4 Allocation segment error messages

The following rule responses apply to the Validation process:

### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-08	Error	Error – XSD Validation	<ul style="list-style-type: none"> <li>▪ A system generated contextual XSD error message is provided.</li> </ul>
RM-M31-01	Error	Error – Missing Mandatory Data	<ul style="list-style-type: none"> <li>▪ The <i>Allocation</i> and <i>Antenatal</i> segments must be supplied together.</li> </ul>
RM-M31-16	Error	Error – Incorrect Code Range	<ul style="list-style-type: none"> <li>▪ The <i>Ethnicity</i> in the Allocation segment is not within the correct code range.</li> </ul>
RM-M31-19	Error	Error – Value Not Within Range	<ul style="list-style-type: none"> <li>▪ The <i>Height in cms</i> in the Allocation segment is not within the range of probable values. Please review and confirm as correct.</li> </ul>
RM-M31-20	Error	Error – Value Not Within Range	<ul style="list-style-type: none"> <li>▪ The <i>Weight in Kgs</i> in the Allocation segment is not within the range of probable values. Please review and confirm as correct.</li> </ul>
RM-M31-21	Error	Error – Invalid data	<ul style="list-style-type: none"> <li>▪ The <i>Gravida</i> in the Allocation segment is not within the range of valid values.</li> </ul>
RM-M31-22	Error	Error – Invalid data	<ul style="list-style-type: none"> <li>▪ The <i>Parity</i> in the Allocation segment is not within the range of valid values.</li> </ul>
RM-M31-23	Error	Error – Invalid data	<ul style="list-style-type: none"> <li>▪ The <i>Parity</i> in the Allocation segment is not less than or equal to the <i>Gravida</i>.</li> </ul>
RM-M31-24	Error	Error – Invalid data	<ul style="list-style-type: none"> <li>▪ The <i>LMP</i> in the Allocation segment is not less than or equal to the <i>Date of First Antenatal Service</i>.</li> </ul>
RM-M31-25	Error	Error – Invalid data	<ul style="list-style-type: none"> <li>▪ The <i>EDD</i> in the Allocation segment is not greater than or equal to the <i>Date of First Antenatal Service</i>.</li> </ul>
RM-M31-26	Error	Error – Invalid data	<ul style="list-style-type: none"> <li>▪ The <i>EDD</i> in the Allocation segment is not less than the <i>Date of First Antenatal Service + 45 weeks</i>.</li> </ul>

## 7.6. Antenatal segment

### 7.6.1 Antenatal data elements

The data elements of the Antenatal Segment are listed below.

Table Key: M = Mandatory. O = Optional. C = Conditional.

<b>Antenatal Elements</b>					
<b>Data Element</b>	<b>Type</b>	<b>Format</b>	<b>M/O/C</b>	<b>Coded</b>	<b>Verified attribute*</b>
Type of Service	Code	N	M	Y	-
Date of First Antenatal Service	Date	YYYY-MM-DD	M	-	-
DHB Practitioner	ID	NN-NNNNN or NNNNN or NNNNNN	C	-	-
Antenatal Visits 1 <sup>st</sup> Trimester	Integer	NN	M	-	Y
Antenatal Visits 2 <sup>nd</sup> Trimester	Integer	NN	M	-	Y
Antenatal Visits 3 <sup>rd</sup> Trimester	Integer	NN	M	-	Y

\* The Verified attribute is a Boolean indicator that the DHB may use to confirm that the value for the element being submitted is legitimately outside the permissible range.

### 7.6.2 Antenatal segment code sets

The data elements of the Antenatal segment that have coded values are listed below.

<b>Antenatal Code Set</b>		
<b>Coded Data Element</b>	<b>Range</b>	<b>Description</b>
Type of Service	1	LMC Services provided by a DHB employed midwife
	2	Co-ordinated DHB midwifery services
	3	DHB midwifery services and postnatal care for woman who have a medical LMC under the Section 88 Maternity Services Notice



### 7.6.3 Antenatal segment rules

The following rules apply to the data associated with the Validation process.

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M41-01	<ul style="list-style-type: none"> <li>The segment must contain all mandatory data as identified in section 7.6.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Type of Service</li> <li>Date of First Antenatal Service</li> <li>Antenatal Visits 1<sup>st</sup> trimester</li> <li>Antenatal Visits 2<sup>nd</sup> trimester</li> <li>Antenatal Visits 3<sup>rd</sup> trimester</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M41-02	<ul style="list-style-type: none"> <li>The data elements, if present, must comply with the data formats identified in section 7.6.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Type of Service</li> <li>Date of First Antenatal Service</li> <li>Antenatal Visits 1<sup>st</sup> trimester</li> <li>Antenatal Visits 2<sup>nd</sup> trimester</li> <li>Antenatal Visits 3<sup>rd</sup> trimester</li> <li>Verified</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M41-03	<ul style="list-style-type: none"> <li>The data elements must comply with the data code ranges identified in section 7.6.2 above.</li> </ul>	<ul style="list-style-type: none"> <li>Type of Service</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M31-04	<ul style="list-style-type: none"> <li>The <i>Allocation</i> and <i>Antenatal</i> segments must be supplied together. One cannot be supplied without the other</li> </ul>	<ul style="list-style-type: none"> <li>Antenatal</li> </ul>	<ul style="list-style-type: none"> <li>RM-M31-01</li> </ul>
BR-M41-04	<ul style="list-style-type: none"> <li>The <i>Date of First Antenatal Service</i> must be less than or equal to <i>Extract Date</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Date of First Antenatal Service</li> <li>Extract Date</li> </ul>	<ul style="list-style-type: none"> <li>RM-M41-14</li> </ul>
BR-M41-05	<ul style="list-style-type: none"> <li>The segment must contain <i>DHB Practitioner</i> if <i>Type of Service</i> = 1 or 2.</li> </ul>	<ul style="list-style-type: none"> <li>DHB Practitioner</li> <li>Type of Service</li> </ul>	<ul style="list-style-type: none"> <li>RM-M41-15</li> </ul>

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M41-06	<ul style="list-style-type: none"> <li>▪ The <i>DHB Practitioner</i> must be registered and the registration details must be in the HPI database.</li> <li>▪ For a midwife the registration number is their full Midwifery Council of New Zealand Registration Number, including the hyphen (e.g. 15-12345)</li> <li>▪ For a Medical Professional the registration number is their New Zealand Medical Council Number in the format (NNNNN).</li> <li>▪ For a Nurses the registration number is their New Zealand Nursing Council Number in the format (NNNNNN).</li> </ul>	<ul style="list-style-type: none"> <li>▪ DHB Practitioner</li> </ul>	<ul style="list-style-type: none"> <li>▪ RM-M41-16</li> </ul>
BR-M41-07	<ul style="list-style-type: none"> <li>▪ If not verified, <i>Antenatal Visits 1<sup>st</sup> trimester</i> must be between 0 and 10</li> </ul>	<ul style="list-style-type: none"> <li>▪ Antenatal Visits 1<sup>st</sup> trimester</li> </ul>	<ul style="list-style-type: none"> <li>▪ RM-M41-17</li> </ul>
BR-M41-08	<ul style="list-style-type: none"> <li>▪ If not verified, <i>Antenatal Visits 2<sup>nd</sup> trimester</i> must be between 0 and 15</li> </ul>	<ul style="list-style-type: none"> <li>▪ Antenatal Visits 2<sup>nd</sup> trimester</li> </ul>	<ul style="list-style-type: none"> <li>▪ RM-M41-18</li> </ul>
BR-M41-09	<ul style="list-style-type: none"> <li>▪ If not verified, <i>Antenatal Visits 3<sup>rd</sup> trimester</i> must be between 0 and 30</li> </ul>	<ul style="list-style-type: none"> <li>▪ Antenatal Visits 3<sup>rd</sup> trimester</li> </ul>	<ul style="list-style-type: none"> <li>▪ RM-M41-19</li> </ul>

#### 7.6.4 Antenatal segment error messages

The following rule responses apply to the Validation process:

##### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-08	Error	Error – XSD Validation	<ul style="list-style-type: none"> <li>▪ A system generated contextual XSD error message is provided</li> </ul>
RM-M41-14	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>▪ The <i>Date of First Antenatal Service</i> in the Antenatal segment is not less than or equal to the date the <i>Extract Date</i>.</li> </ul>
RM-M41-15	Error	Error – Missing Conditional Data	<ul style="list-style-type: none"> <li>▪ The <i>DHB Practitioner</i> has not been supplied in the Antenatal segment. It must be supplied when <i>Type of Service</i> = 1 or 2</li> </ul>
RM-M41-16	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>▪ The <i>DHB Practitioner</i> supplied in the Antenatal segment does not exist in the HPI Database.</li> </ul>

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M41-17	Error	Error – Invalid Data	▪ The <i>Antenatal Visits 1<sup>st</sup> Trimester</i> in the Antenatal segment is not in the range 0 to 10.
RM-M41-18	Error	Error – Invalid Data	▪ The <i>Antenatal Visits 2<sup>nd</sup> Trimester</i> in the Antenatal segment is not in the range 0 to 15.
RM-M41-19	Error	Error – Invalid Data	▪ The <i>Antenatal Visits 3<sup>rd</sup> Trimester</i> in the Antenatal segment is not in the range 0 to 30.
RM-M31-01	Error	Error – Missing Mandatory Data	▪ The <i>Allocation</i> and <i>Antenatal</i> segments must be supplied together.

## 7.7. Labour and Birth segment

### 7.7.1 Labour and Birth data elements

The data elements of the Labour and Birth Segment are listed below.

Table Key: M = Mandatory. O = Optional. C = Conditional.

<i>Labour and Birth Elements</i>				
Data Element	Type	Format	M/O/C	Coded
Type of Service	Code	N	M	Y
Delivery Date	Date	YYYY-MM-DD	M	-
Home Birth Indicator	Boolean	'true' or 'false'	M	-
VBAC Indicator	Boolean	'true' or 'false'	O	-

### 7.7.2 Labour and Birth segment code sets

The data elements of the Labour and Birth segment that have coded values are listed below.

<i>Labour and Birth Code Set</i>		
Coded Data Element	Range	Description
Type of Service	1	LMC Services provided by a DHB employed midwife
	2	Co-ordinated DHB midwifery services
	3	DHB midwifery services and postnatal care for woman who have a medical LMC under the Section 88 Maternity Services Notice

### 7.7.3 Labour and Birth segment rules

The following rules apply to the data associated with the Validation process.

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M51-01	<ul style="list-style-type: none"> <li>The segment must contain all mandatory data as identified in section 7.7.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Type of Service</li> <li>Delivery Date</li> <li>Home Birth Indicator</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M51-02	<ul style="list-style-type: none"> <li>The data elements, when present, must comply with the data formats identified in section 7.7.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Type of Service</li> <li>Delivery Date</li> <li>Home Birth Indicator</li> <li>VBAC Indicator</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M51-03	<ul style="list-style-type: none"> <li>The data elements must comply with the data code ranges identified in section 7.7.2 above.</li> </ul>	<ul style="list-style-type: none"> <li>Type of Service</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M51-04	<ul style="list-style-type: none"> <li>If <i>Date of First Antenatal Service</i> is supplied for the pregnancy, the <i>Delivery Date</i> must be greater than or equal to <i>Date of First Antenatal Service</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Delivery Date</li> <li>Date of First Antenatal Service</li> </ul>	<ul style="list-style-type: none"> <li>RM-M51-14</li> </ul>
BR-M51-11	<ul style="list-style-type: none"> <li>At least one <i>Labour and Birth Baby Details</i> segment must be supplied when this segment is supplied.</li> </ul>	<ul style="list-style-type: none"> <li>Labour and Birth Baby Details</li> </ul>	<ul style="list-style-type: none"> <li>RM-M51-15</li> </ul>

#### 7.7.4 Labour and Birth segment error messages

The following rule responses apply to the Validation process:

##### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-08	Error	Error – XSD Validation	<ul style="list-style-type: none"> <li>A system generated contextual XSD error message is provided</li> </ul>
RM-M51-14	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The <i>Delivery Date</i> in the Labour and Birth segment is not greater than or equal to <i>Date of First Antenatal Service</i>.</li> </ul>
RM-M51-15	Error	Error – Missing Conditional Data	<ul style="list-style-type: none"> <li><i>Labour and Birth Baby Details</i> segment has not been supplied.</li> </ul>

## 7.8. Postnatal segment

### 7.8.1 Postnatal data elements

The data elements of the Postnatal Segment are listed below.

Table Key: M = Mandatory. O = Optional. C = Conditional.

<b>Postnatal Elements</b>					
<b>Data Element</b>	<b>Type</b>	<b>Format</b>	<b>M/O/C</b>	<b>Coded</b>	<b>Verified attribute*</b>
Type of Service	Code	N	M	Y	-
Date of Last Postnatal Service	Date	YYYY-MM-DD	M	-	-
Smoking Status at 2 Weeks	Boolean	'true' or 'false'	O	-	-
Smoking Quantity at 2 Weeks	Code	A	O	Y	-
Postnatal Inpatient Visits	Integer	NN	M	Y	Y
Postnatal Home Visits	Integer	NN	M	Y	Y
DHB Practitioner	ID	NN-NNNNN or NNNNN or NNNNNN	C	-	-
GP Referral	Code	A	O	Y	-
Wellchild Referral	Code	A	O	Y	-

\* The Verified attribute is a Boolean indicator that the DHB may use to confirm that the value for the element being submitted is legitimately outside the permissible range.

### 7.8.2 Postnatal segment code sets

The data elements of the Postnatal segment that have coded values are listed below.

