

**DHB Primary Maternity Service Data Collection System**

**MAT ODS**

**Retrospective File Specification**

|  |  |
| --- | --- |
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**NOTE: This document has been prepared in response to project change request 3541-06 for DHB Primary Maternity Data Collection. It documents ‘lighter’ business rules required to accept historic DHB maternity data collected during the period 1 Jan 2007 to 31 July 2012.**

**This document should be read in conjunction with the DHB Primary Maternity Service Data Collection Systems Mat ODS – File Specification 4.1 of 01 October 2014.**

**The list of contents has purposely been aligned with the above file specification document to assist the developer and tester with the build of the retrospective file version.**

**The file version for retrospective data is 00000.01**

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# Retrospective File Specifications Requirements

Refer Change Request 3541-06 of November 2012.

# 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.

## 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.
* ZZZZZZZ denotes the input file type
* YYYYMMDD is the extract date
* XXXX is the submitting DHB 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.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Input File Attributes*** | | | | |
| **Attribute** | **Type** | **Format** | **M/O/C** | **Coded** |
| Target system | Code | AAAA | M | Y |
| Input file type | Code | A(7) | M | Y |
| Extract date | Date | YYYY-MM-DD | M | - |
| Submitting DHB | Code | NNNN | M | Y |
| Sequence number | Positive Integer | NNN | M | - |
| Document reference | String | AAAA\_MATYYYYMMDD\_XXXX  \_NNN\_ZZZZZZZ | M | - |
| File version | String | NNNNN.NN | M | - |

### Input file name code set attributes

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

|  |  |  |
| --- | --- | --- |
| ***Input File Name Code Set*** | | |
| **Coded Data Element** | **Range** | **Description** |
| Target system | PROD COMP | Production Compliance |
| Input file type | EXTRACT REVERSE | Extract Reversal |
| Submitting DHB | 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 | Tairawhiti 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 |
| File Version | 00000.01 | Historic file version |

### Input file initial validation business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M01-01 | * The file name must comply with the format identified in 6.1 above. | * File name format | RM-M01-01 |
| BR-M01-02 | * The elements must comply with the data code ranges identified in section 6.1.1 above. | * Target system * File type * Submitting DHB | RM-M01-02  RM-M01-12  RM-M01-03 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M01-03 | * The *Extract Date* must be less than or equal to the date the file is received*.* | * Extract Date | RM-M01-04 |
| BR-M01-04 | * The *Extract date* must be greater than or equal to the *Extract date* of the last file processed. | * Extract Date | RM-M01-05 |
| 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 | * Sequence number | RM-M01-06 |
| BR-M01-08 | * The *Submitting DHB* must be certified to submit the file version to the Target system | * Target system * File version * Submitting DHB | RM-M01-09 |
| BR-M01-13 | * The file must be readable   (The root segment must be present in the extract file.)(The *File version* must be the present in the Extract file) | * File | RM-M01-15 |
| BR-M01-16 | * The data elements must be in the correct order |  | RM-M01-08 |
| BR-M01-17 | * The Target system in the input file name must match the processing system | * Target system | RM-M01-19 |
| BR-M01-18 | * The *Extract Date* must be a valid date | * Extract Date | RM-M01-21 |
| BR-M01-19 | * The file must be in the correct DHB input folder | * Submitting DHB | RM-M01-20 |

### Input file initial validation error messages

The following business rule responses apply to the Validation process:

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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 | * The *Input file name* does not comply with the correct format. |
| RM-M01-02 | Error | Error – Incorrect Code Range | * The *Target system* in the Input file name is not within the correct code range. |
| RM-M01-03 | Error | Error – Incorrect Code Range | * The *Submitting DHB* in the Input file name is not within the correct code range. |
| RM-M01-04 | Error | Error – Invalid Data | * The *Extract date* in the Input file is not less than or equal to the date the file is received by MOH*.* |
| RM-M01-05 | Error | Error – Invalid Sequence | * The *Extract date* in the Input file is not greater than or equal to the *Extract date* of the last file processed by MOH*.* |
| RM-M01-06 | Error | Error – Invalid Sequence | * The *Sequence number* in the Input file is not greater than the *Sequence number* of the last file accepted by MOH*.* |
| RM-M01-08 | Error | Error – XSD Validation | * A system generated contextual XSD error message is provided |
| RM-M01-09 | Error | Error – Invalid Data | * The *Submitting DHB* in the Input file name is not certified to submit this file version to the Target System |
| RM-M01-12 | Error | Error – Incorrect Code Range | * The *Input file type* in the Input file name is not within the correct code range. |
| RM-M01-15 | Error | Error – Invalid Data | * The file is unreadable |
| RM-M01-19 | Error | Error – Invalid Data | * Input file has been submitted to wrong *Target system* |
| RM-M01-20 | Error | Error – Invalid Data | * The Submitting DHB in the input file name does not match the DHB input folder name |
| RM-M01-21 | Error | Error – Invalid Data | * The *Extract date* in the Input file is not a valid date |

# MAT Segment Formats, Code Sets and Validation Rules

## Extract file root segment

### Extract file root segment data attributes

The attributes of the Root segment are listed below.

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Root segment Attributes*** | | | | |
| **Attribute** | **Type** | **Format** | **M/O/C** | **Coded** |
| Document reference | String | AAAA\_MATYYYYMMDD\_XXXX  \_NNN\_ZZZZZZZ | M | - |
| File version | String | NNNNN.NN | M | - |

### Extract file root segment business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M01-09 | * The *Document reference* must be present in the Extract file | * Document reference | RM-M01-08 |
| BR-M01-10 | * The *Document reference* must be the same as the *File name* | * Document reference | RM-M01-14 |
| BR-M01-15 | * The *File version* must comply with the data format identified in section 7.1.1 | * File version | RM-M01-08 |

### Extract file root segment error messages

The following business rule responses apply to the Validation process:

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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 *Document reference* and the file name are not the same |

## DHB Details Segment

### DHB Details segment data elements

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

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***DHB Details Elements*** | | | | |
| **Data Element** | **Type** | **Format** | **M/O/C** | **Coded** |
| DHB of Service | Code | NNNN | M | Y |
| Extract DateTime | Datetime | YYYY-MM-DDTHH:MM:SS | M | - |

### DHB Details segment code set elements

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

|  |  |  |
| --- | --- | --- |
| ***DHB Details Code Set*** | | |
| **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 | Tairawhiti 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 |

### DHB Details segment business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M11-01 | * The segment must contain all mandatory data as identified in section 7.2.1 above. | * DHB of Service * Extract DateTime | RM-M01-08 |
| BR-M11-02 | * The data elements must comply with the data formats identified in section   7.2.1 above. | * DHB of Service * Extract DateTime | RM-M01-08 |
| BR-M11-03 | * The data elements must comply with the data code ranges identified in section 7.2.2 above. | * DHB of Service | RM-M11-05 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M11-04 | * The *Extract DateTime* must equal to   *Extract Date* in the file name | * Extract DateTime | RM-M11-06 |
| BR-M11-05 | * The segment must be present in the input file | * DHB Details | RM-M01-08 |
| BR-M01-06 | * The *DHB of Service* in the DHB Details segment must match the *Submitting DHB* in the file name. | * DHB of Service * Submitting DHB | RM-M01-07 |
| BR-M01-14 | * The *DHB of Service* must be active. | * DHB of Service | RM-M01-16 |

### DHB Details segment error messages

The following business rule responses apply to the Validation process:

