

Midwives Notification System

Validation process 2023

WA Health Manual



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User Support

- 1. For problems with internet access or internet browser, please contact your local IT support.
- 2. For password support for accessing the HSECS Intranet Application contact ICAM Systems Support

Email: <u>HSS-ICAMSystemsSupport.RoyalSt@health.wa.gov.au</u>

3. For advice and support in managing the validation ('edit') process for MNS contact the Data Quality Team (DQT) at the Department of Health

Email: RoyalSt.DataQuality@health.wa.gov.au

4. For advice and support on data governance, data definition, and data collection processes for MNS contact the Maternal and Child Health Team (MCH) at the Department of Health

Email: <u>birthdata@health.wa.gov.au</u>

Tel: (08) 6373 1825 or (08) 6373 1836

Section 2 1 Introduction

The correction and validation of data records in the Midwives Notification System (MNS) can be an arduous, complicated and time consuming task.

This Manual, prepared by the staff of MCH and DQT, is a document made available to midwives and maternity services. It describes and advises on the efficient and effective management of the MNS 'edits' process.

The Manual also provides background information and detail on the reasoning behind each validation rule enabling education of midwives on how to reduce the number of future records requiring 'edits' management.

1.1 The Midwives Notification System

The MNS is a compilation of information notified by registered midwives to the Chief Health Officer (CHO). The notification is required by the WA *Health (Miscellaneous Provisions) Act 1911* section 335 and is information specified in Form 2 regulated by the Health (Notifications by Midwives) Regulations 1994 as amended from time to time. The notification is required "to protect the lives of mothers and infants"¹.

MNS information is valuable for service monitoring, planning and allocation of future services, monitoring of patient safety and quality and research. MNS has been in operation in its current format since 1997. MNS contains over one million records of births reported by midwives to the Department of Health since 1980.

MNS is contained with an Oracle database managed by the Department of Health. The Oracle database is called the Health Statistical Events Common Store (HSECS). The MNS section of HSECS is designated as the HSECS-MNS in this document.

Creation of data records in the MNS occurs through direct data entry or upload of data files in a specified format. Editing of records and data can occur through direct data entry or updated data file upload. Where updated data files are uploaded, the records that are an update to a previously uploaded record must be marked clearly as updates to prevent duplicate record errors.

The value of MNS data is enhanced by accuracy and timeliness of the information collected. In 2016, almost 36,000 records were uploaded and 100 records were added through data entry to MNS. Each of these records was passed through a rigorous quality assurance, or validation process aimed at identifying inaccurate and incomplete data. This process has multiple steps and responsibility is with the midwife and the Department.

The Maternal and Child Health (MCH) team within the Information and System Performance Directorate (ISPD) at the Department of Health manages midwives' notifications and the MNS. The Data Quality Team (DQT) within ISPD manages the MNS validation process.

¹ Section 333, Health (Miscellaneous Provisions) Act 1911

https://www.health.wa.gov.au/Articles/J_M/Midwives-Notification-System

Each record uploaded to MNS that did not pass the validation process is called an 'edit' record and will be returned to the reporting midwife (maternity site) for correction or clarification. This version of the MNS Validation Manual is for staff employed by WA Health who are eligible for approved access to the MNS web based download portal. They are responsible for managing the MNS validation process of the records submitted by their own public maternity service.

A quick reference version of key regular processes is also provided.

2 Data Collection Process

Midwives are required by the *WA Health (Miscellaneous Provisions) Act 1911* to notify the CHO of every birth they attend. The completeness and accuracy of information provided in the notification is the responsibility of the midwife which cannot be delegated to staff who were neither in attendance at the birth nor registered midwives.

Midwives notify the CHO using:

- 1. Stork clinical application in use at 26 public maternity services including public homebirth providers.
- 2. PROD clinical application in use at six St John of God owned or run maternity services.
- 3. Meditech maternity module in use at three Ramsay Group owned maternity services.
- 4. E-form for use by Private Practice Midwives (PPM) to notify of homebirths they attend. The E-form or a paper form may also be used to notify of births that occur at sites that are not maternity services e.g. nursing posts, clinics and general hospitals.

2.1 Record Identification

Each notification to the Chief Health Officer contains identifying data for the mother and the infant. This identifying data is described below in Table 1.