<b>Postnatal Code Set</b>		
<b>Coded Data Element</b>	<b>Range</b>	<b>Description</b>
Type of Service	1	LMC Services provided by a DHB employed midwife
	2	Co-ordinated DHB midwifery services
	3	DHB midwifery services and postnatal care for woman who have a medical LMC under the Section 88 Maternity Services Notice
Smoking Quantity at 2 Weeks	L	Less than 10 cigarettes per day
	M	10 – 20 cigarettes per day
	H	More than 20 cigarettes per day
GP Referral	Y	Yes
	D	Declined Referral
Wellchild Referral	P	Plunket
	O	Other
	D	Declined Referral

### 7.8.3 Postnatal segment rules

The following rules apply to the data associated with the Validation process.



Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M71-01	<ul style="list-style-type: none"> <li>The segment must contain all mandatory data as identified in section 7.8.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Type of Service</li> <li>Date of Last Postnatal Service</li> <li>Postnatal Inpatient Visits</li> <li>Postnatal Home Visits</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M71-02	<ul style="list-style-type: none"> <li>The data elements must comply with the data formats identified in section 7.8.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Type of Service</li> <li>Date of Last Postnatal Service</li> <li>Smoking Status at 2 Weeks</li> <li>Postnatal Inpatient Visits</li> <li>Postnatal Home Visits</li> <li>Verified</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M71-03	<ul style="list-style-type: none"> <li>The data elements must comply with the data code ranges identified in section 7.8.2 above.</li> </ul>	<ul style="list-style-type: none"> <li>Type of Service</li> <li>Smoking Quantity at 2 Weeks</li> <li>GP Referral</li> <li>Wellchild Referral</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M71-04	<ul style="list-style-type: none"> <li>If the <i>Baby Date of Birth</i> is supplied for the pregnancy, the <i>Date of Last Postnatal Service</i> must be greater than or equal to <i>Baby Date of Birth</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Date of Last Postnatal Service</li> <li>Baby Date of Birth<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>RM-M71-19</li> </ul>
BR-M71-06	<ul style="list-style-type: none"> <li>If not verified, <i>Postnatal Inpatient Visits</i> must be in the range 0 – 14</li> </ul>	<ul style="list-style-type: none"> <li>Postnatal Inpatient Visits</li> </ul>	<ul style="list-style-type: none"> <li>RM-M71-21</li> </ul>
BR-M71-07	<ul style="list-style-type: none"> <li>If not verified, <i>Postnatal Home Visits</i> must be in the range 0 – 30</li> </ul>	<ul style="list-style-type: none"> <li>Postnatal Home Visits</li> </ul>	<ul style="list-style-type: none"> <li>RM-M71-22</li> </ul>
BR-M71-08	<ul style="list-style-type: none"> <li>The segment must contain <i>DHB Practitioner</i> if <i>Type of Service</i> = 1 or 2.</li> </ul>	<ul style="list-style-type: none"> <li>DHB Practitioner</li> <li>Type of Service</li> </ul>	<ul style="list-style-type: none"> <li>RM-M71-23</li> </ul>

<sup>1</sup> Date of Birth for Baby 1 if multiple birth

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M71-09	<ul style="list-style-type: none"> <li>▪ The <i>DHB Practitioner</i> must be registered and the registration details must be in the HPI database.</li> <li>▪ For a midwife the registration number is their full Midwifery Council of New Zealand Registration Number, including the hyphen (e.g. 15-12345).</li> <li>▪ For a Medical Professional the registration number is their New Zealand Medical Council Number.</li> </ul>	<ul style="list-style-type: none"> <li>▪ DHB Practitioner</li> </ul>	<ul style="list-style-type: none"> <li>▪ RM-M71-24</li> </ul>
BR-M71-10	<ul style="list-style-type: none"> <li>▪ The segment must contain <i>Wellchild Referral</i> if                             <ul style="list-style-type: none"> <li>• <i>Birth Condition</i> is supplied for the pregnancy and <i>Birth Condition</i> = 'LB'.</li> </ul>                             and                             <ul style="list-style-type: none"> <li>• <i>Date of Neonatal Death</i> is supplied for the pregnancy and <i>Date of Neonatal Death</i> is NULL</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Wellchild Referral</li> <li>▪ Birth Condition</li> <li>▪ Date of Neonatal Death</li> </ul>	<ul style="list-style-type: none"> <li>▪ RM-M71-25</li> </ul>

#### 7.8.4 Postnatal segment error messages

The following rule responses apply to the Validation process:

##### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-08	Error	Error – XSD Validation	<ul style="list-style-type: none"> <li>▪ A system generated contextual XSD error message is provided</li> </ul>
RM-M71-19	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>▪ The <i>Date of Last Postnatal Service</i> in the Postnatal segment is not greater than or equal to the Date of Birth.</li> </ul>
RM-M71-21	Error	Error – Value Not Within Range	<ul style="list-style-type: none"> <li>▪ The <i>Postnatal Inpatient Visits</i> in the Postnatal segment is not within the range of probable values 0-14. Please review and confirm as correct.</li> </ul>
RM-M71-22	Error	Error – Value Not Within Range	<ul style="list-style-type: none"> <li>▪ The <i>Postnatal Home Visits</i> in the Postnatal segment is not within the range of probable values 0-30. Please review and confirm as correct.</li> </ul>



Response Message Reference	Error or Warning	Message Title	Response Message
RM-M71-23	Error	Error – Missing Conditional Data	<ul style="list-style-type: none"> <li>The <i>DHB Practitioner</i> field has not been supplied in the Postnatal segment. It must be supplied when <i>Type of Service</i> = 1 or 2</li> </ul>
RM-M71-24	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The <i>DHB Practitioner</i> supplied in the Postnatal segment does not exist in the HPI Database.</li> </ul>
RM-M71-25	Error	Error – Missing Conditional Data	<ul style="list-style-type: none"> <li>The <i>Wellchild Referral</i> field has not been supplied in the Postnatal segment. It must be supplied when <i>Birth Condition</i> = 'LB' and <i>Date of Neonatal Death</i> is NULL</li> </ul>

## 7.9. Baby Details segment

### 7.9.1 Baby Details segment data elements

The attribute of the Baby Details segment is listed below.

Table Key: M = Mandatory. O = Optional. C = Conditional.

<i>Baby Details Attributes</i>				
Attribute	Type	Format	M/O/C	Coded
Baby Number	Positive Integer	99	M	-

### 7.9.2 Baby Details segment rules

The following rules apply to the data associated with the Validation process.

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M86-01	<ul style="list-style-type: none"> <li>The segment must contain the attribute as identified in section 7.9.1 above</li> </ul>	<ul style="list-style-type: none"> <li>Baby Number</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M86-02	<ul style="list-style-type: none"> <li>The attribute must comply with the data formats identified in section 7.9.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Baby Number</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M86-03	<ul style="list-style-type: none"> <li>The <i>Baby Number</i> must be unique in the Pregnancy Details segment.</li> </ul>	<ul style="list-style-type: none"> <li>Baby Number</li> </ul>	<ul style="list-style-type: none"> <li>RM-M86-03</li> </ul>

### 7.9.3 Baby Details segment error messages

The following rule responses apply to the Validation process:

#### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.

3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-08	Error	Error – XSD Validation	<ul style="list-style-type: none"> <li>A system generated contextual XSD error message is provided.</li> </ul>
RM-M86-03	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The <i>Baby Number</i> supplied in the Baby Details segment is not unique in the Pregnancy Details segment</li> </ul>

## 7.10. Baby Identity segment

### 7.10.1 Baby Identity segment data elements

The data elements of the Baby Identity segment are listed below. They are validated against the National Health Index (NHI) database.

Table Key: M = Mandatory. O = Optional. C = Conditional.

<b>Baby Identity Elements</b>				
Data Element	Type	Format	M/O/C	Coded
NHI Number	ID	AAANNNN	C	-
Date of Birth	Date	YYYY-MM-DD	C	-
Sex	Code	A	C	Yes

### 7.10.2 Baby Identity segment code set elements

The data elements of the Baby Identity Segment that have coded values are listed below.

<b>Baby Identity Code Set</b>		
Coded Data Element	Range	Description
Sex	M	Male
	F	Female
	U	Unknown
	I	Indeterminate

### 7.10.3 Baby Identity segment rules

The following rules apply to the data associated with the Validation process.

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M91-01	<ul style="list-style-type: none"> <li>The segment must contain all the data elements as identified in section 7.10.1 above if <i>Birth condition</i> is supplied for the pregnancy and <i>Birth condition</i> = 'LB'.</li> </ul>	<ul style="list-style-type: none"> <li>NHI Number</li> <li>Date of Birth</li> <li>Sex</li> </ul>	<ul style="list-style-type: none"> <li>RM-M91-01</li> <li>RM-M91-02</li> <li>RM-M91-03</li> </ul>
BR-M91-02	<ul style="list-style-type: none"> <li>The data elements must comply with the data formats identified in section 7.10.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>NHI Number</li> <li>Date of Birth</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M91-03	<ul style="list-style-type: none"> <li>The data elements must comply with the data code ranges identified in section 7.10.2 above.</li> </ul>	<ul style="list-style-type: none"> <li>Sex</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M91-04	<ul style="list-style-type: none"> <li>The <i>NHI Number</i> must be registered on the NHI database before submission.</li> </ul>	<ul style="list-style-type: none"> <li>NHI Number</li> </ul>	<ul style="list-style-type: none"> <li>RM-M91-06</li> </ul>
BR-M91-05	<ul style="list-style-type: none"> <li>The <i>Date of Birth</i> in this segment must be ≤ the <i>Extract Date</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Date of Birth</li> <li>Extract Date</li> </ul>	<ul style="list-style-type: none"> <li>RM-M91-07</li> </ul>
BR-M91-06	<ul style="list-style-type: none"> <li>The <i>Baby Identity</i> segment must be present if                             <ul style="list-style-type: none"> <li>the <i>Birth Condition</i> is supplied for the pregnancy and <i>Birth Condition</i> = 'LB'</li> </ul>                             or                             <ul style="list-style-type: none"> <li>the <i>Postnatal Baby Details</i> segment is supplied.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Baby Identity</li> </ul>	<ul style="list-style-type: none"> <li>RM-M91-09</li> </ul>

#### 7.10.4 Baby Identity segment error messages

The following rule responses apply to the Validation process:

##### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-08	Error	Error – XSD Validation	<ul style="list-style-type: none"> <li>A system generated contextual XSD error message is provided.</li> </ul>
RM-M91-01	Error	Error – Missing Conditional Data	<ul style="list-style-type: none"> <li>The <i>NHI number</i> field has not been supplied in the <i>Baby Identity</i> segment. It must be supplied when <i>Birth Condition</i> = 'LB'</li> </ul>

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M91-02	Error	Error – Missing Conditional Data	<ul style="list-style-type: none"> <li>The <i>Date of Birth</i> field has not been supplied in the Baby Identity segment. It must be supplied when <i>Birth Condition</i> = 'LB'.</li> </ul>
RM-M91-03	Error	Error – Missing Conditional Data	<ul style="list-style-type: none"> <li>The <i>Sex</i> field has not been supplied in the Baby Identity segment. It must be supplied when <i>Birth Condition</i> = 'LB'.</li> </ul>
RM-M91-06	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The <i>NHI Number</i> supplied in the Baby Identity segment is not valid in the NHI Database.</li> </ul>
RM-M91-07	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The <i>Date of Birth</i> in the Baby Identity segment is not less than or equal to the <i>Extract Date</i>.</li> </ul>
RM-M91-09	Error	Error – Missing Mandatory Data	<ul style="list-style-type: none"> <li>The <i>Baby Identity</i> segment has not been supplied</li> </ul>

## 7.11. Labour and Birth Baby Details segment

### 7.11.1 Labour and Birth Baby Details data elements

The data elements of the Labour and Birth Baby Details Segment are listed below.

Table Key: M = Mandatory. O = Optional. C = Conditional.

<i>Labour and Birth Baby Details Elements</i>					
Data Element	Type	Format	M/O/C	Coded	Verified attribute*
Ethnicity 1	Code	NNNNN	O	Y	-
Ethnicity 2	Code	NNNNN	O	Y	-
Ethnicity 3	Code	NNNNN	O	Y	-
Birth Condition	Code	AA	M	Y	-
Apgar Score at 5 Mins	Non-negative Integer	NN	C	-	-
Birth Weight	Positive Integer	NNNN	C	-	Y
Gestational Age	Positive Integer	NN	C	-	Y

\* The Verified attribute is a Boolean indicator that the DHB may use to confirm that the value for the element being submitted is legitimately outside the permissible range.

### 7.11.2 Labour and Birth Baby Details segment code sets

The data elements of the Labour and Birth Baby Details segment that have coded values are listed below.

<b>Labour and Birth Baby Details Code Set</b>		
<b>Coded Data Element</b>	<b>Range</b>	<b>Description</b>
Ethnicity		Refer to Appendix C for the complete list of valid Level 4 ethnicity codes and a mapping table of Level 2 codes to Level 4 codes
Birth Condition	LB	Live Born
	SB	Still born

### 7.11.3 Labour and Birth Baby Details segment rules

The following rules apply to the data associated with the Validation process.