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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-M11-05 | Error | Error – Incorrect Code Range | * The *DHB of Service* in the DHB Details segment is not within the correct code range. |
| RM-M11-06 | Error | Error – Invalid Data | * The *Extract DateTime* in the DHB Details segment is not equal to the *Extract Date* in the file name |
| RM-M01-07 | Error | Error – Invalid Data | * The *Submitting DHB* in the Input file name does not match the *DHB of Service* in the DHB Details segment. |
| RM-M01-16 | Error | Error – Invalid Data | * The *DHB of Service* in the DHB Details segment is not active |

## Request segment

### 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.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Request Type Attributes*** | | | | |
| **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 | - |

### Request segment business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M16-01 | * The segment must contain all mandatory attributes as identified in section 7.3.1 above. | * Pregnancy Identifier * Batch Request ID | RM-M01-08 |
| BR-M16-02 | * The attributes must comply with the data formats identified in section   7.3.1 above. | * Pregnancy Identifier * Batch Request ID | RM-M01-08 |
| BR-M16-05 | * The *Batch Request ID* must be unique in the Extract File | * Batch Request ID | RM-M01-08 |
| BR-M16-06 | * If the request type is Create or Replace *Pregnancy Details* must be present | * Pregnancy Details | RM-M01-08 |
| BR-M16-07 | * There should be at least one Create, Replace or Delete Request present in the file |  | RM-M16-08 |

### Request Type segment error messages

The following business rule responses apply to the Validation process:

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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-M16-08 | Error | Error – Missing Data | * The file does not contain any Create, Replace or Delete Requests |

## Woman Identity segment

### Woman Identity segment data elements

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

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Woman Identity Elements*** | | | | |
| **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 | - |

### Woman Identity segment business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M21-01 | * The segment must contain all mandatory data as identified in section 7.4.1 above. | * NHI Number * Date of Birth * Maternal Death Indicator | RM-M01-08 |
| BR-M21-02 | * The data elements must comply with the data formats identified in section   7.4.1 above. | * NHI Number * Date of Birth * Maternal Death Indicator | RM-M01-08 |
| BR-M21-03 | * The *NHI Number* must be registered on the NHI database before submission. | * NHI Number | RM-M21-05 |
| BR-M21-04 | * The *Date of Birth* in this segment must match the *Date of Birth* held in the NHI database for the *NHI Number.* | * Date of Birth * NHI Number | RM-M21-06 |
| BR-M21-05 | * If the *Woman Details* segment is supplied, the *Woman Identity* segment must be present | * Woman Identity | RM-M01-08 |
| BR-M21-06 | * The *Sex* held in the NHI database for the *NHI Number* must be ‘F’. | * Sex * NHI Number | RM-M21-10 |

### Woman Identity segment error messages

The following business rule responses apply to the Validation process:

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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-M21-05 | Error | Error – Invalid Data | * The *NHI Number* supplied in the Woman Identity segment is not valid in the NHI Database. |
| RM-M21-06 | Error | Error – Invalid Data | * The *Date of Birth* in the Woman Identity segment does not match *the Date of Birth* in the NHI Database for the *NHI Number*. |
| RM-M21-10 | Error | Error – Invalid Data | * The *NHI Number* supplied in the Woman Identity segment is not registered as belonging to a woman. |

## Allocation segment

### Allocation data elements

The data elements of the Allocation Segment are listed below.

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Allocation Elements*** | | | | | |
| **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 | - |
| 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 | O | - | - |

\* 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.

### Allocation segment code sets

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

|  |  |  |
| --- | --- | --- |
| ***Allocation Code Set*** | | |
| **Coded Data Element** | **Range** | **Description** |
| 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 |

### Allocation segment business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M31-02 | * The data elements, when present, must comply with the data formats identified in section 7.5.1 above. | * Ethnicity 1, 2, or 3 * Height in cms * Weight in Kgs * Smoking Status at Allocation * Gravida * Parity * LMP * EDD * Verified | RM-01-08 |
| BR-M31-03 | * The data elements, when present, must comply with the data code ranges identified in section 7.5.2 above. | * Ethnicity 1, 2 or 3 * Smoking Quantity at Allocation | RM-M31-16  RM-M01-08 |
| BR-M31-04 | ~~~~The *Allocation* and *Antenatal* segments must be supplied together. One cannot be supplied without the other | ~~~~Allocation | RM-M31-01 |
| BR-M31-05 | * If not NULL or verified, *Height in cms* must be in the range 100 cm – 215 cm | * Height in cms | RM-M31-19 |
| BR-M31-06 | * If not NULL or verified, *Weight in kgs*   must be in the range 40 kg – 180 kg | * Weight in Kgs | RM-M31-20 |
| BR-M31-07 | * If not NULL, *Gravida* must be between 1 and 99 | * Gravida | RM-M01-08 |
| BR-M31-08 | * If not NULL, *Parity* must be between 0 and 99 | * Parity | RM-M01-08 |
| BR-M31-09 | * If not NULL, *Parity* must be less than or equal to *Gravida* | * Parity * Gravida | RM-M31-23 |
| BR-M31-10 | * If not NULL, *LMP* must be less than or equal to *Date of First Antenatal Service* | * LMP * Date of First Antenatal Service | RM-M31-24 |
| BR-M31-11 | * *EDD* must be greater than or equal to *Date of First Antenatal Service* | * EDD * Date of First Antenatal Service | RM-M31-25 |
| BR-M31-12 | * *EDD* must be less than *Date of First Antenatal Service* + 45 weeks | * EDD * Date of First Antenatal Service | RM-M31-26 |
| BR-M31-14 | * No more than three Ethnicities should be supplied. | * Ethnicity | RM-M01-08 |

### Allocation segment error messages

The following business rule responses apply to the Validation process:

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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-M31-01 | Error | Error – Missing Mandatory Data | * The *Allocation* and *Antenatal* segments must   be supplied together. |
| RM-M31-16 | Error | Error – Incorrect Code Range | * The *Ethnicity* in the Allocation segment is not within the correct code range. |
| RM-M31-19 | Error | Error – Value Not Within Range | * The *Height in cms* in the Allocation segment is not within the range of probable values. Please review and confirm as correct. |
| RM-M31-20 | Error | Error – Value Not Within Range | * The *Weight in Kgs* in the Allocation segment is not within the range of probable values. Please review and confirm as correct. |
| RM-M31-21 | Error | Error – Invalid data | * The *Gravida* in the Allocation segment is not within the range of valid values. |
| RM-M31-22 | Error | Error – Invalid data | * The *Parity* in the Allocation segment is not within the range of valid values. |
| RM-M31-23 | Error | Error – Invalid data | * The *Parity* in the Allocation segment is not less than or equal to the *Gravida*. |
| RM-M31-24 | Error | Error – Invalid data | * The *LMP* in the Allocation segment is not less than or equal to the *Date of First Antenatal Service*. |
| RM-M31-25 | Error | Error – Invalid data | * The *EDD* in the Allocation segment is not greater than or equal to the *Date of First Antenatal Service*. |
| RM-M31-26 | Error | Error – Invalid data | * The *EDD* in the Allocation segment is not less than the *Date of First Antenatal Service* + 45 weeks. |

## Antenatal segment

### Antenatal data elements

The data elements of the Antenatal Segment are listed below.

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Antenatal Elements*** | | | | | |
| **Data Element** | **Type** | **Format** | **M/O/C** | **Coded** | **Verified attribute\*** |
| Type of Service | Code | N | M | Y | - |
| Date of First Antenatal Service | Date | YYYY-MM-DD | M | - | - |
| DHB Practitioner | ID | X(10) | O | - | - |
| Antenatal Visits 1st Trimester | Integer | NN | O | - | Y |
| Antenatal Visits 2nd Trimester | Integer | NN | O | - | Y |
| Antenatal Visits 3rd Trimester | Integer | NN | 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.