These identifying data are required to manage records that require 'edit'.

| Identifier | Definition | Source | Use in Validation |
|---------------|---|---------------------|-----------------------|
| Record Type | The text "DEL" is applied to each | Clinical system or | |
| | mother's record | process for | |
| | The text "PRG" is applied to each | providing data file | |
| | record describing a mother's | | |
| | Pregnancy complications | | |
| | The text "MED" is applied to each | | |
| | record describing a mother's Medical | | |
| | Conditions | | |
| | The text "BIR" is applied to each | | |
| | infant's record. | | |
| | The text "LAB" is applied to each | | |
| | record describing a mother's Labour | | |
| | and Birth complications for each infant | | |
| | born. | | |
| Establishment | The health service where the birth | Midwife reporting | Identifying owner of |
| | occurred | case | 'edit' records |
| UMRN/URN | Unique Medical Record Number or Unit | Midwife reporting | Identifying 'edit' |
| | Record Number assigned by the health | case | records to midwives |
| | service to the woman who gave birth | | at maternity services |
| | and infant born alive. It is used to | | |
| | catalogue medical records and | | |
| | uniquely identify each patient. | | |
| Date of Birth | The full date of birth of the woman who | Midwife reporting | |
| | gave birth and the infant born. | case | |
| Name | The first, second and last name of the | Midwife reporting | |
| | woman who gave birth | case | |
| Address | The street address of the woman who | Midwife reporting | |
| | gave birth | case | |
| Telephone | The landline or mobile number of the | Midwife reporting | |
| | woman who gave birth | case | |

Table 1: Identifying data item descriptions

| Identifier | Definition | Source | Use in Validation |
|--------------------------------------|---|--|---|
| Email | The email address of the woman who gave birth | Midwife reporting case | |
| Midwife Name | The first and last name of the midwife reporting the birth information. | Midwife reporting case | |
| Midwife AHPRA Registration Number | The AHPRA midwifery registration number of the midwife reporting the birth information. | Midwife reporting case | |
| Batch ID | One unique numeric ID allocated by MNS to all birth records uploaded to MNS in one data file. | MNS | Identifying 'edit' records to MCH staff |
| Case ID | One numeric ID allocated by MNS to each birth record uploaded to MNS in one data file. This ID is unique for the Batch ID. | MNS | Identifying 'edit' records to MCH staff |
| Event ID | One unique numeric ID allocated by MNS to each record uploaded to MNS. It is unique for each record within MNS. | MNS | |
| Update Flag | A status flag that is either NULL or 'Y' for each record in a data file. A 'Y' indicates that the record flagged is an updated record for a record that has been previously uploaded to MNS | Clinical system or process for providing data file | Identifying updated records to MNS at time of file upload |
| Validation ID | A unique ID allocated by MNS to a validation rule | MNS | Identifying validation rule that the record failed to pass. This ID enables the process for validation to be determined |

3 Data validation process

3.1 Shared responsibilities

The current process, described below, presents multiple opportunities for MNS records to be checked and/or validated for completeness and accuracy.

3.1.1 Midwife at maternity service

- 1. Description and explanation of information required to be notified that is available at time of recording by midwife.
- 2. Visual checking for completeness and accuracy of paper forms.
- 3. Automated validation of information at time of recording by midwife.
- 4. Automated display of data items required, or concealment of data items not required, dependent on previous information entered e.g. where method of birth was not Caesarean section then reason for Caesarean section need not be recorded/displayed.
- 5. System requirement to validate and complete/lock a record before it can be extracted to "NOCA Extract."
- 6. Data file, "NOCA Extract" conforms to file specification required by MNS.
- 7. Notify MCH team if records determined to be valid will still raise 'edits' with instructions to "override" these validation warnings and accept the record as valid. This will prevent unnecessary duplication of validation at site. (Example: where a maternal weight was greater than 150kg and was determined to be valid.)

3.1.2 Maternal and Child Health team

- 8. Log receipt of data file "NOCA Extract".
- 9. Save "NOCA Extract" to secure location.
- 10. Run program to perform following actions on "NOCA Extract" received:
 - a. Check that file conforms with file specification
 - b. Check file only contains new or revised records
 - c. Ensure revised records have "Update flag" set to "Y", and
 - d. Exclude records that will not improve records that already exist in MNS.
- 11. Upload "NOCA Extract" to MNS.
- 12. Maintain an automated process of applying validation rules to each record uploaded.

3.1.3 Data Quality team

- 13. Generate 'Edit Report' that includes all MNS records (existing and just uploaded) that fail validation rules.
- 14. Over-ride any 'edits' that have been reported by maternity service as already validated. (Example: maternal weight greater than 150 kg.)
- 15. After 'edits' are overridden ensure new version of 'Edit Report' is created that excludes 'edits' that have been overridden.
- 16. 'Edit Report' is refreshed every 24 hours at 14:00.

3.1.4 Midwife at maternity service

- 17. Retrieve 'Edit Report' (directly from HSECS or emailed by Data Quality team).
- 18. Determine the records listed in the 'Edit Report' that require investigation.
- 19. Retrieve medical or other records required to investigate issue.
- 20. Correct data in local system (Stork, PROD, Meditech) as appropriate.
- 21. Add notes to 'Edit Report' to indicate actions taken:
 - a. Local system record amended, re-extracted and re-provided to MNS
 - b. Data reported in record is correct, override validation rule (only applicable to Warnings)
- 22. Re-extract all records that were amended in local system in "NOCA Extract" format.
- 23. The re-extraction process must include a value of "Y" for "Update flag" as per file specification.
- 24. Submit "NOCA Extract" to <u>birthdata@health.wa.gov.au</u> via secure file transfer or for WA Health staff save "NOCA Extract" to secure server location provided.
- 25. Return your copy of the 'Edit Report' with notes of actions taken via secure file transfer or to secure server location provided.