<b>Rule Reference</b>	<b>Rule Description</b>	<b>Affected Data</b>	<b>Response Message Reference</b>
BR-M61-01	<ul style="list-style-type: none"> <li>The segment must contain all mandatory data as identified in section 7.11.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Birth Condition</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M61-02	<ul style="list-style-type: none"> <li>The data elements, when present, must comply with the data formats identified in section 7.11.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Ethnicity</li> <li>Birth Condition</li> <li>Apgar Score at 5 Mins</li> <li>Birth Weight</li> <li>Gestational Age</li> <li>Verified</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M61-03	<ul style="list-style-type: none"> <li>The data elements must comply with the data code ranges identified in section 7.11.2 above.</li> </ul>	<ul style="list-style-type: none"> <li>Ethnicity</li> </ul>	<ul style="list-style-type: none"> <li>RM-M61-08</li> </ul>
BR-M61-04	<ul style="list-style-type: none"> <li>The segment must contain at least one <i>Ethnicity</i> if <i>Birth Condition</i> = 'LB'.</li> </ul>	<ul style="list-style-type: none"> <li>Ethnicity</li> <li>Birth Condition</li> </ul>	<ul style="list-style-type: none"> <li>RM-M61-09</li> </ul>
BR-M61-05	<ul style="list-style-type: none"> <li>The segment must contain <i>Apgar Score at 5 Mins</i> if <i>Birth Condition</i> = 'LB'.</li> </ul>	<ul style="list-style-type: none"> <li>Apgar Score at 5 Mins</li> <li>Birth Condition</li> </ul>	<ul style="list-style-type: none"> <li>RM-M61-11</li> </ul>
BR-M61-06	<ul style="list-style-type: none"> <li>The segment must contain <i>Birth Weight</i> if <i>Birth Condition</i> = 'LB'.</li> </ul>	<ul style="list-style-type: none"> <li>Birth Weight</li> <li>Birth Condition</li> </ul>	<ul style="list-style-type: none"> <li>RM-M61-12</li> </ul>
BR-M61-07	<ul style="list-style-type: none"> <li>The segment must contain <i>Gestational Age</i> if <i>Birth Condition</i> = 'LB'.</li> </ul>	<ul style="list-style-type: none"> <li>Gestational Age</li> <li>Birth Condition</li> </ul>	<ul style="list-style-type: none"> <li>RM-M61-13</li> </ul>
BR-M61-08	<ul style="list-style-type: none"> <li><i>Apgar Score at 5 Mins</i> must be between 0 and 10</li> </ul>	<ul style="list-style-type: none"> <li>Apgar Score at 5 Mins</li> </ul>	<ul style="list-style-type: none"> <li>RM-M61-14</li> </ul>
BR-M61-09	<ul style="list-style-type: none"> <li>If not verified, <i>Birth Weight</i> must be between 300 and 7000 (gm)</li> </ul>	<ul style="list-style-type: none"> <li>Birth Weight</li> </ul>	<ul style="list-style-type: none"> <li>RM-M61-15</li> </ul>
BR-M61-10	<ul style="list-style-type: none"> <li>If not verified, <i>Gestational Age</i> must be between 20 and 44 (weeks)</li> </ul>	<ul style="list-style-type: none"> <li>Gestational Age</li> </ul>	<ul style="list-style-type: none"> <li>RM-M61-16</li> </ul>
BR-M61-11	<ul style="list-style-type: none"> <li>No more than three Ethnicities should be supplied.</li> </ul>	<ul style="list-style-type: none"> <li>Ethnicity</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>

### 7.11.4 Labour and Birth Baby Details segment error messages

The following rule responses apply to the Validation process:

#### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-08	Error	Error – XSD Validation	<ul style="list-style-type: none"> <li>▪ A system generated contextual XSD error message is provided.</li> </ul>
RM-M61-08	Error	Error – Incorrect Code Range	<ul style="list-style-type: none"> <li>▪ The <i>Ethnicity</i> in the Labour and Birth Baby Details segment is not within the correct code range.</li> </ul>
RM-M61-09	Error	Error – Missing Conditional Data	<ul style="list-style-type: none"> <li>▪ <i>Ethnicity</i> has not been supplied in the Labour and Birth Baby Details segment. It must be supplied when <i>Birth Condition</i> = 'LB'</li> </ul>
RM-M61-11	Error	Error – Missing Conditional Data	<ul style="list-style-type: none"> <li>▪ The <i>Apgar Score at 5 Mins</i> has not been supplied in the Labour and Birth Baby Details segment. It must be supplied when <i>Birth Condition</i> = 'LB'</li> </ul>
RM-M61-12	Error	Error – Missing Conditional Data	<ul style="list-style-type: none"> <li>▪ The <i>Birth Weight</i> has not been supplied in the Labour and Birth Baby Details segment. It must be supplied when <i>Birth Condition</i> = 'LB'</li> </ul>
RM-M61-13	Error	Error – Missing Conditional Data	<ul style="list-style-type: none"> <li>▪ The <i>Gestational Age</i> has not been supplied in the Labour and Birth Baby Details segment. It must be supplied when <i>Birth Condition</i> = 'LB'</li> </ul>
RM-M61-14	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>▪ The <i>Apgar Score at 5 Mins</i> in the Labour and Birth Baby Details segment is not within the range 0-10.</li> </ul>
RM-M61-15	Error	Error – Value Not Within Range	<ul style="list-style-type: none"> <li>▪ The <i>Birth Weight</i> in the Labour and Birth Baby Details segment is not within the range of probable values 300-7000 (gm). Please review and confirm as correct.</li> </ul>
RM-M61-16	Error	Error – Value Not Within Range	<ul style="list-style-type: none"> <li>▪ The <i>Gestational Age</i> in the Labour and Birth Baby Details segment is not within the range of probable values 20-44 (weeks). Please review and confirm as correct.</li> </ul>

## 7.12. Postnatal Baby Details segment

### 7.12.1 Postnatal Baby Details data elements

The data elements of the Postnatal Baby Details Segment are listed below.

Table Key: M = Mandatory. O = Optional. C = Conditional.

<b>Postnatal Baby Details Elements</b>				
<b>Data Element</b>	<b>Type</b>	<b>Format</b>	<b>M/O/C</b>	<b>Coded</b>
Breast Feeding Status at 2 Weeks	Code	Char(10)	C	Y
Breast Feeding Status at Discharge	Code	Char(10)	C	Y
Date of Neonatal Death	Date	YYYY-MM-DD	O	-

### 7.12.2 Postnatal Baby Details segment code sets

The data elements of the Postnatal Baby Details segment that have coded values are listed below.

<b>Postnatal Baby Details Code Set</b>		
<b>Coded Data Element</b>	<b>Range</b>	<b>Description</b>
Breast Feeding Status	Exclusive	The baby has never had any water, formula or other liquid or solid food; and only breast milk, from the breast or expressed, and prescribed medicines have been given to the baby from birth.
	Fully	The baby has taken breast milk only, no other liquids or solids except a minimal amount of water or prescribed medicines, in the previous 48 hours.
	Partial	The baby has taken some breast-milk and some infant formula or other solid food in the past 48 hours
	Artificial	The baby has had no breast milk in the past 48 hours but has had alternative liquid such as infant formula with or without solid food in the past 48 hours

### 7.12.3 Postnatal Baby Details segment rules

The following rules apply to the data associated with the Validation process.

<b>Rule Reference</b>	<b>Rule Description</b>	<b>Affected Data</b>	<b>Response Message Reference</b>
BR-M81-01	<ul style="list-style-type: none"> <li>The data elements, when present must comply with the data formats identified in section 7.12.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Date of Neonatal Death</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M81-02	<ul style="list-style-type: none"> <li>The data elements must comply with the data code ranges identified in section 7.12.2 above.</li> </ul>	<ul style="list-style-type: none"> <li>Breast Feeding Status at 2 Weeks</li> <li>Breast Feeding Status at Discharge</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M81-03	<ul style="list-style-type: none"> <li>▪ The segment must contain <i>Breast Feeding Status at 2 Weeks</i> if                             <ul style="list-style-type: none"> <li>• <i>Birth Condition</i> is supplied for the pregnancy and <i>Birth Condition</i> = 'LB'.</li> </ul> </li> <li>and</li> <li>• [<i>Date of Neonatal Death</i> is NULL or <i>Date of Neonatal Death</i> is greater than (<i>Date of Birth</i> + 14 days).]</li> </ul>	<ul style="list-style-type: none"> <li>▪ Breast Feeding Status at 2 Weeks</li> <li>▪ Birth Condition</li> <li>▪ Date of Neonatal Death</li> <li>▪ Date of Birth</li> </ul>	<ul style="list-style-type: none"> <li>▪ RM-M81-05</li> </ul>
BR-M81-04	<ul style="list-style-type: none"> <li>▪ The segment must contain <i>Breast Feeding Status at Discharge</i> if                             <ul style="list-style-type: none"> <li>• <i>Birth Condition</i> is supplied for the pregnancy and <i>Birth Condition</i> = 'LB'.</li> </ul> </li> <li>and</li> <li>• <i>Date of Neonatal Death</i> is NULL</li> </ul>	<ul style="list-style-type: none"> <li>▪ Breast Feeding Status at Discharge</li> <li>▪ Birth Condition</li> <li>▪ Date of Neonatal Death</li> </ul>	<ul style="list-style-type: none"> <li>▪ RM-M81-06</li> </ul>

#### 7.12.4 Postnatal Baby Details segment error messages

The following rule responses apply to the Validation process:

##### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-08	Error	Error – XSD Validation	<ul style="list-style-type: none"> <li>▪ A system generated contextual XSD error message is provided.</li> </ul>
RM-M81-05	Error	Error – Missing Conditional Data	<ul style="list-style-type: none"> <li>▪ The <i>Breast Feeding Status at 2 Weeks</i> field has not been supplied in the Postnatal Baby Details segment. It must be supplied when <i>Birth Condition</i> = 'LB' and [<i>Date of Neonatal Death</i> is NULL or <i>Date of Neonatal Death</i> is greater than (<i>Date of Birth</i> + 14 days).]</li> </ul>
RM-M81-06	Error	Error – Missing Conditional Data	<ul style="list-style-type: none"> <li>▪ The <i>Breast Feeding Status at Discharge</i> field has not been supplied in the Postnatal Baby Details segment. It must be supplied when <i>Birth Condition</i> = 'LB' and <i>Date of Neonatal Death</i> is NULL</li> </ul>



## 7.13. Reverse file root segment

### 7.13.1 Reverse file root segment rules

The following rules apply to the data associated with the Validation process.

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M311-01	<ul style="list-style-type: none"> <li>The root segment must be present in the reverse file.</li> </ul>	<ul style="list-style-type: none"> <li>Root segment</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>

### 7.13.2 Reverse file root segment error messages

The following rule responses apply to the Validation process:

#### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-08	Error	Error – XSD Validation	<ul style="list-style-type: none"> <li>A system generated contextual XSD error message is provided</li> </ul>

## 7.14. Reversal segment

### 7.14.1 Reversal data elements

The data elements of the Reversal Segment are listed below.

Table Key: M = Mandatory. O = Optional. C = Conditional.

<b>Reversal Elements</b>				
Data Element	Type	Format	M/O/C	Coded
Document Reference To Reverse	String	Char(37)	M	-

### 7.14.2 Reversal segment rules

The following rules apply to the data associated with the Validation process.

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M301-01	<ul style="list-style-type: none"> <li>The segment must contain all mandatory data as identified in section 7.14.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Document Reference To Reverse</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M301-02	<ul style="list-style-type: none"> <li>The data element must comply with the data formats identified in section 7.14.1 above.</li> </ul>	<ul style="list-style-type: none"> <li>Document Reference To Reverse</li> </ul>	<ul style="list-style-type: none"> <li>RM-M01-08</li> </ul>
BR-M301-03	<ul style="list-style-type: none"> <li>Ensuring the Submitter of the original record can only reverse the record within the same environment.</li> </ul>	<ul style="list-style-type: none"> <li>DHB</li> </ul>	<ul style="list-style-type: none"> <li>RM-301-03</li> </ul>

### 7.14.3 Reversal segment error messages

The following rule responses apply to the Validation process:

#### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M01-08	Error	Error – XSD Validation	<ul style="list-style-type: none"> <li>A system generated contextual XSD error message is provided.</li> </ul>
RM-M301-03	Error	Error – Invalid DHB	<ul style="list-style-type: none"> <li>The Submitter of this data differs from the originating Submitter or submitting or original environments differ.</li> </ul>

## 8. MAT Extract File Record Types

The Extract File has the following request types that allow the submission of data:

- A Create request is used for adding new pregnancy records
  - A Create record should be used to send all the data for the pregnancy that the DHB has. The Submitter assigns a unique identifier (a GUID) to a pregnancy record. This is the pregnancy record's identifier in the MAT ODS database
  - For a new pregnancy record to be created it must not exist in the ODS database i.e. There must not be a record in the ODS with the same Pregnancy Identifier.
  - If a pregnancy record with a different Pregnancy Identifier exists in the ODS database with data that is either partly or entirely the same, the create record will be rejected. See Table 1: Duplicate record identification fields.
  - Create should not be used to establish a pregnancy record with a view to later updating it with more data.
- A Replace request is used for changing an existing pregnancy record
  - The Replace request allows the DHB to correct any issues with the pregnancy data.
  - The Replace request must have the same Pregnancy Identifier as the Pregnancy Identifier that was used to add the pregnancy to the database.
  - The Replace record replaces everything for the given Pregnancy Identifier. Therefore all the data must be re sent.
- A Delete request is used for deleting an existing pregnancy record
  - An active pregnancy record must exist in the ODS database for the Pregnancy Identifier supplied in a Delete request.
  - The Delete request labels the pregnancy record with the given Pregnancy Identifier as deleted in the MAT ODS database. Therefore a Pregnancy Identifier should not be re-used.
  - Delete and then Create should not be used to amend data. Replace should be used.