### Antenatal segment code sets

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

|  |  |  |
| --- | --- | --- |
| ***Antenatal Code Set*** | | |
| **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 |

### Antenatal segment business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M41-01 | * The segment must contain all mandatory data as identified in section 7.6.1 above. | * Type of Service * Date of First Antenatal Service | RM-M01-08 |
| BR-M41-02 | * The data elements, if present, must comply with the data formats identified in section 7.6.1 above. | * Type of Service * Date of First Antenatal Service * Antenatal Visits 1st trimester * Antenatal Visits 2nd trimester * Antenatal Visits 3rd trimester * Verified | RM-M01-08 |
| BR-M41-03 | * The data elements must comply with the data code ranges identified in section 7.6.2 above. | * Type of Service | RM-M01-08 |
| BR-M31-04 | * The *Allocation* and *Antenatal* segments must be supplied together. One cannot be supplied without the other | * Allocation | RM-M31-01 |
| BR-M41-04 | * The *Date of First Antenatal Service* must be less than or equal to *Extract Date.* | * Date of First Antenatal Service * Extract Date | RM-M41-14 |
| BR-M41-06 | * The *DHB Practitioner* must be registered and the registration details must be in the HPI database. * For a midwife the registration number is their full Midwifery Council of New Zealand Registration Number, including the hyphen (e.g. 15-12345) * For a Medical Professional the registration number is their New Zealand Medical Council Number | * DHB Practitioner | RM-M41-16 |
| BR-M41-07 | * If not verified, *Antenatal Visits 1st trimester* must be between 0 and 10 | * Antenatal Visits 1st trimester | RM-M41-17 |
| BR-M41-08 | * If not verified, *Antenatal Visits 2nd trimester* must be between 0 and 15 | * Antenatal Visits 2nd trimester | RM-M41-18 |
| BR-M41-09 | * If not verified, *Antenatal Visits 3rd trimester* must be between 0 and 30 | * Antenatal Visits 3rd trimester | RM-M41-19 |

### Antenatal segment error messages

The following business rule responses apply to the Validation process:

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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-M41-14 | Error | Error – Invalid Data | * The *Date of First Antenatal Service* in the Antenatal segment is not less than or equal to the date the *Extract Date.* |
| RM-M41-16 | Error | Error – Invalid Data | * The *DHB Practitioner* supplied in the Antenatal segment is not valid in the HPI Database. |
| RM-M41-17 | Error | Error – Invalid Data | * The *Antenatal Visits 1st Trimester* in the Antenatal segment is not in the range 0 to 10. |
| RM-M41-18 | Error | Error – Invalid Data | * The *Antenatal Visits 2nd Trimester* in the Antenatal segment is not in the range 0 to 15. |
| RM-M41-19 | Error | Error – Invalid Data | * The *Antenatal Visits 3rd Trimester* in the Antenatal segment is not in the range 0 to 30. |
| RM-M31-01 | Error | Error – Missing Mandatory Data | * The *Allocation* and *Antenatal* segments must be supplied together.. |

## Labour and Birth segment

### 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.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Labour and Birth Elements*** | | | | |
| **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 | - |

### Labour and Birth segment code sets

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

|  |  |  |
| --- | --- | --- |
| ***Labour and Birth Code Set*** | | |
| **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 |

### Labour and Birth segment business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M51-01 | * The segment must contain all mandatory data as identified in section 7.7.1 above. | * Type of Service * Delivery Date * Home Birth Indicator | RM-M01-08 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M51-02 | * The data elements, when present, must comply with the data formats identified in section 7.7.1 above. | * Type of Service * Delivery Date * Home Birth Indicator * VBAC Indicator | RM-M01-08 |
| BR-M51-03 | * The data elements must comply with the data code ranges identified in section 7.7.2 above. | * Type of Service | RM-M01-08 |
| BR-M51-04 | * If *Date of First Antenatal Service* is supplied for the pregnancy, the *Delivery Date* must be greater than or equal to *Date of First Antenatal Service.* | * Delivery Date * Date of First Antenatal Service | RM-M51-14 |
| BR-M51-11 | * At least one *Labour and Birth Baby Details* segment must be supplied when this segment is supplied. | * Labour and Birth Baby Details | RM-M51-15 |

### Labour and Birth segment error messages

The following business rule responses apply to the Validation process:

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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-M51-14 | Error | Error – Invalid Data | * The *Delivery Date* in the Labour and Birth segment is not greater than or equal to *Date of First Antenatal Service.* |
| RM-M51-15 | Error | Error – Missing Conditional Data | * *Labour and Birth Baby Details* segment has not been supplied. |

## Postnatal segment

### Postnatal data elements

The data elements of the Postnatal Segment are listed below.

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Postnatal Elements*** |  |  |  |  |  |
| **Data Element** | **Type** | **Format** | **M/O/C** | **Coded** | **Verified attribute\*** |
| 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 | O | Y | Y |
| Postnatal Home Visits | Integer | NN | O | Y | Y |
| DHB Practitioner | ID | X(10) | O | - | - |
| 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.

### Postnatal segment code sets

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

|  |  |  |
| --- | --- | --- |
| ***Postnatal Code Set*** | | |
| **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 |
| 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 |

### Postnatal segment business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M71-01 | * The segment must contain all mandatory data as identified in section 7.8.1 above. | * Type of Service * Date of Last Postnatal Service | RM-M01-08 |
| BR-M71-02 | * The data elements must comply with the data formats identified in section   7.8.1 above. | * Type of Service * Date of Last Postnatal Service * Smoking Status at 2 Weeks * Postnatal Inpatient Visits * Postnatal Home Visits * Verified | RM-M01-08 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M71-03 | * The data elements must comply with the data code ranges identified in section 7.8.2 above. | * Type of Service * Smoking Quantity at 2 Weeks * GP Referral * Wellchild Referral | RM-M01-08 |
| BR-M71-04 | * The *Date of Last Postnatal Service* must be greater than or equal to *Baby Date of Birth.* | * Date of Last Postnatal Service * Baby Date of Birth*1* | RM-M71-19 |
| BR-M71-06 | * If not verified*, Postnatal Inpatient Visits* must be in the range 0 – 14 | * Postnatal Inpatient Visits | RM-M71-21 |
| BR-M71-07 | * If not verified, *Postnatal Home Visits*   must be in the range 0 – 30 | * Postnatal Home Visits | RM-M71-22 |
| BR-M71-08 | * The segment must contain *DHB Practitioner* if *Type of Service* = 1 or 2. | * DHB Practitioner * Type of Service | RM-M71-23 |
| BR-M71-09 | * The *DHB Practitioner* must be registered and the registration details must be in the HPI database. * For a midwife the registration number is their full Midwifery Council of New Zealand Registration Number, including the hyphen (e.g. 15-12345). * For a Medical Professional the registration number is their New Zealand Medical Council Number. | * DHB Practitioner | RM-M71-24 |

### Postnatal segment error messages

The following business rule responses apply to the Validation process:

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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.