3.1.5 Data Quality team

- 26. Retrieve the 'Edit Report' with notes provided by midwife.
- 27. Ensure updated records indicated in the returned 'Edit Report' (Step 22 above) have been supplied by site and have been uploaded to MNS using the process outlined in steps 8 to 12 above.
- 28. Override validation rules in applicable MNS records as instructed by site (Step 21 above).

To prevent duplication of overriding validation rules, do not load "Update" records to replace records that have received this action.

If validation rules have been overridden in a record and it is then updated with a new version of the record, the overriding of validation rules will need to be actioned again.

29. Repeat process from Step 13 above until no records remain in the 'Edit Report' requiring validation actions.

3.2 Submission deadlines

A batch file called the Notification of Case Attended ("NOCA Extract") must be submitted each month by each maternity service.

E-forms or paper forms must be submitted when completed.

An 'Edits Report' (report of records that failed MNS validation rules) will be available to the midwife within one business day of the "NOCA Extract" or E-form being uploaded to MNS.

Deadlines for data submission and completion of validation of records are listed in Table 2.

| Table 2: Deadlines | for data | submission | and validation |
|---------------------------|----------|--------------|----------------|
| | ioi aata | 300111331011 | |

| Item | Frequency | Deadline |
|---|-------------|---|
| "NOCA Extract" containing new records for all births that occurred at one maternity service in one calendar | Monthly | For maternity services with no SCN: Within four weeks of the end of the calendar month for maternity services with no Special Care Nursery (SCN). |
| month. | | Example: 100 notifications by 28 June 2023 |
| Example: 100 infants born between 01 and 31 May 2023 | | For maternity services with SCN: Within four weeks of the date that at least 95% of infants born in the month have been discharged. |
| | | Example: ≥ 95 notifications by 28 August 2023 if at least 95 infants discharged by 31 July. |
| | | The remaining infants must be included in a later "NOCA Extract" once discharged. |
| "NOCA Extract" uploaded to HSECS- MNS by MCH team | As required | Within two business days of receipt. |
| 'Edit Report' refreshed | Daily | Report refreshed every day at 14:00. |
| 'Edit Report' received by midwife | Monthly | HSECS-MNS download portal |
| | | Retrieve 'Edit Report' between 1 and 4 weeks after "NOCA Extract" last submitted. |
| Midwife returns 'Edit Report' to Data Quality team with all issues actioned | Monthly | To be completed before submission of new records via "NOCA Extract". |
| | | Place note in 'Edit Report' against each record to indicate actions taken to manage error. |
| Midwife re-submits corrected data | | Amend invalid records in local system. |
| records in "NOCA Extract" | | Re-extract amended records to "NOCA Extract". |
| | | Submit "NOCA Extract" to MCH team. |
| | | Example: May 2023 birth records must be confirmed to be valid (no records remain in 'Edit Report') by 28 July 2023 |

4 Submission and upload of a NOCA Extract

Notifications utilising the E-form or the paper form have a submission process that is different to the "NOCA Extract" submission process.

A batch file called the Notification of Case Attended ("NOCA Extract") must be submitted each month by each maternity service.

The "NOCA Extract" is a data file specified in the document "NOCA Extract Feeder File Specification". This document is amended from time to time and is published at http://ww2.health.wa.gov.au/Articles/J_M/Midwives-Notification-System.

4.1 Submission process

- 1. Maternity services provide the "NOCA Extract" to MCH via shared folders on WA Health servers or by secure file transfer to email address <u>birthdata@health.wa.gov.au</u>.
- 2. MCH staff log receipt of the "NOCA Extract".

4.2 Upload process

- 3. MCH staff queue all "NOCA Extract" files received for upload to HSECS-MNS overnight.
- 4. HSECS-MNS provides by email to <u>birthdata@health.wa.gov.au</u> the following information:
 Number of "NOCA Extract" files successfully uploaded.
 - A Batch ID for each "NOCA Extract" uploaded that applies to all records in the data file.
- 5. HSECS-MNS also assigns a Case ID for each record in each "NOCA Extract" that is unique within each Batch ID.
- 6. Records that do not pass all validation rules are isolated from the other records uploaded at the same time.
- 7. HSECS-MNS creates a list, 'Edit Report', of records that did not pass all validation rules. These records are described with UMRN/URN, Batch and Case ID, Validation rule ID with explanation.

5 'Edit Report'

5.1 **Description**

The 'Edit Report' is a Comma Separated Value (CSV) spreadsheet with a name format like "mw_Edits_NNN.csv".