**Table 1: Duplicate record identification fields**

Module	Fields
Antenatal	DHB of Service, Woman NHI, Date of First Antenatal Service
Labour/Birth	DHB of Service, Woman NHI, Delivery Date
Postnatal	DHB of Service, Woman NHI, Date of Postnatal Service

## 8.1. Extract file record request processing rules

The following rules identify the requirements for Request Processing that takes valid pregnancy records and attempts to apply them to the ODS database. Note that the below rules apply to active records in the database unless stated otherwise.

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M101-01	<ul style="list-style-type: none"> <li>The <i>Pregnancy Identifier</i> on a Create Request must not exist in the ODS database.</li> </ul>	<ul style="list-style-type: none"> <li>Pregnancy Identifier</li> </ul>	<ul style="list-style-type: none"> <li>RM-M101-01</li> </ul>
BR-M101-03	<ul style="list-style-type: none"> <li>If the <i>DHB of Service</i>, <i>Woman NHI</i> and <i>Date of First Antenatal Service</i> in a Create Request must not be the same as those in a pregnancy record in the ODS database.</li> </ul>	<ul style="list-style-type: none"> <li>DHB of Service</li> <li>Woman NHI</li> <li>Date of First Antenatal Service</li> </ul>	<ul style="list-style-type: none"> <li>RM-M101-04</li> </ul>
BR-M101-04	<ul style="list-style-type: none"> <li>If the <i>DHB of Service</i>, <i>Woman NHI</i> and <i>Delivery Date</i> in a Create Request must not be the same as those in a pregnancy record in the ODS database.</li> </ul>	<ul style="list-style-type: none"> <li>DHB of Service</li> <li>Woman NHI</li> <li>Delivery Date</li> </ul>	<ul style="list-style-type: none"> <li>RM-M101-05</li> </ul>
BR-M101-05	<ul style="list-style-type: none"> <li>If the <i>DHB of Service</i>, <i>Woman NHI</i> and <i>Date of Last Postnatal Service</i> in a Create Request must not be the same as those in a pregnancy record in the ODS database.</li> </ul>	<ul style="list-style-type: none"> <li>DHB of Service</li> <li>Woman NHI</li> <li>Date of Last Postnatal Service</li> </ul>	<ul style="list-style-type: none"> <li>RM-M101-06</li> </ul>
BR-M101-06	<ul style="list-style-type: none"> <li>The <i>Pregnancy Identifier</i> on a Replace Request must exist in the ODS database.</li> </ul>	<ul style="list-style-type: none"> <li>Pregnancy Identifier</li> </ul>	<ul style="list-style-type: none"> <li>RM-M101-02</li> </ul>
BR-M101-07	<ul style="list-style-type: none"> <li>The <i>Pregnancy Identifier</i> on a Delete Request must exist in the ODS database.</li> </ul>	<ul style="list-style-type: none"> <li>Pregnancy Identifier</li> </ul>	<ul style="list-style-type: none"> <li>RM-M101-02</li> </ul>
BR-M101-08	<ul style="list-style-type: none"> <li>The pregnancy on a Delete or Replace Request must not be flagged as 'deleted' in the ODS database.</li> </ul>	<ul style="list-style-type: none"> <li>Pregnancy Identifier</li> </ul>	<ul style="list-style-type: none"> <li>RM-M101-03</li> </ul>
BR-M101-09	<ul style="list-style-type: none"> <li>The pregnancy on a Delete or Replace Request must not be flagged as a reversal of a create request in the ODS database.</li> </ul>	<ul style="list-style-type: none"> <li>Pregnancy Identifier</li> </ul>	<ul style="list-style-type: none"> <li>RM-M101-07</li> </ul>
BR-M101-10	<ul style="list-style-type: none"> <li>The <i>Pregnancy Identifier</i> on a Create Request must not exist in the ODS database where the pregnancy details have been marked as deleted</li> </ul>	<ul style="list-style-type: none"> <li>Pregnancy Identifier</li> </ul>	<ul style="list-style-type: none"> <li>RM-M101-08</li> </ul>
BR-M101-11	<ul style="list-style-type: none"> <li>If the <i>DHB of Service</i>, <i>Woman NHI</i> and <i>Date of First Antenatal Service</i> in a Create Request must not be the same as those in a pregnancy record within the same input file</li> </ul>	<ul style="list-style-type: none"> <li>DHB of Service</li> <li>Woman NHI</li> <li>Date of First Antenatal Service</li> </ul>	<ul style="list-style-type: none"> <li>RM-M101-09</li> </ul>

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M101-12	<ul style="list-style-type: none"> <li>If the <i>DHB of Service, Woman NHI and Delivery Date</i> in a Create Request must not be the same as those in a pregnancy record within the same input file</li> </ul>	<ul style="list-style-type: none"> <li>DHB of Service</li> <li>Woman NHI</li> <li>Delivery Date</li> </ul>	<ul style="list-style-type: none"> <li>RM-M101-10</li> </ul>
BR-M101-13	<ul style="list-style-type: none"> <li>If the <i>DHB of Service, Woman NHI and Date of Last Postnatal Service</i> in a Create Request must not be the same as those in a pregnancy record within the same input file</li> </ul>	<ul style="list-style-type: none"> <li>DHB of Service</li> <li>Woman NHI</li> <li>Date of Last Postnatal Service</li> </ul>	<ul style="list-style-type: none"> <li>RM-M101-11</li> </ul>
BR-M101-14	<ul style="list-style-type: none"> <li>The Baby NHI should not be duplicated within the same input file</li> </ul>	<ul style="list-style-type: none"> <li>Baby NHI</li> </ul>	<ul style="list-style-type: none"> <li>RM-M101-12</li> </ul>

## 8.2. Extract file record request processing error messages

The following rule responses apply to the Request Processing process:

### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M101-01	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The <i>Pregnancy Identifier</i> already exists in the ODS database.</li> </ul>
RM-M101-02	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The <i>Pregnancy Identifier</i> does not exist in the ODS database.</li> </ul>
RM-M101-03	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The pregnancy that is being deleted or replaced has been previously deleted.</li> </ul>
RM-M101-04	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>Duplicate – A pregnancy record with the same <i>DHB of Service, Woman NHI and Date of First Antenatal Service</i> already exists in the ODS database.</li> </ul>
RM-M101-05	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>Duplicate – A pregnancy record with the same <i>DHB of Service, Woman NHI and Delivery Date</i> already exists in the ODS database.</li> </ul>
RM-M101-06	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>Duplicate – A pregnancy record with the same <i>DHB of Service, Woman NHI and Date of Last Postnatal Service</i> already exists in the ODS database.</li> </ul>
RM-M101-07	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The pregnancy that is being deleted or replaced has been previously created then reversed.</li> </ul>

<b>Response Message Reference</b>	<b>Error or Warning</b>	<b>Message Title</b>	<b>Response Message</b>
RM-M101-08	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>▪ The <i>Pregnancy Identifier</i> already exists in the ODS database as a deleted record and cannot be reused.</li> </ul>
RM-M101-09	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>▪ Duplicate – A pregnancy record with the same <i>DHB of Service, Woman NHI and Date of First Antenatal Service</i> already exists in this input file.</li> </ul>
RM-M101-10	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>▪ Duplicate – A pregnancy record with the same <i>DHB of Service, Woman NHI and Delivery Date</i> already exists in this input file.</li> </ul>
RM-M101-11	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>▪ Duplicate – A pregnancy record with the same <i>DHB of Service, Woman NHI and Date of Last Postnatal Service</i> already exists in this input file.</li> </ul>
RM-M101-12	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>▪ Duplicate – A pregnancy record with the same <i>Baby NHI</i> already exists in this input file.</li> </ul>

## 9. MAT Extract File Reversal

### 9.1. Reverse file initial processing rules

The rules around initial validation for the reversal file are the same as those for the extract file apart from BR-M01-03, -04 & -05 (See Section 6.1 Input file name and format and file attributes).

### 9.2. DHB Details

Refer to Section 7.2 DHB Details Segment

### 9.3. Extract file reversal request processing rules

The following rules identify the requirements for Reversal Request Processing that takes valid reversal request and attempts to apply it to the ODS database.

Rule Reference	Rule Description	Affected Data	Response Message Reference
BR-M201-01	<ul style="list-style-type: none"> <li>The <i>Document Reference To Reverse</i> must be the same as the Import File ID of an Import File in the ODS database.</li> </ul>	<ul style="list-style-type: none"> <li>Document Reference To Reverse</li> <li>Import File ID</li> </ul>	RM-M201-01
BR-M201-02	<ul style="list-style-type: none"> <li>Only one reversal request is allowed per Import File ID</li> </ul>	<ul style="list-style-type: none"> <li>Import File ID</li> </ul>	RM-M201-02

### 9.4. Extract file reversal request processing error messages

The following rule responses apply to the Reversal Request Processing process:

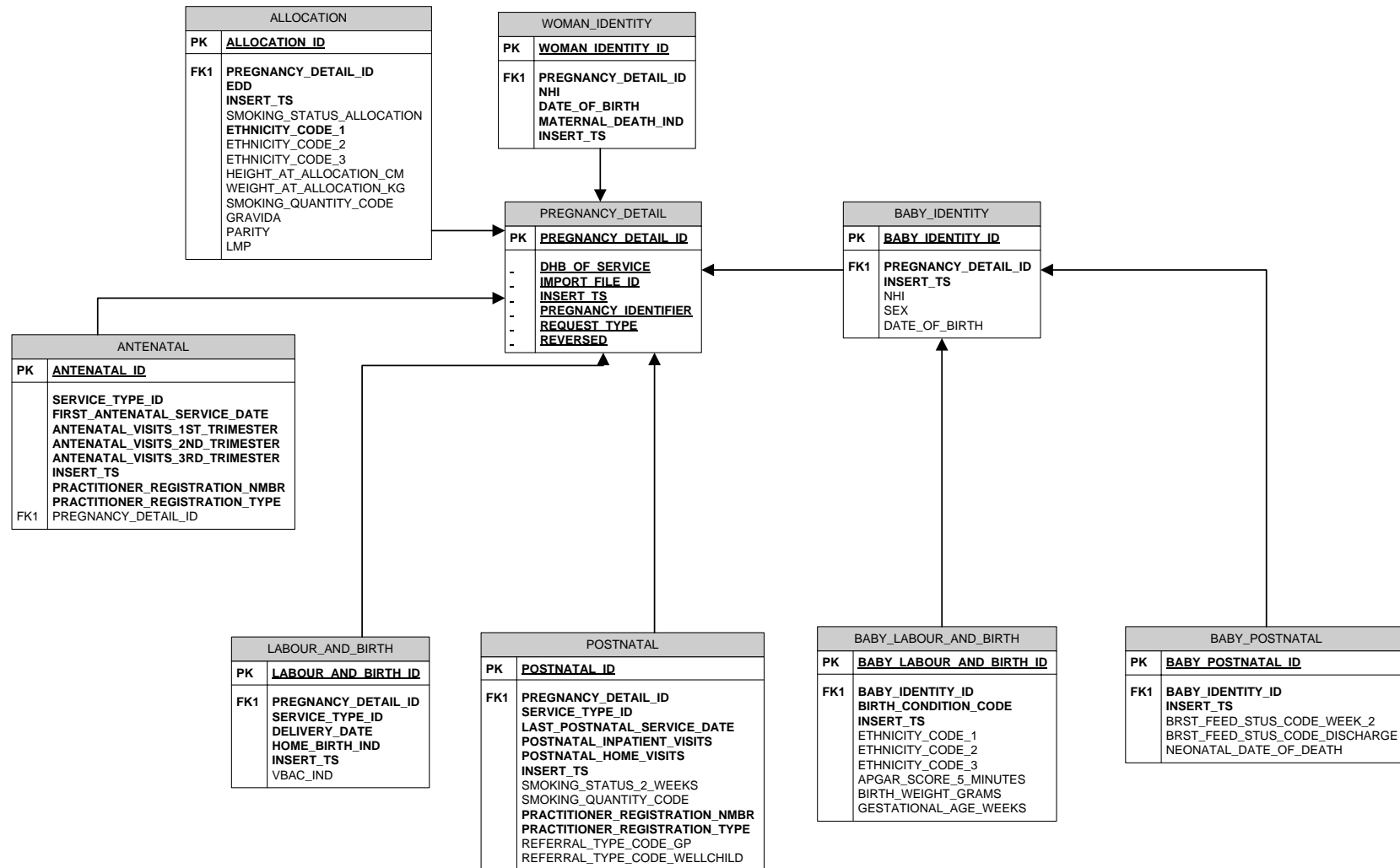
#### Important Notes:

Response messages are intended to provide clarity around conditions where rules are not successfully met:

1. An 'Error' is fatal and the process cannot proceed until corrected.
2. A 'Warning' means unusual conditions encountered but are acceptable.
3. A message is expected for each instance of an encountered error or warning condition.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M201-01	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>There is no Import File in the ODS database with the same ID as the <i>Document Reference To Reverse</i></li> </ul>
RM-M201-02	Error	Error – Invalid Data	<ul style="list-style-type: none"> <li>The Import File with the file ID supplied in <i>Document Reference To Reverse</i> has already been reversed</li> </ul>

## 10. Data model





## APPENDICES

### Appendix A: Definitions, Glossary and References

For the purposes of this document the following terms, acronyms and abbreviations have the specific meaning as listed in the definition below:

Abbreviation/Term	Description
DHB	District Health Board
DHB of Service	The DHB that is responsible for providing the primary maternity service
EDD	Estimated Date of Delivery  The latest Estimated Date of Delivery for the woman that has been recorded during the antenatal period.
Gravida	The number of pregnancies for the woman, including the current one.
GUID	Globally Unique Identifier (or 'Universally Unique Identifier'). A GUID is a 128-bit integer number commonly used as an identifier in software for things such as database keys. The value of a GUID is represented as a 32-character hexadecimal string, such as {21EC2020-3AEA-1069-A2DD-08002B30309D}
HPI	Health Practitioner Index  The HPI is the central source of core information about all registered practitioners.
LMP	Last Menstrual Period
Module	A pregnancy is divided into modules of care. i.e. <ul style="list-style-type: none"> <li>• Allocation</li> <li>• Antenatal</li> <li>• Labour and Birth</li> <li>• Postnatal</li> </ul>
NHI	National Health Index
NHI Number	The primary unique lifetime identifier for all New Zealand that takes precedence over all other identifiers for consumers of health care services
MOH	Ministry of Health
ODS	Operational Data System  In the context of DHB Primary Maternity data the ODS is the system that collects valid data. Collected data is subsequently transferred to the Maternity Collection Data Warehouse (MAT) where it is used for reporting and analysis.