1 Date of Birth for Baby 1 if multiple birth

|  |  |  |  |
| --- | --- | --- | --- |
| **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-M71-19 | Error | Error – Invalid Data | * The *Date of Last Postnatal Service* in the Postnatal segment is not greater than or equal to the Date of Birth*.* |
| RM-M71-21 | Error | Error – Value Not Within Range | * The *Postnatal Inpatient Visits* in the Postnatal segment is not within the range of probable values 0-14. Please review and confirm as correct. |
| RM-M71-22 | Error | Error – Value Not Within Range | * The *Postnatal Home Visits* in the Postnatal segment is not within the range of probable values 0-30. Please review and confirm as correct. |
| RM-M71-23 | Error | Error – Missing Conditional Data | * The *DHB Practitioner* field has not been supplied in the Postnatal segment. It must be supplied when *Type of Service* = 1 or 2 |
| RM-M71-24 | Error | Error – Invalid Data | * The *DHB Practitioner* supplied in the Postnatal segment is not valid in the HPI Database. |

## Baby Details segment

### Baby Details segment data elements

The attribute of the Baby Details segment is listed below.

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Baby Details Attributes*** | | | | |
| **Attribute** | **Type** | **Format** | **M/O/C** | **Coded** |
| Baby Number | Positive Integer | 99 | M | - |

### Baby Details segment business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M86-01 | * The segment must contain the attribute as identified in section 7.9.1 above | * Baby Number | RM-M01-08 |
| BR-M86-02 | * The attribute must comply with the data formats identified in section   7.9.1 above. | * Baby Number | RM-M01-08 |
| BR-M86-03 | * The *Baby Number* must be unique in the Pregnancy Details segment. | * Baby Number | RM-M86-03 |
|  |  |  |  |

### Baby Details segment error messages

The following business rule responses apply to the Validation process:

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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-M86-01 | Error | Error – Missing Mandatory Data | * The *Baby Number* attribute has not been supplied in the Baby Details segment. |
| RM-M86-03 | Error | Error – Invalid Data | * The *Baby Number* supplied in the Baby Details segment is not unique in the Pregnancy Details segment |

## Baby Identity segment

### 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.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Baby Identity Elements*** | | | | |
| **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 |

### Baby Identity segment code set elements

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

***Baby Identity Code Set***

|  |  |  |
| --- | --- | --- |
| **Coded Data Element** | **Range** | **Description** |
| Sex | M | Male |
|  | F | Female |
|  | U | Unknown |
|  | I | Indeterminate |

### Baby Identity segment business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M91-01 | * The segment must contain all the data elements as identified in section   7.10.1 above if *Birth condition* is supplied for the pregnancy and *Birth condition* = ‘LB’.. | * NHI Number * Date of Birth * Sex | RM-M91-01  RM-M91-02  RM-M91-03 |
| BR-M91-02 | * The data elements must comply with the data formats identified in section   7.10.1 above. | * NHI Number * Date of Birth | RM-M01-08 |
| BR-M91-03 | * The data elements must comply with the data code ranges identified in section 7.10.2 above. | * Sex | RM-M01-08 |
| BR-M91-04 | * The *NHI Number* must be registered on the NHI database before submission. | * NHI Number | RM-M91-06 |
| BR-M91-05 | * The *Date of Birth* in this segment must be ≤ the *Extract Date.* | * Date of Birth * Extract Date | RM-M91-07 |
| BR-M91-06 | * The *Baby Identity* segment must be present if   + the *Birth Condition* is supplied for the pregnancy and *Birth Condition* = ‘LB’   or   * + - the *Postnatal Baby Details*   segment is supplied. | * Baby Identity | RM-M91-09 |

### Baby Identity segment error messages

The following business rule responses apply to the Validation process:

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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-M91-01 | Error | Error – Missing Conditional Data | * The *NHI number* field has not been supplied in the Baby Identity segment. It must be supplied when *Birth Condition* = ‘LB’ |
| RM-M91-02 | Error | Error – Missing Conditional Data | * The *Date of Birth* field has not been supplied in the Baby Identity segment. It must be supplied when *Birth Condition* = ‘LB’. |
| RM-M91-03 | Error | Error – Missing Conditional Data | * The *Sex* field has not been supplied in the Baby Identity segment. It must be supplied when *Birth Condition* = ‘LB’. |
| RM-M91-06 | Error | Error – Invalid Data | * The *NHI Number* supplied in the Baby Identity segment is not valid in the NHI Database. |
| RM-M91-07 | Error | Error – Invalid Data | * The *Date of Birth* in the Baby Identity segment is not less than or equal to the *Extract Date*. |
| RM-M91-09 | Error | Error – Missing Mandatory Data | * The *Baby Identity* segment has not been supplied |

## Labour and Birth Baby Details segment

### 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.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Labour and Birth Baby Details Elements*** | | | | | |
| **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 | XX | M | Y | - |
| Apgar Score at 5 Mins | Non- negative Integer | NN | O | - | - |
| Birth Weight | Positive Integer | NNNN | O | - | Y |
| Gestational Age | Positive Integer | NN | 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.

### 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.

|  |  |  |
| --- | --- | --- |
| ***Labour and Birth Baby Details Code Set*** | | |
| **Coded Data Element** | **Range** | **Description** |
| 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 |

### Labour and Birth Baby Details segment business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M61-01 | * The segment must contain all mandatory data as identified in section 7.11.1 above. | * Birth Condition | RM-M01-08 |
| BR-M61-02 | * The data elements, when present, must comply with the data formats identified in section 7.11.1 above. | * Ethnicity * Birth Condition * Apgar Score at 5 Mins * Birth Weight * Gestational Age * Verified | RM-01-08 |
| BR-M61-03 | * The data elements must comply with the data code ranges identified in section 7.11.2 above. | * Ethnicity | RM-M61-08 |
| BR-M61-08 | * *Apgar Score at 5 Mins* must be between 0 and 10 | * Apgar Score at 5 Mins | RM-M61-14 |
| BR-M61-09 | * If not verified*, Birth Weight* must be between 300 and 7000 (gm) | * Birth Weight | RM-M61-15 |
| BR-M61-10 | * If not verified*, Gestational Age* must be between 20 and 44 (weeks) | * Gestational Age | RM-M61-16 |
| BR-M61-11 | * No more than three Ethnicities should be supplied. | * Ethnicity | RM-M01-08 |

* + 1. **Labour and Birth Baby Details segment error messages** The following business rule responses apply to the Validation process: **Important Notes:**

Response messages are intended to provide clarity around conditions where business 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-M61-08 | Error | Error – Incorrect Code Range | * The *Ethnicity* in the Labour and Birth Baby Details segment is not within the correct code range. |
| RM-M61-14 | Error | Error – Invalid Data | * The *Apgar Score at 5 Mins* in the Labour and Birth Baby Details segment is not within the range 0-10*.* |
| RM-M61-15 | Error | Error – Value | * The *Birth Weight* in the Labour and Birth Baby |

|  |  |  |  |
| --- | --- | --- | --- |
| **Response Message Reference** | **Error or Warning** | **Message Title** | **Response Message** |
|  |  | Not Within Range | Details segment is not within the range of probable values 300-7000 (gm). Please review and confirm as correct. |
| RM-M61-16 | Error | Error – Value Not Within Range | * 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. |

## Postnatal Baby Details segment

### 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.

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

### Postnatal Baby Details segment code sets

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

|  |  |  |
| --- | --- | --- |
| ***Postnatal Baby Details Code Set*** | | |
| **Coded Data Element** | **Range** | **Description** |
| 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 |

### Postnatal Baby Details segment business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M81-01 | * The data elements, when present must comply with the data formats identified in section 7.12.1 above. | * Date of Neonatal Death | RM-M01-08 |
| BR-M81-02 | * The data elements must comply with the data code ranges identified in section 7.12.2 above. | * Breast Feeding Status at 2 Weeks * Breast Feeding Status at Discharge | RM-M01-08 |

### Postnatal Baby Details segment error messages

The following business rule responses apply to the Validation process:

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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 |

## Reverse file root segment

### Reverse file root segment business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M311-01 | * The root segment must be present in the reverse file. | * Root segment | RM-M01-08 |

### Reverse file root segment error messages

The following business rule responses apply to the Validation process:

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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-M08-01 | Error | Error – Missing Mandatory Data | * The root segment has not been supplied in the reverse file |

## Reversal segment

### Reversal data elements

The data elements of the Reversal Segment are listed below.