It provides a list of all birth records that failed MNS validation rules and require 'edit' by a midwife. A midwife at a maternity service would use this report to identify records requiring attention and possibly correction.

Records requiring 'edit' will remain on the 'Edit Report' until the record in MNS is correct or Warnings have been addressed.

| Column heading | Description |
|----------------|--|
| MUMRN | Mothers Client ID allocated by site |
| BUMRN | Baby Client ID allocated by site |
| Surname | Mothers Surname |
| Firstname | Mothers Forename |
| Baby DOB | Baby Date of Birth |
| Code | Programming number assigned by the DoH to the validation algorithm and validation descriptive text |
| Туре | Description of seriousness of the validation failure. Is the issue an Error in logic and the record can't be processed? Or is it an unlikely data combination that warns the reporter that this scenario must be confirmed before the record can be processed? |
| Error Desc | Meaningful text that describes what data combination reported in the record has failed the validation algorithm test. |
| Hosp | Establishment ID for the maternity service. These have been assigned by the DoH. See Error! Reference source not found. for maternity service names and Establishment IDs as assigned in 2015. |
| BatchId | Number allocated by HSECS-MNS to each "NOCA Extract" as it is uploaded to MNS. All cases within the one "NOCA Extract" will have the same BatchID. |
| Caseld | Number allocated by HSECS-MNS to each DEL and BIR record within one "NOCA Extract" as it is uploaded to MNS. All DEL and BIR Records with the same BatchID will have a unique CaseID. |
| Update | An "N" indicates that this is the first time this record has been supplied and uploaded to MNS by the maternity service A "Y" indicates that this record has been supplied and uploaded to MNS more than once as an update to the record originally supplied. |
| Extract Date | The date the record's "NOCA Extract" identified by BatchID was first uploaded to HSECS-MNS |
| Comments | Provided to enable maternity service staff to indicate how this error is to be managed i.e. Updated record to be supplied (record had incorrect data, it has been corrected in the system at the maternity service and an updated record will be supplied to MNS.) Override validation rule (record data is correct and clinically valid, MNS must accept data as supplied). |

Table 3: 'Edit Report' – heading descriptions

5.2 Creation

Every day at 14:00, HSECS-MNS compiles an 'Edit Report' containing all records isolated from others because they did not pass all validation rules.

For each record, one or more Validation IDs are displayed.

An 'Edit Report' is provided for each separate maternity service (establishment).

The MNS 'Edit Report' must be retrieved from the HSECS-MNS intranet portal.

5.3 Frequently asked questions

5.3.1 Record previously validated is still in the 'Edit Report'

A record will continue to be compiled to the 'Edit Report' each day until:

- Incorrect data has been corrected in the source system and the corrected record has been uploaded as an "updated" record to HSECS-MNS,
- Data Quality team have "overridden" any validation rule/s for data confirmed as accurate, and
- The record has no other validation issues.

5.3.2 Some records are duplicated in the 'Edit Report'

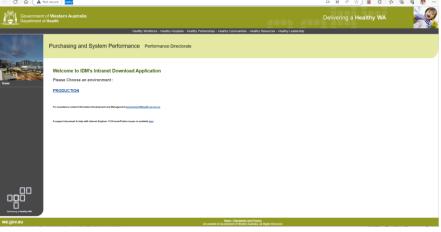
For each validation rule a record failed, the record will be displayed with the Validation ID in the 'Edit Report'.

For these records correction of one data item may make the whole record valid.

5.4 Retrieve 'Edit Report' from HSECS-MNS download portal

5.4.1 Logon to HSECS Intranet Application

- 1. Requires:
 - WA Health owned device with internet access.
 - Microsoft Edge as internet browser.
- 2. Open browser window using Microsoft Edge
- 3. Go to address: <u>http://icam/</u> to display the welcome form:



4. Select the environment "PRODUCTION" to display the user login form:

| ndows Security The server lxfm password. | 011ic.health.wa.gov.au at prod requires a username and |
|--|--|
| | User name Password Remember my credentials |
| | OK Cancel |

5. Add User Name and Password and select "OK" to display following form:

| | Production Database for HE | 00000 |
|--|--|-----------------------------|
| | This Page has been accessed 201450 times since 1st Septem Continue | ber 2005 |
| The password for user Please ensure that you ch | will expire on 06-May-2015 ange your password before the expiry date, as no warnings are sent | |
| HSECS - Health Statistic | al Events Common Store | Government of Western Austr |

5.4.2 Download 'Edit Report'

6. Select the "Continue" button to display the following form:

| HMDS Home Page - Production | | | |
|--|----------------------|--|--|
| | HMDS Query Batches | | |
| | HMDS Change Password | | |
| Query Batches Extract Retrieval Change | 2assword | | |