Parity	The number of times a woman has borne children counting multiple births as one and including stillbirths.
Record	A record constitutes a DHB's data for a pregnancy. A record may contain all the data for the pregnancy if the DHB provided all the care and services related to the pregnancy. If more than one DHB provided care and/or services there would be more than one record for the pregnancy each containing the modules for which the relevant DHB provided care and/or services.
SFTP	SSH File Transfer Protocol.  A network protocol that provides file access, file transfer, and file management functionality over any reliable data stream.
Submitter	An organisation that submits an extract file containing DHB Primary Maternity Service data.  The organisation may be a DHB or a representative acting on behalf of a DHB.
VBAC	Vaginal birth after previous birth by caesarean section and no previous vaginal birth
Verified	The Verified attribute of data elements in the Extract File is a Boolean indicator that the DHB may use to confirm that the value for the element being submitted is legitimately outside the permissible range.

## Appendix B: NHI Number Validation

To establish if an NHI Number is valid or not, the provider should use the following validation routine below.

### Validation Steps

Step	Description	Example: EPT6335	Example: CGC2720	Example: DAB8233
1	Alphabetic characters must be within the Alphabet Conversion Table (see above), that is, they aren't 'I' or 'O'.	EPT	CGC	DAB
2	NNNC numbers must be numeric.	6335	2720	8233
3	Assign first alpha character its corresponding value from the Alphabet Conversion Table and multiply value by 7.	$5*7 = 35$	$3*7 = 21$	$4*7 = 28$
4	Assign second alpha character its corresponding value from the Alphabet Conversion Table and multiply value by 6.	$14*6 = 84$	$7*6 = 42$	$1*6 = 6$
5	Assign third alpha character its corresponding value from the Alphabet Conversion Table and multiply value by 5.	$18*5 = 90$	$3*5 = 15$	$2*5 = 10$
6	Multiply first number by 4.	$6*4 = 24$	$2*4 = 8$	$8*4 = 32$
7	Multiply second number by 3.	$3*3 = 9$	$7*3 = 21$	$2*3 = 6$
8	Multiply third number by 2.	$3*2 = 6$	$2*2 = 4$	$3*2 = 6$
9	Total the results of steps 3 to 8.	$35+84+90+24+9+6 = 248$	$21+42+15+8+21+4 = 111$	$28+6+10+32+6+6 = 88$
10	Apply modulus 11 to create a checksum. NB: Excel has a modulus function MOD (n,d) where n is the number to be converted (eg the sum calculated in step 9), and d equals the modulus (in the case of the NHI this is 11).	$248/11 = 22 \text{ r } 6$ (6 is the checksum)	$111/11 = 10 \text{ r } 1$ (1 is the checksum)	$88/11 = 8 \text{ r } 0$ (0 is the checksum)
11	If checksum is '0' then the NHI number is not used.	Continue to step 12	Continue to step 12	NHI number bad. Continue to step 15.
12	Subtract checksum from 11 to create check digit.	$11-6 = 5$	$11-1 = 10$	
13	If the check digit equals '10' convert to '0'	Continue to step 14	Convert '10' to '0'	
14	Fourth number must equal the checksum.	$5 = 5$	$0 = 0$	
15	NHI number passes the NHI validation routine.	Yes	Yes	No (see note 1)

**Note 1:** No digit can be added to the end of DAB823 to create a valid NHI number

### Alpha Conversion Table

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

Use this table to determine the Alpha characters value within the NHI Validation Routine.

A	1	K	10	U	19
B	2	L	11	V	20
C	3	M	12	W	21
D	4	N	13	X	22
E	5	P	14	Y	23
F	6	Q	15	Z	24
G	7	R	16		
H	8	S	17		
J	9	T	18		

This validation routine allows health and disability support services to confirm the NHI is in the correct format and that it is a valid NHI number. Its main purpose is to identify mistyped NHI numbers.

The validation routine does not confirm that a health and disability support services has assigned the NHI number to a correct individual. Nor does it mean the NHI number has been registered, on the NHI. For example pre-allocated NHI numbers are not 'active' until they have been sent to the NHI in the registration transaction (NEWHCU).

## Appendix C: Ethnicity Data Protocols

For details refer to the Ethnicity Data Protocols for the Health and Disability sector on the Ministry of Health website.

<http://www.health.govt.nz/publication/ethnicity-data-protocols-health-and-disability-sector>

### C.1 Level 4 Ethnicity Codes

The table below shows the full set of Level 4 codes

Level 4 Ethnicity Codes		Level 4 Ethnicity Codes	
Code	Description	Code	Description
10000	European NFD	12918	Cypriot Unspecified
11111	New Zealand European / Pākehā	12919	Czech
12000	Other European NFD	12920	Danish
12100	British NFD	12921	Estonian
12111	Celtic	12922	Finnish
12112	Channel Islander	12923	Flemish
12113	Cornish	12924	French
12114	English	12925	Greenlander
12115	Gaelic	12926	Hungarian
12116	Irish	12927	Icelander
12117	Manx	12928	Latvian
12118	Orkney Islander	12929	Lithuanian
12119	Scottish (Scots)	12930	Maltese
12120	Shetland Islander	12931	Norwegian
12121	Welsh	12932	Portuguese
12199	British NEC	12933	Romanian / Rumanian
12211	Dutch / Netherlands	12934	Romany / Gypsy
12311	Greek (including Greek Cypriot)	12935	Russian
12411	Polish	12936	Sardinian
12500	South Slav (formerly Yugoslav groups) NFD	12937	Slavic / Slav
12511	Croat / Croatian	12938	Slovak
12512	Dalmatian	12939	Spanish
12513	Macedonian	12940	Swedish
12514	Serb / Serbian	12941	Swiss
12515	Slovene / Slovenian	12942	Ukrainian
12599	South Slav (formerly Yugoslav) NEC	12943	American (US)
12611	Italian	12944	Burgher
12711	German	12945	Canadian
12811	Australian	12946	Falkland Islander / Kelper
12911	Albanian	12947	New Caledonian
12912	Armenian	12948	South African
12913	Austrian	12999	European NEC
12914	Belgian	21111	Māori
12915	Bulgarian	30000	Pacific peoples NFD
12916	Byelorussian	31111	Samoan
12917	Corsican	32100	Cook Island Maori NFD

Level 4 Ethnicity Codes	
Code	Description
32111	Aitutaki Islander
32112	Atiu Islander
32113	Mangaia Islander
32114	Manihiki Islander
32115	Mauke Islander
32116	Mitiaro Islander
32117	Palmerston Islander
32118	Penrhyn Islander
32119	Pukapuka Islander
32120	Rakahanga Islander
32121	Rarotongan
33111	Tongan
34111	Niuean
35111	Tokelauan
36111	Fijian (except Fiji Indian / Indo-Fijian)
37100	Other Pacific peoples NFD
37111	Admiralty Islander
37112	Australian Aboriginal
37113	Austral Islander
37114	Belau / Palau Islander
37115	Bismark Archipelagoan
37116	Bougainvillean
37117	Caroline Islander
37118	Easter Islander
37119	Gambier Islander
37120	Guadalcanalian
37121	Guam Islander / Chamorro
37122	Hawaiian
37123	Kanaka / Kanak
37124	I-Kiribati / Gilbertese
37125	Malaitian
37126	Manus Islander
37127	Marianas Islander
37128	Marquesas Islander
37129	Marshall Islander
37130	Nauru Islander
37131	New Britain Islander
37132	New Georgian
37133	New Irelander
37134	Ocean Islander / Banaban
37135	Papuan / New Guinean / Irian Jayan
37136	Phoenix Islander
37137	Pitcairn Islander
37138	Rotuman / Rotuman Islander
37139	Santa Cruz Islander
37140	Society Islander (including Tahitian)
37141	Solomon Islander
37142	Torres Strait Islander / Thursday Islander
37143	Tuamotu Islander

Level 4 Ethnicity Codes	
Code	Description
37144	Tuvalu Islander / Ellice Islander
37145	Vanuatu Islander / New Hebridean
37146	Wake Islander
37147	Wallis Islander
37148	Yap Islander
37199	Other Pacific peoples NEC
40000	Asian NFD
41000	Southeast Asian NFD
41111	Filipino
41211	Khmer / Kampuchean / Cambodian
41311	Vietnamese
41411	Burmese
41412	Indonesian (including Javanese / Sundanese / Sumatran)
41413	Lao / Laotian
41414	Malay / Malayan
41415	Thai / Tai / Siamese
41499	Other Southeast Asian NEC
42100	Chinese NFD
42111	Hong Kong Chinese
42112	Kampuchean Chinese
42113	Malaysian Chinese
42114	Singaporean Chinese
42115	Vietnamese Chinese
42116	Taiwanese Chinese
42199	Chinese NEC
43100	Indian NFD
43111	Bengali
43112	Fijian Indian / Indo-Fijian
43113	Gujarati
43114	Tamil
43115	Punjabi
43116	Sikh
43199	Indian NEC
44100	Sri Lankan NFD
44111	Sinhalese
44112	Sri Lankan Tamil
44199	Sri Lankan NEC
44211	Japanese
44311	Korean
44411	Afghani
44412	Bangladeshi
44413	Nepalese
44414	Pakistani
44415	Tibetan
44499	Other Asian NEC
51100	Middle Eastern NFD
51111	Algerian
51112	Arab

Level 4 Ethnicity Codes	
Code	Description
51113	Assyrian
51114	Egyptian
51115	Iranian / Persian
51116	Iraqi
51117	Israeli / Jewish / Hebrew
51118	Jordanian
51119	Kurd
51120	Lebanese
51121	Libyan
51122	Moroccan
51123	Omani
51124	Palestinian
51125	Syrian
51126	Tunisian
51127	Turkish (including Turkish Cypriot)
51128	Yemeni
51199	Middle Eastern NEC
52100	Latin American / Hispanic NFD
52111	Argentinian
52112	Bolivian
52113	Brazilian
52114	Chilean
52115	Colombian
52116	Costa Rican
52117	Creole (Latin America)
52118	Ecuadorian
52119	Guatemalan
52120	Guyanese
52121	Honduran
52122	Malvinian (Spanish-speaking Falkland Islander)
52123	Mexican

Level 4 Ethnicity Codes	
Code	Description
52124	Nicaraguan
52125	Panamanian
52126	Paraguayan
52127	Peruvian
52128	Puerto Rican
52129	Uruguayan
52130	Venezuelan
52199	Latin American / Hispanic NEC
53100	African NFD
53111	Black
53112	Creole (US)
53113	Jamaican
53114	Kenyan
53115	Nigerian
53116	African American
53117	Ugandan
53118	West Indian / Caribbean
53119	Somali
53199	Other African NEC
54100	Other NFD
54111	Central American Indian
54112	Inuit / Eskimo
54113	Mauritian
54114	North American Indian
54115	Seychelles Islander
54116	South American Indian
54199	Other NEC
96666	Repeated value
97777	Response unidentifiable
98888	Response outside scope
99999	Not stated