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Reversal Elements*** | | | | |
| **Data Element** | **Type** | **Format** | **M/O/C** | **Coded** |
| Document Reference To Reverse | String | X(37) | M | - |

### Reversal segment business rules

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M301-01 | * The segment must contain all mandatory data as identified in section 7.14.1 above. | * Document Reference To Reverse | RM-M01-08 |
| BR-M301-02 | * The data element must comply with the data formats identified in section 7.14.1 above. | * Document Reference To Reverse | RM-M01-08 |
| BR-M301-03 | * Ensuring the DHB who submitted the original record is the only DHB that can reverse the record within the same environment. | * DHB | RM-301-03 |

### Reversal segment error messages

The following business rule responses apply to the Validation process:

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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-M301-03 | Error | Error – Invalid DHB | * The DHB submitting this data differs from the originating DHB or submitting or original environment differ. |

# MAT Extract File Record Types

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

* + .Create Request for adding new pregnancy details records
    - A Create record should be used to send all the data for the pregnancy that the DHB has. The DHB 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](#_bookmark71) [identification fields](#_bookmark71).
    - Create should not be used to establish a pregnancy record with a view to later updating it with more data.
  + Replace Request for changing an existing pregnancy details 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.
  + Delete Request for deleting an existing pregnancy details 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 |

## Extract file record request processing rules

The following business 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.

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| BR-M101-01 | * The *Pregnancy Identifier* on a Create Request must not exist in the ODS database. | * Pregnancy Identifier | RM-M101-01 |
| 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. | * DHB of Service * Woman NHI * Date of First Antenatal Service | RM-M101-04 |
| 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. | * DHB of Service * Woman NHI * Delivery Date | RM-M101-05 |
| 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. | * DHB of Service * Woman NHI * Date of Last Postnatal Service | RM-M101-06 |
| BR-M101-06 | * The *Pregnancy Identifier* on a Replace Request must exist in the ODS database. | * Pregnancy Identifier | RM-M101-02 |
| BR-M101-07 | * The *Pregnancy Identifier* on a Delete Request must exist in the ODS database. | * Pregnancy Identifier | RM-M101-02 |
| BR-M101-08 | * The pregnancy on a Delete or Replace Request must not be flagged as ‘deleted’ in the ODS database. | * Pregnancy Identifier | RM-M101-03 |
| 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. | * Pregnancy Identifier | RM-M101-07 |
| 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 | * Pregnancy Identifier | RM-M101-08 |
| 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 | * DHB of Service * Woman NHI * Date of First Antenatal Service | RM-M101-09 |
| 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 | * DHB of Service * Woman NHI * Delivery Date | RM-M101-10 |
|  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Rule Reference** | **Business Rule Description** | **Affected Data** | **Response Message Reference** |
| 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 | * DHB of Service * Woman NHI * Date of Last Postnatal Service | RM-M101-11 |
| BR-M101-14 | * The Baby NHI should not be duplicated within the same input file | * Baby NHI | RM-M101-12 |
| BR-M101-15 | * Pregnancy records must be dated within the file version date boundaries. e.g. Retrospective files should only contain pregnancies prior to 1 August 2011.   (Request to change 1 August 2011 to 1 August 2012 raised by Lew Skinner in September 2013.)   1. Determine what is the earliest date from these sources for a given record:    * Woman's - Antenatal - Antenatal date of first antenatal service    * Woman's - Labour and Birth - Delivery Date    * Woman's - Postnatal - Postnatal Date of last postnatal Service    * Baby details - Baby Identity - Baby date of Birth 2. If that date is less than 1 August 2012   Then accept record for processing.   1. If that date is equal to or greater than 1 August 2012   Then reject the record  **Note: Code written to accept data less than 1 August 2012** The date of 1 August 2012 rather than 1 July 2012 is a historical decision to allow a grace period of 1 month for transition of service specification. | * Date of First Antenatal Service * Date of Last Postnatal Service * Delivery Date * Baby date of Birth | RM-M101-13 |

## Extract file record request processing error messages

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

**Important Notes:**

Response messages are intended to provide clarity around conditions where business 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 | * The *Pregnancy Identifier* already exists in the ODS database. |
| RM-M101-02 | Error | Error – Invalid Data | * The *Pregnancy Identifier* does not exist in the ODS database. |
| RM-M101-03 | Error | Error – Invalid Data | * The pregnancy that is being deleted or replaced has been previously deleted*.* |
| RM-M101-04 | Error | Error – Invalid Data | * Duplicate – A pregnancy record with the same *DHB of Service, Woman NHI* and *Date of First Antenatal Service* already exists in the ODS database.. |
| RM-M101-05 | Error | Error – Invalid Data | * Duplicate – A pregnancy record with the same *DHB of Service, Woman NHI* and *Delivery Date* already exists in the ODS database.. |
| RM-M101-06 | Error | Error – Invalid Data | * Duplicate – A pregnancy record with the same *DHB of Service, Woman NHI* and *Date of Last Postnatal Service* already exists in the ODS database. |
| RM-M101-07 | Error | Error – Invalid Data | * The pregnancy that is being deleted or replaced has been previously created then reversed*.* |
| RM-M101-08 | Error | Error – Invalid Data | * The *Pregnancy Identifier* already exists in the ODS database as a deleted record and cannot be reused. |
| RM-M101-09 | Error | Error – Invalid Data | * Duplicate – A pregnancy record with the same *DHB of Service, Woman NHI* and *Date of First Antenatal Service* already exists in this input file. |
| RM-M101-10 | Error | Error – Invalid Data | * Duplicate – A pregnancy record with the same *DHB of Service, Woman NHI* and *Delivery Date* already exists in this input file. |
| RM-M101-11 | Error | Error – Invalid Data | * Duplicate – A pregnancy record with the same *DHB of Service, Woman NHI* and *Date of Last Postnatal Service* already exists in this input file. |
| RM-M101-12 | Error | Error – Invalid Data | * Duplicate – A pregnancy record with the same Baby NHI already exists in this input file. |
| RM-M101-13 | Error | Error – Invalid Data | * Pregnancy date(s) suggests record has been submitted in the wrong file version. |

# MAT Extract File Reversal

## 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).

## DHB Details

Refer to Section 7.2 DHB Details Segment

## 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 | * The *Document Reference To Reverse* must be the same as the Import File ID of an Import File in the ODS database. | * Document Reference To Reverse * Import File ID | RM-M201-01 |
| BR-M201-02 | * Only one reversal request is allowed per Import File ID | * Import File ID | RM-M201-02 |

## 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 | * There is no Import File in the ODS database with the same ID as the *Document Reference To Reverse* |
| RM-M201-02 | Error | Error – | * The Import File with the file ID supplied in |

|  |  |  |  |
| --- | --- | --- | --- |
| **Response Message Reference** | **Error or Warning** | **Message Title** | **Response Message** |
|  |  | Invalid Data | *Document Reference To Reverse* has already been reversed |