- 7. Note the options provided:
 - "HMDS Query Batches"
 - "HMDS Extract Retrieval"
 - "HMDS Change Password" (see section 7.3).
- 8. Select "HMDS Extract Retrieval" to display the following form:

| | se use the right mouse button | then select 'Save Target As' | Save the file to a suitable location on your PC and you will then be able to open the file in a suitable Microsoft Office produ |
|-------------------|--|--|---|
| Files for 0000 | | | |
| File Name | File Type | Size Date/Time | |
| mw edits 218.csv | Commented Edits Spreadsheet | 0.43 Kb 05/08/2015 14:00 | |
| nw edits 642.csv | Commented Edits Spreadsheet | 192.05 Kb 05/08/2015 14:00 | |
| nw edits 640.csv | Commented Edits Spreadsheet | 88.36 Kb 05/08/2015 14:00 | |
| nw edits 633.csv | Commented Edits Spreadsheet | 104.04 Kb 05/08/2015 14:00 | |
| nw edits 629.csv | Commented Edits Spreadsheet | 46.27 Kb 05/08/2015 14:00 | |
| nw edits 616.csv | Commented Edits Spreadsheet | 299.70 Kb 05/08/2015 14:00 | |
| uw edits 613.csv | Commented Edits Spreadsheet | 7.39 КЬ 05/08/2015 14:00 | |
| nw edits 612.csv | Commented Edits Spreadsheet | 28.29 Kb 05/08/2015 14:00 | |
| nw edits 906.csv | Commented Edits Spreadsheet | 1.76 Kb 05/08/2015 14:00 | |
| nw_edits_104.csv | Commented Edits Spreadsheet | 25.48 Kb 05/08/2015 14:00 | |
| nw edits 106.csv | Commented Edits Spreadsheet | 6.92 Kb 05/08/2015 14:00 | |
| nw edits 131.csv | Commented Edits Spreadsheet | 3.11 Kb 05/08/2015 14:00 | |
| nw edits 201.csv | Commented Edits Spreadsheet | 1.57 Kb 05/08/2015 14:00 | |
| nw edita 203.csv | Commented Edits Spreadsheet | 10.41 Kb 05/08/2015 14:00 | |
| nw_edits_206.csv | Commented Edits Spreadsheet | 3.97 Kb 05/08/2015 14:00 | |
| nw edits 208.csv | Commented Edits Spreadsheet | 9.14 Kb 05/08/2015 14:00 | |
| nw edits 209.csv | Commented Edits Spreadsheet | 1.38 Kb 05/08/2015 14:00 | |
| nov edits 210.csv | Commented Edits Spreadsheet | 0.10 Kb 05/08/2015 14:00 | |
| nw_edits_211.csv | Commented Edits Spreadsheet | 0.10 Kb 05/08/2015 14:00 | |
| nw edits 215.csv | Commented Edits Spreadsheet | 1.93 Kb 05/08/2015 14:00 | |
| mw edits 645.csv | Commented Edits Spreadsheet | 139.90 Kb 05/08/2015 14:00 | |
| mw edits 220.csv | Commented Edits Spreadsheet Commented Edits Spreadsheet | 3.83 Kb 05/08/2015 14:00 6.57 Kb 05/08/2015 14:00 | |

9. Information provided:

- File Name: unique name for data file that contains MNS edits for one maternity service (e.g. mw_edits_208.csv) where:
 - mw = Midwives, MNS data tables
 - edits = type of information contained in file
 - 208 = 0208, establishment number for Bunbury Regional Hospital
 - \circ csv = comma separated variables, file type
- File Type: Brief explanation of content and format of data file as applied to HSECS
- Size: Size of data file in kilobytes. Be wary of large file sizes. They may take a lot of time to download. MNS 'Edit Report' data files are usually small and less than 500 Kb.
- Date/Time: Date and time that this file was created from HSECS-MNS. Schedule is set for 14:00 every day.
- 10. Select the data file required this form is displayed:



11. Select "Save" to specify where you want to save your file, and see this form:

| Organize 🔻 New folder 🛛 🏥 👻 🔞 | | | | | | | 2 |
|--|---|--|--|--|------|--|---|
| Desktop Downloads | ^ | Name | Date modified 8/01/2015 7:59 AM | Type File folder | Size | | |
| M and CH & RT | L | IPTRIM PerfLogs | 6/11/2014 5:27 PM 14/07/2009 11:20 | File folder File folder | | | |
| Ibraries Image: Documents Image: Documents | Ŧ | Program Files Program Files (x86) Users Windows | 28/01/2015 10:03 8/07/2015 9:03 AM 2/06/2015 8:25 AM 21/07/2015 5:08 PM | File folder File folder File folder File folder | | | |
| File name: mw_edits_613 Save as type: Microsoft Excel Comma Separated Values File | | | | | | | • |

- 12. Select your preferred folder.
- 13. Add a date of download to your file name. For example, rename the File_name to "mw_edits_613_20170806" to indicate Year, Month and Day it was saved.
- 14. Select the "Save" button.