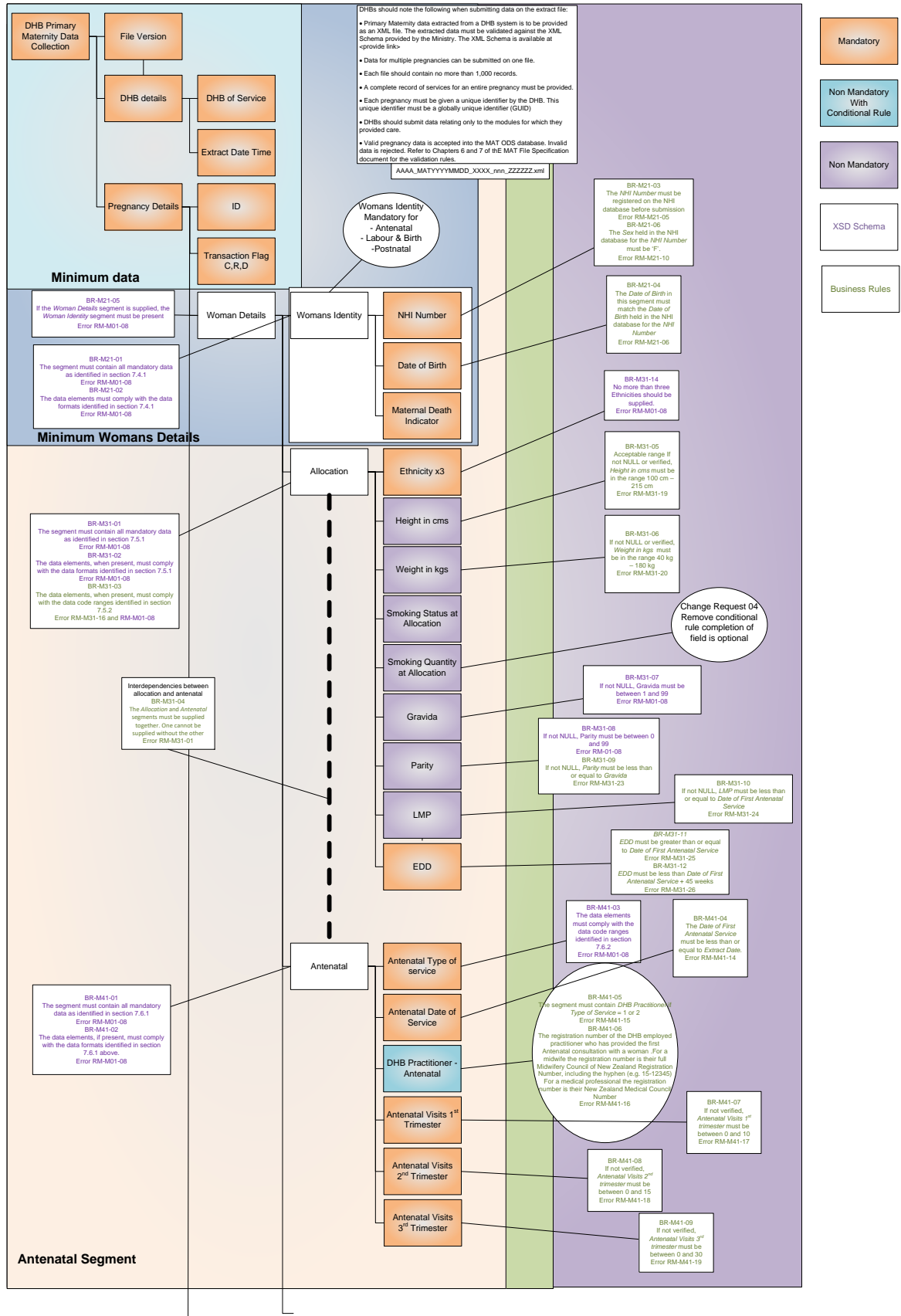
## C.2 Level 4 to Level 2 Mapping

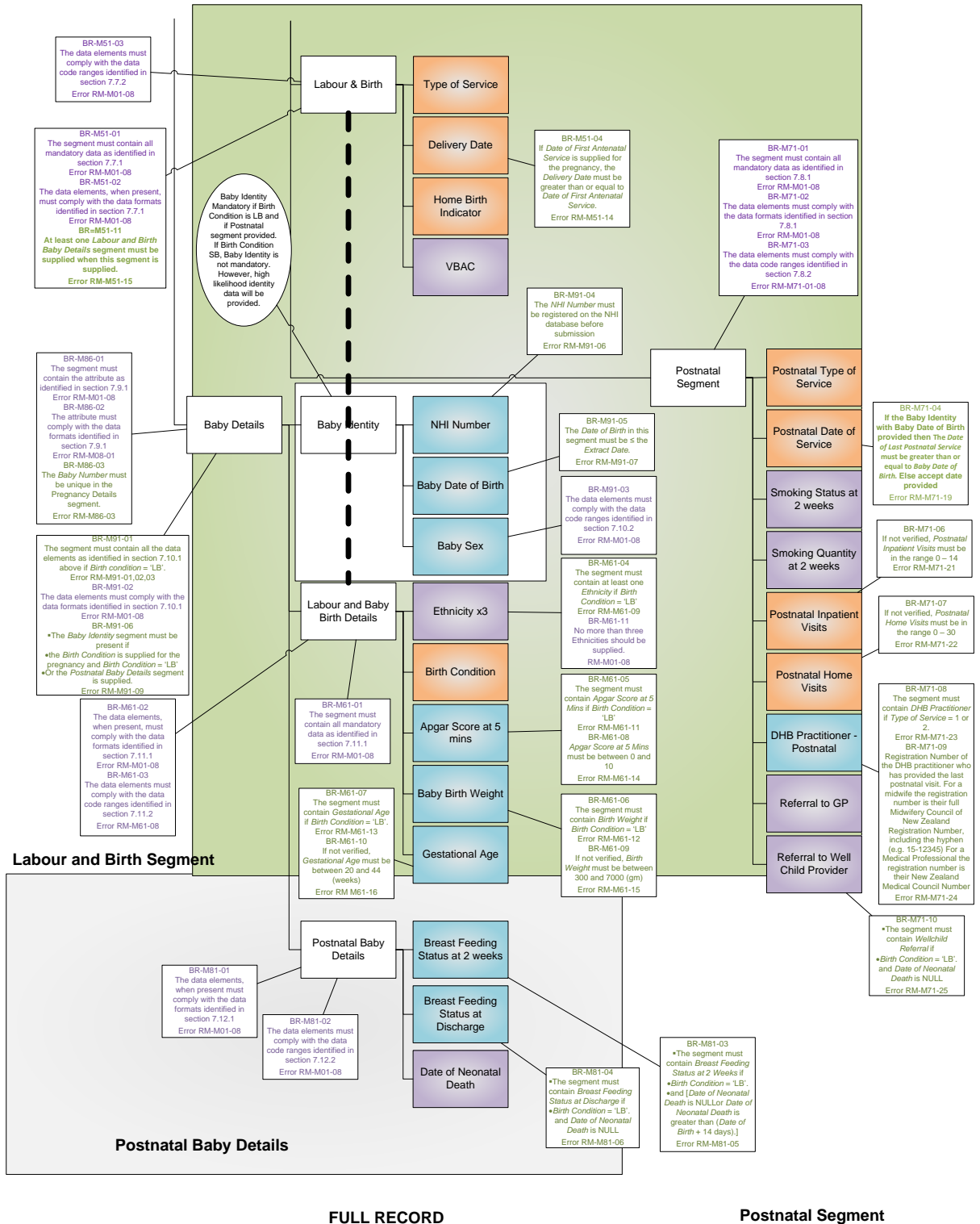
If the DHB holds ethnicity data as Level 2 ethnicity codes, the table below shows how to convert a Level 2 code to a Level 4 code for MAT ODS.

Level 2		Level 4	
Description	Code	Description	Code
European NFD	10	European NFD	10000
New Zealand European / Pākehā	11	New Zealand European / Pākehā	11111
Other European	12	Other European NFD	12000
Māori	21	Māori	21111
Pacific peoples NFD	30	Pacific peoples NFD	30000
Samoan	31	Samoan	31111
Cook Island Maori	32	Cook Island Maori NFD	32100
Tongan	33	Tongan	33111
Niuean	34	Niuean	34111
Tokelauan	35	Tokelauan	35111
Fijian	36	Fijian (except Fiji Indian / Indo-Fijian)	36111
Other Pacific peoples	37	Other Pacific peoples NFD	37100
Asian NFD	40	Asian NFD	40000
Southeast Asian	41	Southeast Asian NFD	41000
Chinese	42	Chinese NFD	42100
Indian	43	Indian NFD	43100
Other Asian	44	Other Asian NEC	44499
Middle Eastern	51	Middle Eastern NFD	51100
Latin American / Hispanic	52	Latin American / Hispanic NFD	52100
African (or cultural group of African origin)	53	African NFD	53100
Other	54	Other NFD	54100
Repeated value * not used	96	Repeated value	96666
Response unidentifiable * not used	97	Response unidentifiable	97777
Response outside scope * not used	98	Response outside scope	98888
Not stated	99	Not stated	99999



## **Appendix D: Extract File Structure Summary**





Initial File validation	Processing Rules	Systems Errors
BR-M01-01 The file name must comply with the format identified in 6.1 above RM-M01-01	BR-M101-01 The Pregnancy Identifier on a Create Request must not exist in the ODS database. RM-M101-01	Application Error Systems error. RM-M901-03
BR-M01-02 The elements must comply with the data codes ranges identified in section 6.1.1. above RM-M01-02,03 and 12	BR-M101-03 If the DHB of Service, Woman NHI and Date of First Antenatal Service in a Create Request must not be the same as those in a pregnancy record in the ODS database. RM-M101-04	EFT Error Systems error. RM-M901-01
BR-M01-03 The Extract Date must be less than or equal to the date the file is received. RM-M01-04	BR-M101-04 If the DHB of Service, Woman NHI and Delivery Date in a Create Request must not be the same as those in a pregnancy record in the ODS database. RM-M101-05	Internal Error Systems error. RM-M901-02
BR-M01-04 The Extract date must be greater than or equal to the Extract date of the last file processed. RM-M01-05	BR-M101-05 If the DHB of Service, Woman NHI and Date of Last Postnatal Service in a Create Request must not be the same as those in a pregnancy record in the ODS database. RM-M101-06	
BR-M01-05 If Sequence number is greater than 1, then Sequence number must be equal to Sequence number of the last accepted file on Extract date +1 RM-M01-06	BR-M101-06 The Pregnancy Identifier on a Replace Request must exist in the ODS database. RM-M101-02	
BR-M01-06 The DHB of Service in the DHB Details segment must match the Submitting DHB in the file name. RM-M01-07	BR-M101-07 The Pregnancy Identifier on a Delete Request must exist in the ODS database. RM-M101-02	
BR-M01-08 The Submitting DHB must be certified to submit the file version to the Target system RM-M01-09	BR-M101-08 The pregnancy on a Delete or Replace Request must not be flagged as "deleted" in the ODS database. RM-M101-03	
BR-M01-09 The Document reference must be present in the Extract file RM-M01-08	BR-M101-09 The pregnancy on a Delete or Replace Request must not be flagged as a reversal of a create request in the ODS database. RM-M101-07	
BR-M01-10 The Document reference must be the same as the File name RM-M01-14	BR-M101-10 The Pregnancy Identifier on a Create Request must not exist in the ODS database where the pregnancy details have been marked as deleted. RM-M101-08	
BR-M01-13 The File version must comply with the data format identified in section 7.1.1 RM-M01-15	BR-M101-11 If the DHB of Service, Woman NHI and Date of First Antenatal Service in a Create Request must not be the same as those in a pregnancy record within the same input file RM-M101-09	
BR-M01-14 The DHB of Service must be active RM-M01-16	BR-M101-12 If the DHB of Service, Woman NHI and Delivery Date in a Create Request must not be the same as those in a pregnancy record within the same input file RM-M101-10	
BR-M01-15 The File version must comply with the data format identified in section 7.1.1 RM-M01-08	BR-M101-13 If the DHB of Service, Woman NHI and Date of Last Postnatal Service in a Create Request must not be the same as those in a pregnancy record within the same input file RM-M101-11	
BR-M01-16 The data elements must be in the correct order RM-M01-08	BR-M101-14 The Baby NHI should not be duplicated within the same input file RM-M101-12	
BR-M01-17 The Target system in the input file name must match the processing system RM-M01-19		
BR-M01-18 The Extract Date must be a valid date RM-M01-21		
BR-M01-19 The file must be in the correct DHB input folder RM-M01-20		

## Appendix E: System Errors

The following errors will be delivered to the Error folder. They will not be returned to the DHB.

Response Message Reference	Error or Warning	Message Title	Response Message
RM-M901-01	Error	Error – System Error	▪ EFT error - Input file has been placed in the wrong DHB / Submitter's directory [directory]
RM-M901-02	Error	Error – System Error	▪ Internal error - [error description]
RM-M901-03	Error	Error – System Error	▪ Application error - [error description]

## Appendix F: Related Documents/Files

Document/File	Version
DHB Primary Maternity Data Collection Detailed Business Requirements	1.1
DHB_Primary_Maternity_Data_Collection_v1.0.xsd	1.0
DHB_Primary_Maternity_Data_Collection_Acknowledgement_v1.0.xsd	1.0
DHB_Primary_Maternity_Common_Types_v1.0.xsd	1.0
DHB_Primary_Maternity_Data_Collection_Reversal_v1.0.xsd	1.0
DHB_Primary_Maternity_Data_Collection_Reversal_Acknowledgement_v1.0.xsd	1.0