# Appendix A – Business Rules Diagram



Mandatory

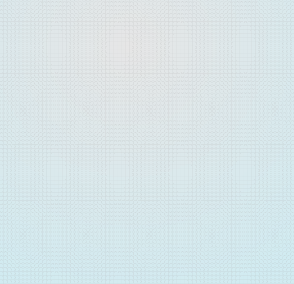
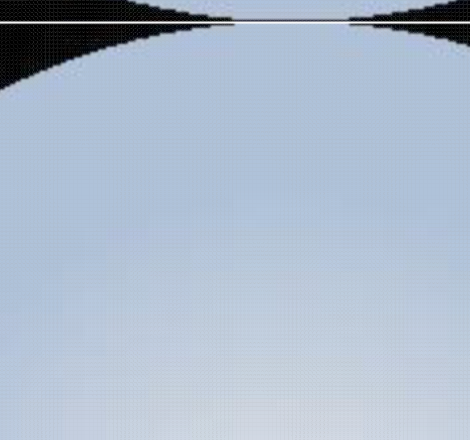
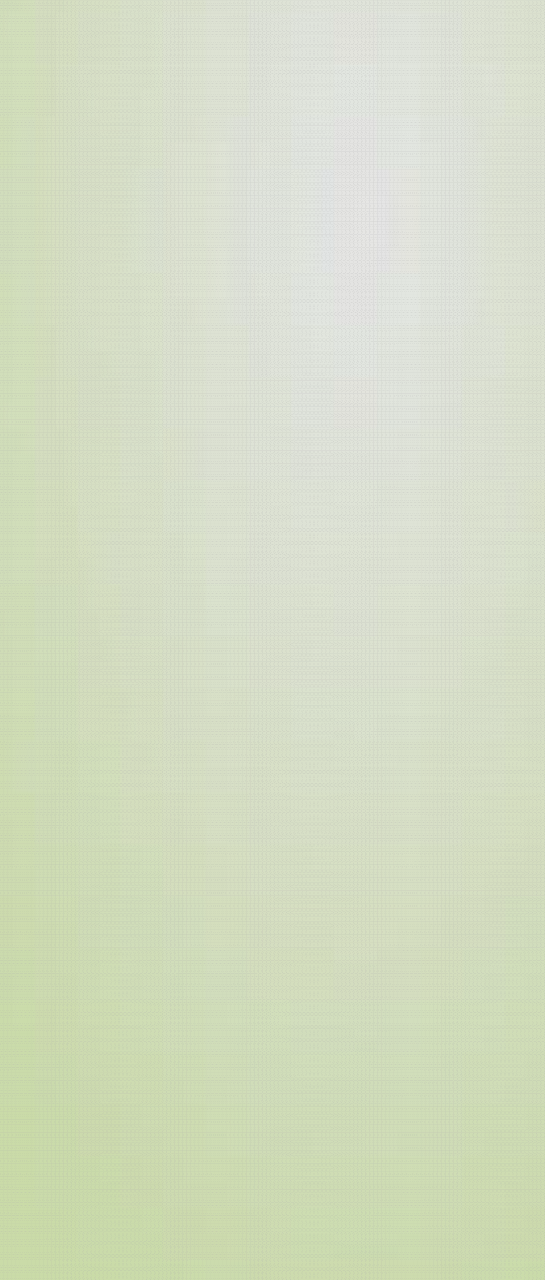


Non Mandatory With

Conditional Rule



Non Mandatory



**NOTE:**

**Should be viewed in conjunction with the DHB Primary maternity Data Collection detailed business requirements and File Specifications.**

BR-M21-03

The *NHI Number* must be registered on the NHI database before submission Error RM-M21-05

BR-M21-06

The *Sex* held in the NHI database for the *NHI Number* must be ‘F’.

Error RM-21-10

BR-M21-04

The *Date of Birth* in this segment must match the *Date of Birth* held in the NHI database for the *NHI Number*

Error RM-M21-06

BR-M21-05

If the *Woman Details* segment is supplied, the

*Woman Identity* segment must be present Error RM-M01-08

BR-M21-01

The segment must contain all mandatory data as identified in section 7.4.1

Error RM-M01-08 BR-M21-02

The data elements must comply with the data formats identified in section 7.4.1

Error RM-M01-08

BR-M31-14

No more than three Ethnicities should be supplied.

Error RM-M01-08

BR-M31-05

Acceptable rangeIf not NULL or verified, *Height in cms* must be in the range 100 cm – 215 cm

Error RM-M31-19

BR-M31-02

The data elements, when present, must comply with the data formats identified in section 7.5.1 Error RM-M01-08

BR-M31-03

The data elements, when present, must comply with the data code ranges identified in section 7.5.2

Error RM-M31-16 and RM-M01-08

BR-M31-06

If not NULL or verified, *Weight in kgs* must be in the range 40 kg

– 180 kg Error RM-M31-20

*BR-M31-11*

*EDD* must be greater than or equal to *Date of First Antenatal Service* Error RM-M31-25

BR-M31-12

*EDD* must be less than *Date of First Antenatal Service* + 45 weeks

Error RM-M31-26

BR-M41-01

The segment must contain all mandatory data as identified in section 7.6.1

Error RM-M01-08 BR-M41-02

The data elements, if present, must comply with the data formats identified in section 7.6.1

Error RM-M01-08

BR-M41-07

If not verified, *Antenatal Visits 1st trimester* must be between 0 and 10 Error RM-M41-17

BR-M41-08

If not verified, *Antenatal Visits 2nd trimester* must be between 0 and 15 Error RM-M41-18

BR-M41-09

If not verified, *Antenatal Visits 3rd trimester* must be between 0 and 30 Error RM-M41-19

BR-M41-03

The data elements must comply with the data code ranges identified in section 7.6.2

Error RM-M01-08

BR-M41-04

The *Date of First Antenatal Service* must be less than or equal to *Extract Date.*

Error RM-M41-14

DHBs should note the following when su

* Primary Maternity data extracted from a as an XML file. The extracted data must Schema provided by the Ministry. The XM

<provide link>

* Data for multiple pregnancies can be su
* A complete record of services for an en
* Each pregnancy must be given a uniqu unique identifier must be a globally uniqu
* DHBs should submit data relating only t provided care.
* Valid pregnancy data is accepted into t data is rejected. Refer to Chapters 6 and document for the validation rules.

bmitting d

DHB sys be validat L Schem

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ancy must be pr

by the DHB. Th r (GUID)

dules for which t

DS database. In AT File Specific

t file:

ided ML

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valid ation

DHB Primary Maternity Data Collection

File Version

DHB details

DHB of Service

Extract Date Time

AAAA\_MATYYYYMMDD\_X

XXX\_nnn

\_ZZZZZZ.xml

Pregnancy Details

ID

Transaction Flag C,R,D

**Minimum Womans Details**

Woman Details

Womans Identity

NHI Number

Date of Birth

Maternal Death Indicator

Allocation

Ethnicity x3

Height in cms

Weight in kgs

Smoking Quantity at Allocation

Smoking Quantity at Allocation

Interdependencies between allocation and antenatal

BR-M31-04

The *Allocation* and Antenatal segment must be supplied together.