The 'Edit Report' will be saved as a CSV file at this stage.

- 15. When opened, save it again as Excel format to enable colour highlights etc to be saved.
- 16. Download other 'Edit Reports' as required.

5.5 Use of 'Edit Report' to validate records

This process is for midwives at maternity services. The Maternal and Child Health and Data Quality teams at the Department of Health are happy to assist if required.

Use maternal or infant identifying data provided in the 'Edits report' to retrieve information about these births from documentation available at your service like:

- Paper Birth Register
- Clinical system like Stork, PROD or Meditech
- Medical Record
- ICD-10 coding
- Patient Administration System, or
- Other.

5.5.1 Prepare the 'Edit Report'

- 17. Open your 'Edit Report' from the directory where it was saved e.g. the document will be called "mw_edits_613_20170806.csv".
- 18. Do not delete any columns provided in the original 'Edit Report'
- 19. All columns are equal in size so some information (e.g. baby DOB, error description) may need columns to be resized so they can be read properly. To change column widths:
 - move the cursor to the heading row
 - place over the line at the right of the column to be expanded
 - click and drag until the required width is reached and all information can be viewed clearly.

5.5.2 Get information required to investigate each record for 'edit'

- 20. From the 'Edit Report' use record identifiers, validation ID, validation message, and validation type to investigate what information in the record has been incorrectly reported and must now be corrected.
- 21. Refer to section 6.3 for information on data items and errors that often fail to meet validation rule/s.
- 22. Determine sources of information required to validate each case.
- 23. Retrieve these sources of information i.e. go to Birth Register or request Medical Record.

5.5.3 Action records requiring 'edit'

a.

- 24. Determine the correct data for each record listed in the 'Edit Report'.
- 25. Determine the appropriate action to manage the record, for example:
 - Data in record requires correction (Example A):
 - Validation Type may be **Warning** or **Error**.
 - Example validation rule is an **Error** with text: *Anaesthesia value is invalid for the method of birth.*
 - Source system record must be corrected and record resubmitted.
 - The outcome "Updated record to be provided" is added in column "Comments".
 - The updated record is re-extracted and re-submitted to MNS.
 - b. Data in record does not require correction (Example B)
 - Validation Type is **Warning**.
 - Example validation rule is a Warning with text: *Marital status reported is unlikely for age category*.
 - Data in the record is confirmed to be accurate.
 - The outcome "Data correct mother was 19 and was divorced, override of validation rule is required" is added in column "Comments".

5.5.4 Completion of 'edit' actions

- 26. Process is complete when each record and Validation ID in the 'Edit Report' has an appropriate action against each record in the "Comments" column.
- 27. Save the 'Edit Record' with your Comments.
- 28. Return the 'Edit File' to <u>birthdata@health.wa.gov.au</u> using secure file transfer or by saving it to the designated shared folder.

- 29. The Data Quality team will action overrides as advised in the 'Edit Report' (outcome b.).
- 30. Records that had outcome a. must be resubmitted as updated records in a "NOCA Extract" data file.
- 31. The "NOCA Extract" must be submitted via secure file transfer to <u>birthdata@health.wa.gov.au</u> or shared in designated secure folder.
- 32. The Maternal and Child Health team will receive and upload "NOCA Extract" files provided with updated records by the maternity service (outcome a).
- 33. Repeat sections 5.4.1 to 5.5.4 above until the 'Edit Report' for the maternity service has no more records included.
- 34. The process begins again when the next "NOCA Extract" with new records is submitted and uploaded.

6 MNS validation rules

6.1 Introduction

Each validation rule applied during the MNS validation process has a unique Validation ID and validation message explaining why an 'edit' of the record is required.

Table 4 describes headings used in Table 5 and **Error! Reference source not found.** to describe validation rules.

| Label | Name | Values | Description | Provided | | |
|-------|-----------------------|--|--|---|--|--|
| Code | Validation ID | | The unique ID allocated by MNS to a validation rule. | For all issues. | | |
| Туре | Validation Type | System error | This type of validation rule checks whether the data file is acceptable to | Displayed at time of file upload to HSECS - MNS. | | |
| | | | the system or programming and is suitable for loading to HSECS. | Managed by MCH team. | | |
| | | | | may require midwife at maternity service to re-provide data file in correct format. | | |
| | | Fatal error | This type of validation rule checks whether the content or format of data in | Displayed at time of file upload to MNS. | | |
| | | | a record prevents the record from loading to MNS even if other records in the file load successfully. | Managed by midwife at site or MCH team. | | |
| | | | | May require midwife at maternity service to re-provide the record. | | |
| | | Error | This type of validation rule checks for | Displayed in 'Edit Report'. | | |
| | | data values that are never valid in: single data item value single data item multiple values | Managed by midwife at maternity service. | | | |
| | | | combination, or multiple data items and combination of their values | Will require correction of record in source system and re- submission to MNS. | | |
| | | | Example: woman with spontaneous onset of labour has no duration of labour. | | | |
| | | Warning | This type of validation rule checks for | Displayed in 'Edit Report'. | | |
| | | | data values that are unlikely in: single data item value single data item multiple values | Managed by midwife at maternity service staff. | | |
| | | | combination, or multiple data items and combination of their values | May require correction of record in source system and re- submission to MNS or | | |
| | | | Example: infant of 28 weeks gestation has birthweight over 2500 grams. | advice to Data Quality team that data reported, while unusual, was correct. | | |
| | Validation message | | The text provided with the Validation ID t validation rule that the record failed to pa | | | |
| | Responsibility | | The person/people responsible for mana | ging the error and 'edit'. | | |
| | | | If Site, then a midwife at the maternity service is responsible for checking the source system and records to confirm or improve accuracy of record. | | | |