## Appendix G: Examples

### G.1 File rejected because of XSD schema errors

#### G1.1 Extract file

```
<?xml version="1.0" encoding="utf-8"?>
<mat:DHB_Primary_Maternity_Data_Collection_Document xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:mat="http://moh.govt.nz/maternity/v1.0"
File_Version="1.00"
Document_Reference="TEST_MAT20120831_3061_001_EXTRACT.xml"
xsi:schemaLocation="http://moh.govt.nz/maternity/v1.0 ./xsd/DHB_Primary_Maternity_Data_Collection_v1.0.xsd">
  <mat:DHB_Details>
    <mat:DHB_Of_Service>3061</mat:DHB_Of_Service>
    <mat:Extract_DateTime>2012-08-31T09:14:30</mat:Extract_DateTime>
  </mat:DHB_Details>
  <mat:Create_Request PregnancyIdentifier="4d473add-feb4-4225-938b-baf9ff54026f" BatchRequestId="1">
    <mat:Pregnancy_Details>
      <mat:Woman_Details>
        <mat:Woman_Identity>
          <mat:NHI_Number>LMC4295_TEST</mat:NHI_Number>
          <mat>Date_Of_Birth>1973-03-13-TEST</mat>Date_Of_Birth>
          <mat:Maternal_Death_Indicator>>false</mat:Maternal_Death_Indicator>
        </mat:Woman_Identity>
      <mat:Allocation>
```

```
<mat:Ethnicity>21111</mat:Ethnicity>
<mat:Smoking_Status_At_Allocation>true</mat:Smoking_Status_At_Allocation>
<mat:Smoking_Quantity_At_Allocation>L</mat:Smoking_Quantity_At_Allocation>
<mat:Gravida>1</mat:Gravida>
<mat:Parity>5</mat:Parity>
<mat:LMP>2010-05-20</mat:LMP>
<mat:EDD>2011-02-24</mat:EDD>
</mat:Allocation>
<mat:Labour_And_Birth>
  <mat:Type_Of_Service>1</mat:Type_Of_Service>
  <mat:Delivery_Date>2011-02-24</mat:Delivery_Date>
  <mat:HomeBirth_Indicator>false</mat:HomeBirth_Indicator>
</mat:Labour_And_Birth>
<mat:Postnatal>
  <mat:Type_Of_Service>1</mat:Type_Of_Service>
  <mat>Date_Of_Last_Postnatal_Service>2011-04-07</mat>Date_Of_Last_Postnatal_Service>
  <mat:Smoking_Status_At_2_Weeks>true</mat:Smoking_Status_At_2_Weeks>
  <mat:Smoking_Quantity_At_2_Weeks>M</mat:Smoking_Quantity_At_2_Weeks>
  <mat:Postnatal_Inpatient_Visits isVerified="true">1</mat:Postnatal_Inpatient_Visits>
  <mat:Postnatal_Home_Visits isVerified="true">7</mat:Postnatal_Home_Visits>
  <mat:DHB_Practitioner>163886</mat:DHB_Practitioner>
  <mat:GP_Referral>Y</mat:GP_Referral>
  <mat:Wellchild_Referral>P</mat:Wellchild_Referral>
</mat:Postnatal>
</mat:Woman_Details>
<mat:Baby_Details Baby_Number="1">
  <mat:Baby_Identity>
```

```
<mat:NHI_Number>TWU7654111</mat:NHI_Number>
<mat:Date_Of_Birth>2011-02-24-1</mat:Date_Of_Birth>
<mat:Sex>M</mat:Sex>
</mat:Baby_Identity>
<mat:Labour_And_Birth_Baby_Details>
  <mat:Ethnicity>21111</mat:Ethnicity>
  <mat:Birth_Condition>LB</mat:Birth_Condition>
  <mat:Apgar_Score_At_5_Mins>9</mat:Apgar_Score_At_5_Mins>
  <mat:Birth_Weight isVerified="true">28101</mat:Birth_Weight>
  <mat:Gestational_Age isVerified="true">40</mat:Gestational_Age>
</mat:Labour_And_Birth_Baby_Details>
<mat:Postnatal_Baby_Details>
  <mat:Breast_Feeding_Status_At_2_Weeks>Partial1</mat:Breast_Feeding_Status_At_2_Weeks>
  <mat:Breast_Feeding_Status_At_Discharge>Partial</mat:Breast_Feeding_Status_At_Discharge>
</mat:Postnatal_Baby_Details>
</mat:Baby_Details>
</mat:Pregnancy_Details>
</mat>Create_Request>
</mat:DHB_Primary_Maternity_Data_Collection_Document>
```

## G1.2 Response file

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<DHB_Primary_Maternity_Data_Collection_Acknowledgement xmlns="http://moh.govt.nz/maternity/v1.0"
Document_Reference="TEST_MAT20120831_3061_001_EXTRACT.xml" File_Version="1.00">
  <Status>REJECTED</Status>
```



```
<Error>
  <Error_Reference>RM-M01-08</Error_Reference>
  <Error_Title>Error - Invalid Data, on Line number 15</Error_Title>
  <Error_Message>cvc-maxLength-valid: Value 'LMC4295_TEST' with length = '12' is not facet-valid with respect to maxLength '10' for type
'NHIType'.</Error_Message>
</Error>
<Error>
  <Error_Reference>RM-M01-08</Error_Reference>
  <Error_Title>Error - Invalid Data, on Line number 15</Error_Title>
  <Error_Message>cvc-type.3.1.3: The value 'LMC4295_TEST' of element 'mat:NHI_Number' is not valid.</Error_Message>
</Error>
<Error>
  <Error_Reference>RM-M01-08</Error_Reference>
  <Error_Title>Error - Invalid Data, on Line number 16</Error_Title>
  <Error_Message>Error in parsing time zone: '1973-03-13-TEST'.</Error_Message>
</Error>
<Error>
  <Error_Reference>RM-M01-08</Error_Reference>
  <Error_Title>Error - Invalid Data, on Line number 16</Error_Title>
  <Error_Message>cvc-datatype-valid.1.2.1: '1973-03-13-TEST' is not a valid value for 'date'.</Error_Message>
</Error>
<Error>
  <Error_Reference>RM-M01-08</Error_Reference>
  <Error_Title>Error - Invalid Data, on Line number 16</Error_Title>
  <Error_Message>cvc-type.3.1.3: The value '1973-03-13-TEST' of element 'mat:Date_Of_Birth' is not valid.</Error_Message>
</Error>
<Error>
```

```
<Error_Reference>RM-M01-08</Error_Reference>
<Error_Title>Error - Invalid Data, on Line number 48</Error_Title>
<Error_Message>Error in parsing time zone: '2011-02-24-1'.</Error_Message>
</Error>
<Error>
  <Error_Reference>RM-M01-08</Error_Reference>
  <Error_Title>Error - Invalid Data, on Line number 48</Error_Title>
  <Error_Message>cvc-datatype-valid.1.2.1: '2011-02-24-1' is not a valid value for 'date'.</Error_Message>
</Error>
<Error>
  <Error_Reference>RM-M01-08</Error_Reference>
  <Error_Title>Error - Invalid Data, on Line number 48</Error_Title>
  <Error_Message>cvc-type.3.1.3: The value '2011-02-24-1' of element 'mat:Date_Of_Birth' is not valid.</Error_Message>
</Error>
<Error>
  <Error_Reference>RM-M01-08</Error_Reference>
  <Error_Title>Error - Invalid Data, on Line number 55</Error_Title>
  <Error_Message>cvc-maxInclusive-valid: Value '28101' is not facet-valid with respect to maxInclusive '9999' for type
'Weight_In_gmsBaseType'.</Error_Message>
</Error>
<Error>
  <Error_Reference>RM-M01-08</Error_Reference>
  <Error_Title>Error - Invalid Data, on Line number 55</Error_Title>
  <Error_Message>cvc-complex-type.2.2: Element 'mat:Birth_Weight' must have no element [children], and the value must be valid.</Error_Message>
</Error>
<Error>
  <Error_Reference>RM-M01-08</Error_Reference>
```

```
<Error_Title>Error - Invalid Data, on Line number 59</Error_Title>
<Error_Message>cvc-enumeration-valid: Value 'Partial1' is not facet-valid with respect to enumeration '[Exclusive, Fully, Partial, Artificial]'. It must be a
value from the enumeration.</Error_Message>
</Error>
<Error>
  <Error_Reference>RM-M01-08</Error_Reference>
  <Error_Title>Error - Invalid Data, on Line number 59</Error_Title>
  <Error_Message>cvc-type.3.1.3: The value 'Partial1' of element 'mat:Breast_Feeding_Status_At_2_Weeks' is not valid.</Error_Message>
</Error>
<Number_Of_Create_Requests_Received>1</Number_Of_Create_Requests_Received>
<Number_Of_Create_Requests_Rejected>1</Number_Of_Create_Requests_Rejected>
<Number_Of_Replace_Requests_Received>0</Number_Of_Replace_Requests_Received>
<Number_Of_Replace_Requests_Rejected>0</Number_Of_Replace_Requests_Rejected>
<Number_Of_Delete_Requests_Received>0</Number_Of_Delete_Requests_Received>
<Number_Of_Delete_Requests_Rejected>0</Number_Of_Delete_Requests_Rejected>
<Processing_DateTime>2012-11-26T11:50:07.091+13:00</Processing_DateTime>
<DHB_Details>
  <DHB_Of_Service>3061</DHB_Of_Service>
  <Extract_DateTime>2012-08-31T09:14:30+12:00</Extract_DateTime>
</DHB_Details>
</DHB_Primary_Maternity_Data_Collection_Acknowledgement>
```

### G1.3 Report

#### DHB Primary Maternity Service Data Collection File Submission Report

Submitting Organisation: Capital and Coast DHB

Extract File Name: TEST\_MAT20120831\_3061\_001\_EXTRACT.xml

Extract Date: 31/08/2012

Processing Date: 26/11/2012

File Status: REJECTED

#### Data Validation Error Summary

Error Reference	Error Message	Count	Affected NHI
RM-M01-08	cvc-maxLength-valid: Value 'LMC4295_TEST' with length = '12' is not facet-valid with respect to maxLength '10' for type 'NHIType'.	1	
RM-M01-08	cvc-type.3.1.3: The value 'LMC4295_TEST' of element 'mat:NHI_Number' is not valid.	1	
RM-M01-08	Error in parsing time zone: '1973-03-13-TEST'.	1	
RM-M01-08	cvc-datatype-valid.1.2.1: '1973-03-13-TEST' is not a valid value for 'date'.	1	
RM-M01-08	cvc-type.3.1.3: The value '1973-03-13-TEST' of element 'mat:Date_Of_Birth' is not valid.	1	

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

RM-M01-08	Error in parsing time zone: '2011-02-24-1'.	1
RM-M01-08	cvc-datatype-valid.1.2.1: '2011-02-24-1' is not a valid value for 'date'.	1
RM-M01-08	cvc-type.3.1.3: The value '2011-02-24-1' of element 'mat:Date_Of_Birth' is not valid.	1
RM-M01-08	cvc-maxInclusive-valid: Value '28101' is not facet-valid with respect to maxInclusive '9999' for type 'Weight_In_gmsBaseType'.	1
RM-M01-08	cvc-complex-type.2.2: Element 'mat:Birth_Weight' must have no element [children], and the value must be valid.	1
RM-M01-08	cvc-enumeration-valid: Value 'Partial1' is not facet-valid with respect to enumeration '[Exclusive, Fully, Partial, Artificial]'. It must be a value from the enumeration.	1
RM-M01-08	cvc-type.3.1.3: The value 'Partial1' of element 'mat:Breast_Feeding_Status_At_2_Weeks' is not valid.	1
<b>Total</b>		<b>12</b>

## G.2 File with valid data

### G2.1 Extract file

```
<?xml version="1.0" encoding="utf-8"?>
<mat:DHB_Primary_Maternity_Data_Collection_Document xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:mat="http://moh.govt.nz/maternity/v1.0"
Document_Reference="TEST_MAT20120831_3061_001_EXTRACT.xml" File_Version="1.00"
xsi:schemaLocation="http://moh.govt.nz/maternity/v1.0
file:///X:/Workspaces/Testing%20Services/Projects/DHB%20Primary%20Maternity%20Data/Mat%20XML%20Files/Sample%20Mat
%20files/Latest%20XSD/DHB_Primary_Maternity_Data_Collection_v0_10.xsd">
  <mat:DHB_Details>
    <mat:DHB_Of_Service>3061</mat:DHB_Of_Service>
    <mat:Extract_DateTime>2012-08-31T09:14:30</mat:Extract_DateTime>
  </mat:DHB_Details>
  <mat:Create_Request PregnancyIdentifier="2103bfab-b1ad-4566-b087-44228c47186d" BatchRequestId="1">
    <mat:Pregnancy_Details>
      <mat:Woman_Details>
        <mat:Woman_Identity>
          <mat:NHI_Number>FPH9244</mat:NHI_Number>
          <mat>Date_Of_Birth>1983-01-04</mat>Date_Of_Birth>
          <mat:Maternal_Death_Indicator>>false</mat:Maternal_Death_Indicator>
        </mat:Woman_Identity>
      <mat:Allocation>
```

```
<mat:Ethnicity>21111</mat:Ethnicity>
<mat:Height_In_cms isVerified="true">161</mat:Height_In_cms>
<mat:Smoking_Status_At_Allocation>true</mat:Smoking_Status_At_Allocation>
<mat:Smoking_Quantity_At_Allocation>L</mat:Smoking_Quantity_At_Allocation>
<mat:Gravida>4</mat:Gravida>
<mat:Parity>3</mat:Parity>
<mat:LMP>2010-01-25</mat:LMP>
<mat:EDD>2010-11-01</mat:EDD>
</mat:Allocation>
<mat:Antenatal>
  <mat:Type_Of_Service>1</mat:Type_Of_Service>
  <mat>Date_Of_First_Antenatal_Service>2010-03-17</mat>Date_Of_First_Antenatal_Service>
  <mat:DHB_Practitioner>163886</mat:DHB_Practitioner>
  <mat:Antenatal_Visits_1st_Trimester isVerified="true">0</mat:Antenatal_Visits_1st_Trimester>
  <mat:Antenatal_Visits_2nd_Trimester isVerified="true">1</mat:Antenatal_Visits_2nd_Trimester>
  <mat:Antenatal_Visits_3rd_Trimester isVerified="true">8</mat:Antenatal_Visits_3rd_Trimester>
</mat:Antenatal>
<mat:Labour_And_Birth>
  <mat:Type_Of_Service>1</mat:Type_Of_Service>
  <mat:Delivery_Date>2010-11-03</mat:Delivery_Date>
  <mat:HomeBirth_Indicator>false</mat:HomeBirth_Indicator>
  <mat:VBAC_Indicator>false</mat:VBAC_Indicator>
</mat:Labour_And_Birth>
```