Error RM-M31-01

Gravida

Parity

LMP

EDD

Antenatal

Antenatal Type of service

Antenatal Date of Service

DHB Practitioner - Antenatal

Antenatal Visits 1st Trimester

Antenatal Visits 2nd Trimester

Antenatal Visits 3rd Trimester

Womans Identity Mandatory for

- Antenatal

- Labour & Birth

-Postnatal

BR-M31-07

If not NULL, *Gravida* must be between 1 and 99

Error RM-M31-21

BR-M31-08

If not NULL, *Parity* must be between 0 and 99

Error RM-M31-22 BR-M31-09

If not NULL, *Parity* must be less than or equal to *Gravida*

Error RM-M31-23

BR-M31-10

If not NULL, *LMP* must be less than or equal to *Date of First Antenatal Service* Error RM-M31-24

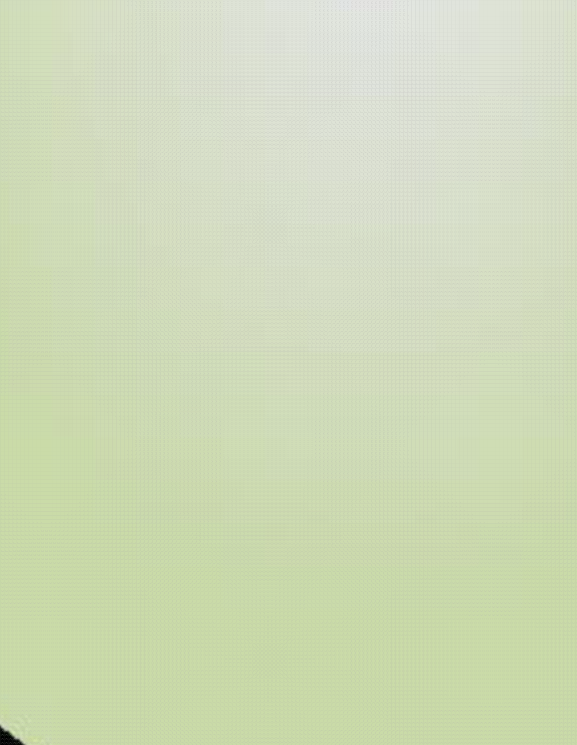
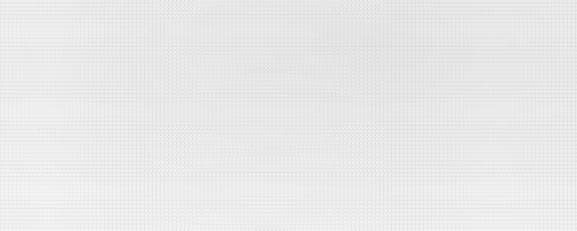
BR-M41-06

The registration number of the DHB employed practitioner who has provided the first Antenatal consultation with a woman

.For a midwife the registration number is their full Midwifery Council of New Zealand Registration Number, including the hyphen (e.g. 15-12345) For a medical professional the registration number is their New Zealand Medical Council Number

Error RM-M41-16

**Antenatal Segment**



Type of Service

BR-M51-03

The data elements must comply with the data code ranges identified in section 7.7.2

Error RM-M01-08

BR-M51-01

The segment must contain all mandatory data as identified in section 7.7.1 Error RM-M01-08

BR-M51-02

The data elements, when present, must comply with the data formats identified in section 7.7.1

Error RM-M01-08 BR=M51-11

At least one *Labour and Birth Baby Details* segment must be supplied when this segment is supplied.

Error RM-M51-15

BR-M71-01

The segment must contain all mandatory data as identified in section 7.8.1

Error RM-M01-08 BR-M71-02

The data elements must comply with the data formats identified in section 7.8.1

Error RM-M01-08 BR-M71-03

The data elements must comply with the data code ranges identified in section 7.8.2

Error RM-M01-08

BR-M51-04

If *Date of First Antenatal Service* is supplied for the pregnancy, the *Delivery Date* must be greater than or equal to *Date of First Antenatal Service.*

Error RM-M51-14

BR-M91-04

The *NHI Number* must be registered on the NHI database before submission

Error RM-91-06

BR-M86-01

The segment must contain the attribute as identified in section 7.9.1

Error RM-M01-08 BR-M86-02

The attribute must comply with the data formats identified in section 7.9.1 Error RM-M01-08

BR-M86-03

The *Baby Number* must be unique in the Pregnancy Details segment.

Error RM-M01-08

BR-M91-01

The segment must contain all the data elements as identified in section 7.10.1 above if *Birth condition* = ‘LB’.

Error RM-M91-01, 02, 03 BR-M91-02

The data elements must comply with the data formats identified in section 7.10.1

Error RM-M01-08 BR-M91-06

The *Baby Identity* segment must be present if

the *Birth Condition* is supplied for the pregnancy and *Birth Condition* = ‘LB’

Or the *Postnatal Baby Details*

segment is supplied. Error RM-M91-09

BR-M61-02

The data elements, when present, must comply with the data formats identified in section 7.11.1

Error RM-M61-08

BR-M81-02

The data elements must comply with the data code ranges identified in section 7.12.2

Error RM-M01-08

Labour & Birth

Delivery Date

Home Birth Indicator

VBAC

Postnatal Segment

BR-M71-04

If the Baby Identi Baby Date of B

provided then Th *of Last Postnatal S* must be greater t equal to *Baby Da Birth.* Else accep

provided Error RM-M71

ty with irth

e *Date ervice* han or *te of*

t date

-19

Postnatal Type of Service

BR-M91-05

The *Date of Birth* i this segment must

≤ the *Extract Date*

Error RM-M91-07

n be

*.*

Baby Details

Baby I

dentity

NHI Number

Postnatal Date of Service

Baby Date of Birth

BR-M91-03

The data elements comply with the d code ranges identifi section 7.10.2

Error RM-M01-0

must ata ed in

8

Smoking Status at 2 weeks

BR-M71-

If not verified*, P Inpatient Visits* m

the range 0 Error RM-M7

06

*ostnatal*

ust be in

– 14

1-21

Smoking Quantity at 2 weeks

Baby Sex

B

The data eleme data code ranges

Erro B

No more than th

R

R-M61-03

nts must comply with the identified in section 7.11.2 r RM-M61-08

R-M61-11

ree Ethnicities should be supplied.

M-M01-08

Postnatal Inpatient Visits

Ethnicity x3

BR-M71-

If not verified,

*Home Visits* m the range 0

Error RM-M

07

*Postnatal*

ust be in

– 30

71-22

Labour and Baby Birth Details

Postnatal Home Visits

BR-M61-01

The segment m contain all mand data as identifie section 7.11.

Error RM-M01-

ust atory d in 1

08

Birth Condition

DHB Practitioner - Postnatal

BR-M71-

Registration N the DHB pra who has prov last postnatal a midwife

registration n their full Mid

Council of Zealand Regi Number, inclu hyphen (e.g. 1

For a Me Profession registration n their New Z Medical C

Numbe Error RM-M

09

umber of ctitioner ided the visit. For the umber is wifery New stration ding the 5-12345)

dical al the

umber is ealand ouncil

r

71-24

Apgar Score at 5 mins

BR-M61-08

*Apgar Score at 5*

must be between 10

Error RM-M61-

*Mins*

0 and

14

Referral to GP

Baby Birth Weight

BR-M61-09

If not verified*,*

*Weight* must between 300 and

(gm) Error RM-M61

*Birth* be 7000

-15

Referral to Well Child Provider

Gestational Age

BR-M61-10

If not verified *Gestational Age* be between 20 a

(weeks) Error RM M61-

*,*

must nd 44

16

Postnatal Baby Details

Breast Feeding Status at 2 weeks

Breast Feeding Status at Discharge

Date of Neonatal Death

BR-M81-01

The data elements, wh present must comply w the data formats identif

in section 7.12.1 Error RM-M01-08

en ith ied

Baby Identity

Mandatory if Birth Condition is LB and if Postnatal segment provided.

If Birth Condition SB, Baby Identity is not mandatory. However, high likelihood identity data will be provided.

**Labour and Birth Segment**

**Postnatal Baby Details**

**FULL RECORD**

**Postnatal Segment**

BR-M51-11At least one *Labour and Birth Baby Details* segment must be supplied when this segment is supplied.