Table 4: Data validations - Table heading descriptions

| Label | Name | Values | Description | Provided |
|-------|--------|--------|---|----------------------------------|
| | | | If MCH it is because the issue is a techni the data file. | cal problem affecting loading of |
| | | | If DQT it is because the issue is related to required in HSECS-MNS. | o the 'Edit Report' and actions |
| | Action | | Actions are suggested to resolve commo fail this validation rule. | n issues that cause a record to |

6.2 Data validation issues

Data validations test for a variety of issues. These can be categorised as follows.

6.2.1 Single data item issues

Is there a value reported for a mandatory data item?

Is the value reported for the data item in correct format (e.g. DD/MM/YYYY for date)?

Is only one data value reported for a data item requiring a single value response?

6.2.2 Conditional data item issues

Has a value been provided when the condition is met (e.g. when method of birth is CS, a reason for CS is provided)?

Is the data field NULL when the condition is not met (e.g. the Last Menstrual Period (LMP) Date is not known and LMP date data field must be NULL)?

6.2.3 Combination of data item issues

Are values in multiple data fields consistent with each other (e.g. onset of labour value is "Spontaneous," and induction of labour method must be "01-None")?

6.3 List of validation rules to be managed by midwife at maternity service

Table 5 provides:

- List and description of Validation Rules that can be managed by midwife at maternity service
- Recommended actions to manage records requiring 'edit'
- Validation ID in numeric order, and
- Different Validation Types highlighted with different colours

Table 5: Validations for action by midwife at maternity service

| Valid ID | Validation message | Val Type | Action |
|----------|---|----------|--|
| 71 | Apgar score not present | Error | Ensure the record has an Apgar Score reported for 1 minute and 5 minutes for the infant between 0 and 10 or 99 if unable to be determined. |
| 72 | Apgar score is invalid | Error | Ensure the record has a valid Apgar Score reported for 1 minute and 5 minutes (0-10 or 99 for unable to be determined). An infant with a birth status of 2,3 or 4 (stillborn) must have Apgar scores of 0. |
| 75 | Birth Order not present | Error | Ensure the record has a Birth Order reported between 1 and 9. |
| 76 | Birth Order value is invalid | Error | Ensure the record has a valid Birth Order reported between 1 and 9. |
| 77 | Born Before Arrival is not present | Error | Ensure the record has a Born Before Arrival indicator reported (1-Yes or 2-No). |
| 78 | Born Before Arrival value is not valid | Error | Ensure the record has a valid Born Before Arrival indicator reported (1-Yes or 2-No). |
| 79 | Caesarean Last Delivery is not present | Error | Ensure the record has a valid CS Last Delivery indicator reported (1-Yes or 2-No). |
| 80 | Caesarean Last Delivery value is invalid (must be 1 or 2) | Error | Ensure the record has a valid CS Last Delivery indicator reported (1-Yes or 2-No). |
| 81 | Caesarean Last Delivery cannot be 1 if previous pregnancies is 0 | Error | Ensure the CS Last delivery value of 1-Yes is reported accurately. If accurate, then Number of previous pregnancies cannot be 0. |
| 92 | Date LMP Certain value is invalid | Error | Ensure the record has a valid LMP Certain value (1-Yes or 2-No). |
| 93 | Date LMP is blank and Date LMP Certain is not equal to 2 (no) | Error | Ensure the record has an LMP date reported if LMP Certain value is 1 (Yes). |
| 97 | Duration Of Labour is not present | Error | Ensure the record has duration of labour reported in hours and minutes for both 1st stage and 2nd stage. Where no labour then report 00:00 (HH:MM) for both stages of labour. |
| 98 | Duration Of Labour value is not in the valid range | Error | Ensure the record has a total duration of labour for both 1st and 2nd stages that is less than 99 hours and 99 minutes. |
| 100 | Estimated Gestation is not present | Error | Ensure the record has a gestational age (as estimated at time of birth) reported in weeks + days e.g. 38 weeks and 6 days. |