```
<mat:Postnatal>
  <mat:Type_Of_Service>1</mat:Type_Of_Service>
  <mat>Date_Of_Last_Postnatal_Service>2010-12-06</mat>Date_Of_Last_Postnatal_Service>
  <mat:Smoking_Status_At_2_Weeks>>false</mat:Smoking_Status_At_2_Weeks>
  <mat:Postnatal_Inpatient_Visits isVerified="true">2</mat:Postnatal_Inpatient_Visits>
  <mat:Postnatal_Home_Visits isVerified="true">4</mat:Postnatal_Home_Visits>
  <mat:DHB_Practitioner>163886</mat:DHB_Practitioner>
  <mat:GP_Referral>Y</mat:GP_Referral>
  <mat:Wellchild_Referral>P</mat:Wellchild_Referral>
</mat:Postnatal>
</mat:Woman_Details>
<mat:Baby_Details Baby_Number="1">
  <mat:Baby_Identity>
    <mat:NHI_Number>TUR6245</mat:NHI_Number>
    <mat>Date_Of_Birth>2010-11-03</mat>Date_Of_Birth>
    <mat:Sex>M</mat:Sex>
  </mat:Baby_Identity>
  <mat:Labour_And_Birth_Baby_Details>
    <mat:Ethnicity>21111</mat:Ethnicity>
    <mat:Birth_Condition>LB</mat:Birth_Condition>
    <mat:Apgar_Score_At_5_Mins>9</mat:Apgar_Score_At_5_Mins>
    <mat:Birth_Weight isVerified="true">3145</mat:Birth_Weight>
    <mat:Gestational_Age isVerified="true">40</mat:Gestational_Age>
```



```
</mat:Labour_And_Birth_Baby_Details>
<mat:Postnatal_Baby_Details>
  <mat:Breast_Feeding_Status_At_2_Weeks>Partial</mat:Breast_Feeding_Status_At_2_Weeks>
  <mat:Breast_Feeding_Status_At_Discharge>Partial</mat:Breast_Feeding_Status_At_Discharge>
</mat:Postnatal_Baby_Details>
</mat:Baby_Details>
</mat:Pregnancy_Details>
</mat>Create_Request>
<mat:Replace_Request PregnancyIdentifier="97b81bd4-828d-466b-8ca8-29fa5936b6fa" BatchRequestId="2">
  <mat:Pregnancy_Details>
    <mat:Woman_Details>
      <mat:Woman_Identity>
        <mat:NHI_Number>FPP6299</mat:NHI_Number>
        <mat>Date_Of_Birth>1975-09-24</mat>Date_Of_Birth>
        <mat:Maternal_Death_Indicator>>false</mat:Maternal_Death_Indicator>
      </mat:Woman_Identity>
      <mat:Allocation>
        <mat:Ethnicity>21111</mat:Ethnicity>
        <mat:Height_In_cms isVerified="true">174</mat:Height_In_cms>
        <mat:Weight_In_Kgs isVerified="true">71</mat:Weight_In_Kgs>
        <mat:Smoking_Status_At_Allocation>true</mat:Smoking_Status_At_Allocation>
        <mat:Smoking_Quantity_At_Allocation>M</mat:Smoking_Quantity_At_Allocation>
        <mat:Gravida>7</mat:Gravida>
      </mat:Allocation>
    </mat:Woman_Details>
  </mat:Pregnancy_Details>
</mat:Replace_Request>
</mat>Create_Request>
```

```
<mat:Parity>3</mat:Parity>
<mat:LMP>2010-04-02</mat:LMP>
<mat:EDD>2011-01-07</mat:EDD>
</mat:Allocation>
<mat:Antenatal>
  <mat:Type_Of_Service>1</mat:Type_Of_Service>
  <mat>Date_Of_First_Antenatal_Service>2010-09-08</mat>Date_Of_First_Antenatal_Service>
  <mat:DHB_Practitioner>163886</mat:DHB_Practitioner>
  <mat:Antenatal_Visits_1st_Trimester isVerified="true">0</mat:Antenatal_Visits_1st_Trimester>
  <mat:Antenatal_Visits_2nd_Trimester isVerified="true">1</mat:Antenatal_Visits_2nd_Trimester>
  <mat:Antenatal_Visits_3rd_Trimester isVerified="true">4</mat:Antenatal_Visits_3rd_Trimester>
</mat:Antenatal>
<mat:Labour_And_Birth>
  <mat:Type_Of_Service>1</mat:Type_Of_Service>
  <mat:Delivery_Date>2010-12-25</mat:Delivery_Date>
  <mat:HomeBirth_Indicator>>false</mat:HomeBirth_Indicator>
</mat:Labour_And_Birth>
<mat:Postnatal>
  <mat:Type_Of_Service>1</mat:Type_Of_Service>
  <mat>Date_Of_Last_Postnatal_Service>2011-01-15</mat>Date_Of_Last_Postnatal_Service>
  <mat:Smoking_Status_At_2_Weeks>>true</mat:Smoking_Status_At_2_Weeks>
  <mat:Smoking_Quantity_At_2_Weeks>L</mat:Smoking_Quantity_At_2_Weeks>
  <mat:Postnatal_Inpatient_Visits isVerified="true">3</mat:Postnatal_Inpatient_Visits>
```

```
<mat:Postnatal_Home_Visits isVerified="true">7</mat:Postnatal_Home_Visits>
<mat:DHB_Practitioner>163886</mat:DHB_Practitioner>
<mat:GP_Referral>Y</mat:GP_Referral>
<mat:Wellchild_Referral>P</mat:Wellchild_Referral>
</mat:Postnatal>
</mat:Woman_Details>
<mat:Baby_Details Baby_Number="1">
  <mat:Baby_Identity>
    <mat:NHI_Number>TVR0098</mat:NHI_Number>
    <mat>Date_Of_Birth>2010-12-25</mat>Date_Of_Birth>
    <mat:Sex>F</mat:Sex>
  </mat:Baby_Identity>
  <mat:Labour_And_Birth_Baby_Details>
    <mat:Ethnicity>21111</mat:Ethnicity>
    <mat:Birth_Condition>LB</mat:Birth_Condition>
    <mat:Apgar_Score_At_5_Mins>8</mat:Apgar_Score_At_5_Mins>
    <mat:Birth_Weight isVerified="true">3135</mat:Birth_Weight>
    <mat:Gestational_Age isVerified="true">38</mat:Gestational_Age>
  </mat:Labour_And_Birth_Baby_Details>
  <mat:Postnatal_Baby_Details>
    <mat:Breast_Feeding_Status_At_2_Weeks>Exclusive</mat:Breast_Feeding_Status_At_2_Weeks>
    <mat:Breast_Feeding_Status_At_Discharge>Exclusive</mat:Breast_Feeding_Status_At_Discharge>
  </mat:Postnatal_Baby_Details>
</mat:Baby_Details>
</mat:Woman_Details>
```

```
</mat:Baby_Details>
</mat:Pregnancy_Details>
</mat:Replace_Request>
<mat>Delete_Request PregnancyIdentifier="ac0e9b5a-d332-45a4-b6d4-7676f216f2be" BatchRequestId="3">
</mat>Delete_Request>
</mat:DHB_Primary_Maternity_Data_Collection_Document>
```

## G2.2 Response file

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<DHB_Primary_Maternity_Data_Collection_Acknowledgement xmlns="http://moh.govt.nz/maternity/v1.0"
Document_Reference="TEST_MAT20120831_3061_001_EXTRACT.xml" File_Version="1.00">
  <Status>ACCEPTED</Status>
  <Number_Of_Create_Requests_Received>1</Number_Of_Create_Requests_Received>
  <Number_Of_Create_Requests_Rejected>0</Number_Of_Create_Requests_Rejected>
  <Number_Of_Replace_Requests_Received>1</Number_Of_Replace_Requests_Received>
  <Number_Of_Replace_Requests_Rejected>0</Number_Of_Replace_Requests_Rejected>
  <Number_Of_Delete_Requests_Received>1</Number_Of_Delete_Requests_Received>
  <Number_Of_Delete_Requests_Rejected>0</Number_Of_Delete_Requests_Rejected>
  <Processing_DateTime>2012-11-26T11:54:57.966+13:00</Processing_DateTime>
  <DHB_Details>
    <DHB_Of_Service>3061</DHB_Of_Service>
    <Extract_DateTime>2012-08-31T09:14:30+12:00</Extract_DateTime>
```

</DHB\_Details>

</DHB\_Primary\_Maternity\_Data\_Collection\_Acknowledgement>

## G2.3 Report

### DHB Primary Maternity Service Data Collection File Submission Report

Submitting organisation : Capital and Coast DHB

Extract File Name: TEST\_MAT20120831\_3061\_001\_EXTRACT.xml

Extract Date: 31/08/2012

Processing Date: 26/11/2012

File Status: ACCEPTED

#### Data Validation Summary

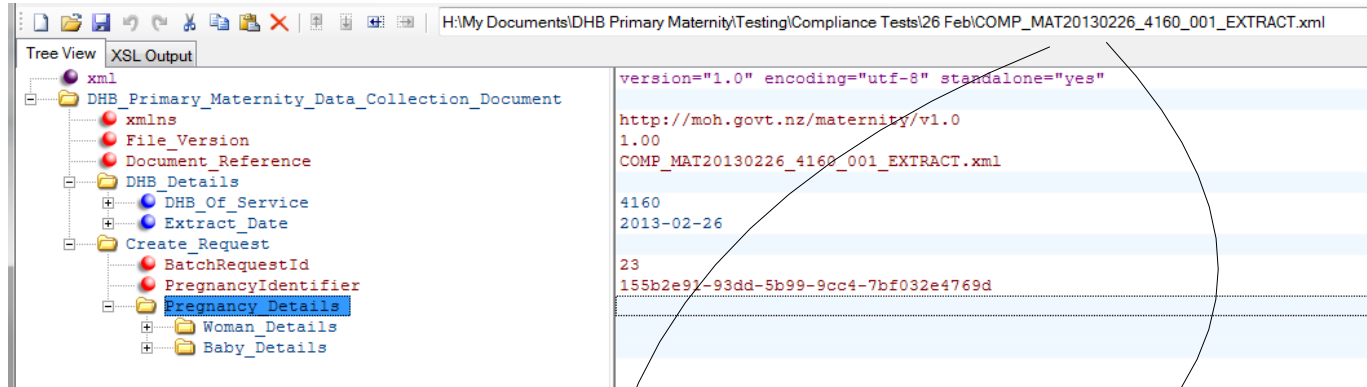
Requests	Received	Accepted	Rejected	Success Rate %
CREATE	1	1	0	100
REPLACE	1	1	0	0
DELETE	1	1	0	0
<b>Total</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>100</b>

#### Data Validation Error Summary

Error Reference	Error Message	Count	Failed NHI
<b>Total</b>		<b>0</b>	

## Appendix H: Reverse File Example

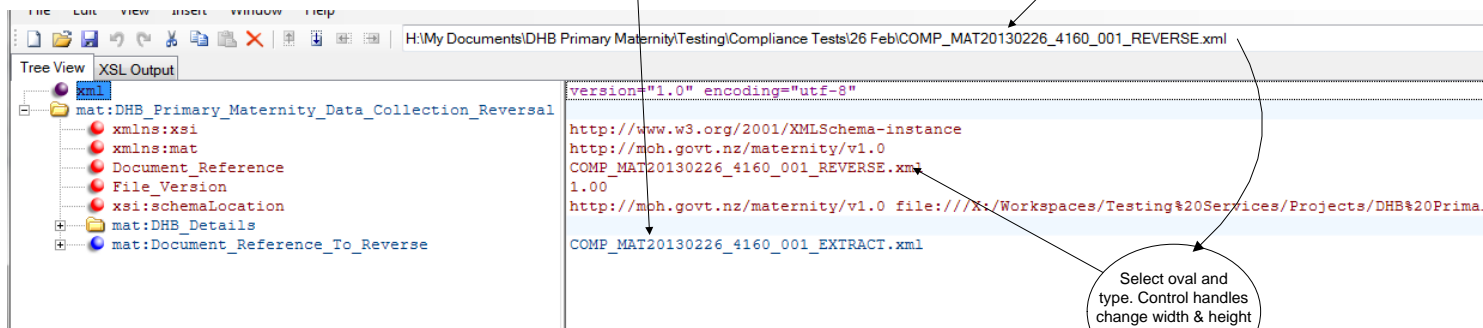
Original Extract file



Match name of original extract file

Note date needs to be the same as the original extract date

Reversal Extract file



Select oval and type. Control handles change width & height of oval.

## Appendix I: File Specification Version History

Version of File Spec	Date	Change
0.1		Initial version with business rules based on Detailed Business Requirements v0.3 and XSD Schema v0.01
0.2	19/03/2012	Extensive revision of 0.1 content based on review comments and inclusion of new information, business rules based on Detailed Business Requirements v0.5 and XSD Schema v0.05
0.3	11/04/2012	Revisions for business rules and xml schema changes
1.0	13/04/2012	Final version for sign off
2.0	22/06/2012	Amendments to error messages. Inserted data model.
2.1	03/07/2012	Additional error messages
2.2	05/07/2012	Amended text of message RM-M01-06
2.3	19/10/2012	Included ethnicity code Level 2 to Level 4 mapping table in Appendix C
3.0	28/11/2012	Amendments to message numbers. Updates to sample files. Included notation guide in Section 5. Included Extract File Summary Diagram.
3.2	23/01/2013	5.1.2 & 7.2 Extract Datetime altered to Extract Date 7.5.4 & 7.6.4 RM-M31-01 message text.
3.3	8/02/2013	Added "Important Notes" in section 5. Fixed up minor discrepancies
3.4	19/02/2013	Amendment to RM-M01-06 message text. Inserted file size limit in 4.1.1. Amended report heading in G1.3
3.5	27/2/2013	Example of reversal file added and new business rule RM-M101-13
4.0	21/3/2013	Final
4.1	01/10/2014	CASD 231621 – Amendments to BR-M71-04, RM-M71-19 Also amendments to BR-M31-11 and RM-M31-25
4.2	18/05/2016	Amendments to allow an agent to submit files on behalf of a DHB