* + - Labour and Birth Baby Details

RM-M51-15

BR-M91-01The segment must contain all the data elements as identified in section 7.10.1 above if *Birth condition* = ‘LB’.

* + - * NHI Number
* Date of Birth
* Sex

 RM-M91-01

 RM-M91-02

 RM-M91-03



**OPTIONAL FIELDS**



**Woman Labour & Birth**



VBAC



**Woman Antenatal**

EDD

LMP

Antenatal Visits 1st

Trimester

Antenatal Visits 2nd Trimester

Antenatal Visits 3rd Trimester

Ethnicity x3

DHB Practitioner - Antenatal

Height in cms

Weight in kgs

Smoking Status at Allocation

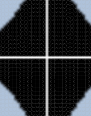
Smoking Quantity at Allocation

Gravida

Parity

Retro Changes

Mandatory or Conditional now optional



**Woman Postnatal**

**Labour & Baby Birth**

**Baby Postnatal Birth**

Breast Feeding

Status at 2 weeks

Breast Feeding Status at Discharge

Ethnicity x3

Gestational Age

Apgar Score at 5 mins

Baby Birth Weight

Postnatal Inpatient Visits

Postnatal Home Visits

DHB Practitioner - Postnatal

Referral to GP

Date of Neonatal Death

Referral to Well Child Provider

Smoking Status at 2 weeks

Smoking Quantity at 2 weeks

Retro Changes

Mandatory or Conditional now optional

Retro Changes

Conditional now optional

Retro Changes

Conditional now optional

**CONDITIONAL**



NHI Number



Baby Date of Birth

Baby Sex

DHB Primary Maternity Data Collection

NHI Number

Type of Service

Birth Condition

Date of Birth

Delivery Date

File Version

Maternal Death Indicator

Home Birth Indicator

DHB details

Antenatal Type of service

DHB of Service

Extract Date Time

Antenatal Date of Service

Pregnancy Details

ID

Transaction Flag C,R,D

**MANDATORY FIELDS**

Postnatal Type of Service

Postnatal Date of Service

BR-M101-15

regnancy records must be dated within the file version

date boundaries. e.g. Retrospective files should only contain pregnancies prior to 1 August 2011.

RM-101-13

# Appendix B - 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 / Päkehä | 11 | New Zealand European / Päkehä | 11111 |
| Other European | 12 | Other European NFD | 12000 |
| Mäori | 21 | Mäori | 21111 |
| Pacific peoples NFD | 30 | Pacific peoples NFD | 30000 |
| Sam oan | 31 | Sam oan | 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 |
| Southeas t Asian | 41 | Southeas t Asian NFD | 41000 |
| Chinese | 42 | Chinese NFD | 42100 |
| Indian | 43 | Indian NFD | 43100 |
| Other Asian | 44 | Other Asian NEC | 44499 |
| Middle Eas tern | 51 | Middle Eas tern 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 s cope \* not used | 98 | Response outside s cope | 98888 |
| Not stated | 99 | Not stated | 99999 |

# 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-](http://www.health.govt.nz/publication/ethnicity-data-protocols-health-and-disability-sector)  [sector](http://www.health.govt.nz/publication/ethnicity-data-protocols-health-and-disability-sector)

## Level 4 Ethnicity Codes

The table below shows the full set of Level 4 codes

|  |  |
| --- | --- |
| **Level 4 Ethnicity Codes** | |
| **Code** | **Description** |
| 10000 | European NFD |
| 11111 | New Zealand European / Päkehä |
| 12000 | Other European NFD |
| 12100 | British NFD |
| 12111 | Celtic |
| 12112 | Channel Islander |
| 12113 | Cornish |
| 12114 | English |
| 12115 | Gaelic |
| 12116 | Irish |
| 12117 | Manx |
| 12118 | Orkney Islander |
| 12119 | Scottish (Scots) |
| 12120 | Shetland Islander |
| 12121 | Welsh |
| 12199 | British NEC |
| 12211 | Dutch / Netherlands |
| 12311 | Greek (including Greek Cypriot) |
| 12411 | Polish |
| 12500 | South Slav (formerly Yugoslav groups) NFD |
| 12511 | Croat / Croatian |
| 12512 | Dalmatian |
| 12513 | Macedonian |
| 12514 | Serb / Serbian |
| 12515 | Slovene / Slovenian |
| 12599 | South Slav (formerly Yugoslav) NEC |
| 12611 | Italian |
| 12711 | German |
| 12811 | Australian |
| 12911 | Albanian |
| 12912 | Armenian |
| 12913 | Austrian |

|  |  |
| --- | --- |
| **Level 4 Ethnicity Codes** | |
| **Code** | **Description** |
| 12914 | Belgian |
| 12915 | Bulgarian |
| 12916 | Byelorussian |
| 12917 | Corsican |
| 12918 | Cypriot Unspecified |
| 12919 | Czech |
| 12920 | Danish |
| 12921 | Estonian |
| 12922 | Finnish |
| 12923 | Flemish |
| 12924 | French |
| 12925 | Greenlander |
| 12926 | Hungarian |
| 12927 | Icelander |
| 12928 | Latvian |
| 12929 | Lithuanian |
| 12930 | Maltese |
| 12931 | Norwegian |
| 12932 | Portuguese |
| 12933 | Romanian / Rumanian |
| 12934 | Romany / Gypsy |
| 12935 | Russian |
| 12936 | Sardinian |
| 12937 | Slavic / Slav |
| 12938 | Slovak |
| 12939 | Spanish |
| 12940 | Swedish |
| 12941 | Swiss |
| 12942 | Ukrainian |
| 12943 | American (US) |
| 12944 | Burgher |
| 12945 | Canadian |

|  |  |
| --- | --- |
| **Level 4 Ethnicity Codes** | |
| **Code** | **Description** |
| 12946 | Falkland Islander / Kelper |
| 12947 | New Caledonian |
| 12948 | South African |
| 12999 | European NEC |
| 21111 | Mäori |
| 30000 | Pacific peoples NFD |
| 31111 | Samoan |
| 32100 | Cook Island Maori NFD |
| 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 |

|  |  |
| --- | --- |
| **Level 4 Ethnicity Codes** | |
| **Code** | **Description** |
| 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 |
| 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 |

|  |  |
| --- | --- |
| **Level 4 Ethnicity Codes** | |
| **Code** | **Description** |
| 44412 | Bangladeshi |
| 44413 | Nepalese |
| 44414 | Pakistani |
| 44415 | Tibetan |
| 44499 | Other Asian NEC |
| 51100 | Middle Eastern NFD |
| 51111 | Algerian |
| 51112 | Arab |
| 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 |
| 52124 | Nicaraguan |
| 52125 | Panamanian |
| 52126 | Paraguayan |
| 52127 | Peruvian |
| 52128 | Puerto Rican |
| 52129 | Uruguayan |
| 52130 | Venezuelan |
| 52199 | Latin American / Hispanic NEC |
| 53100 | African NFD |

|  |  |
| --- | --- |
| **Level 4 Ethnicity Codes** | |
| **Code** | **Description** |
| 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 |

* 1. **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 |
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| Mäori | 21 | Mäori | 21111 |
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| Sam oan | 31 | Sam oan | 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 |
| Southeas t Asian | 41 | Southeas t Asian NFD | 41000 |
| Chinese | 42 | Chinese NFD | 42100 |
| Indian | 43 | Indian NFD | 43100 |
| Other Asian | 44 | Other Asian NEC | 44499 |
| Middle Eas tern | 51 | Middle Eas tern 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 s cope \* not used | 98 | Response outside s cope | 98888 |
| Not stated | 99 | Not stated | 99999 |

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