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| Valid ID | Validation message | Val Type | Action |
|----------|--|----------|---|
| 101 | Estimated Gestation value is not in valid range (20 -47) | Error | Ensure the record has an estimated gestational age for each infant in completed weeks that is between 20 and 47 weeks. Confirm any gestational age greater than 42 completed weeks (42+6) is accurately reported. Ensure the Estimated Date of Delivery (EDD) and Baby DOB supports the gestational age reported. |
| 103 | Head Circumference is not in valid range (10 - 50 or 99) | Error | Ensure the record has a head circumference reported for each infant that is between 10 and 50 cms or 99 if unable to be determined. Confirm any head circumference greater than 39cm is accurate. Confirm that the baby's gestational age, birthweight and length support the head circumference reported. |
| 104 | Head Circumference is not present | Error | Ensure the record has a head circumference reported for each infant. If unable to be determined report 99 cm |
| 105 | Head Circumference is greater than length | Error | Ensure the record has a valid head circumference reported (between 10 and 40 cms). Confirm that the baby's gestational age, birthweight and length support the head circumference reported. |
| 107 | Height value is outside valid range (100 - 230) | Error | Ensure the record has a maternal height reported that is between 100 and 230 cms. Confirm any height less than 150 or more than 190 cms, is accurate. |
| 110 | Infant Weight is mandatory and is presently blank | Error | Ensure the record has a birthweight reported. If unable to be determined report 9999 grams. |
| 112 | Infant Weight is outside the valid range (0050 - 7000 or 9999) | Error | Ensure the record has a birthweight reported for each infant that is between 0050 and 7000 grams. Report 9999 grams if unable to be determined. Confirm any birthweight greater than 5000 grams. Confirm that the baby's gestational age, head circumference and length support the birthweight reported. |
| 124 | Length value is outside valid range (20 - 65 or 99) | Error | Ensure the record has a length reported for each infant that is between 20 and 65 cms or 99 if unable to be determined. Confirm any length greater than 55cm is accurate. Confirm that the baby's gestational age, birthweight and head circumference support the length circumference reported. |
| 126 | Name of delivery ward is not present | Error | Ensure the record has text describing the Delivery Ward where the birth occurred. |
| 127 | Indicator of whether woman had a previous multiple birth must be reported as 1 (Yes) or (2) No | Error | Ensure the record has a response of 1 (Yes) or 2(No) for question "Was any previous birth a multiple birth"? |
| 128 | Previous multiple birth is not in valid range | Error | Ensure the record has a valid previous multiple birth value reported (1-Yes or 2-No). |
| 129 | When 0 previous pregnancies, previous multiple birth indicator must 2 (No) | Error | Ensure the record has compatible data in both "Previous Multiple Birth" and number of previous pregnancies. If a woman had no previous pregnancies, she cannot have had a previous multiple birth. |
| 130 | Previous Pregnancy value is not present | Error | Ensure record has number of previous pregnancies reported, if no previous pregnancies report 0. |

| Valid ID | Validation message | Val Type | Action |
|----------|---|----------|---|
| 137 | Total days in Special Care before discharge/transfer from birth site is outside of valid range (0 - 180). This duration is unlikely unless at SCN3 level. | Warning | Confirm that infant's Date of Birth and Date of Discharge from the birth site are correct. The length of stay is calculated as more than 180 days which is very unlikely in any site other than one with a level 3 nursery. |
| 149 | Separation Establishment is not present | Error | Ensure the record has a valid separation establishment reported (0900 = discharged home, 0912 = died, 0102 = transferred to PMH) |
| 155 | Invalid Gender / Reference Code Association | Error | Ensure the record has a valid infant sex reported (1-male, 2-female, 3-indeterminate) |
| 162 | Expected due date is not present and is mandatory | Error | Ensure record has a date to indicate when pregnancy gestation was calculated to be 40 weeks or due. If not able to be determined during pregnancy report date determined from assessment of newborn infant. |
| 165 | Accoucheur value cannot be blank | Error | Ensure the record has one or more accoucheur at birth (birth attendant) reported. |
| 167 | Accoucheur value is not a valid reference code | Error | Ensure the record has one or more valid values reported for accoucheur at birth (birth attendant). |
| 174 | Marital Status is not present | Error | Ensure the record has a marital status reported for the mother. |
| 175 | Marital Status is outside of the valid range | Error | Ensure the record has a valid value reported for marital status of the mother. |
| 178 | Mode Of Separation is not present | Error | Ensure the record has a separation or discharge outcome value reported. |
| 179 | Mode Of Separation is outside of the valid range | Error | Ensure the record's separation or discharge outcome reported is a valid value e.g. 9 = discharged home, 1 = transferred, 8 = died. |
| 180 | Mode Of Separation is not numeric | Error | Ensure the record's separation or discharge outcome value is number between 1 and 9. |
| 183 | Onset Of Labour value is not present | Error | Ensure the record has an onset of labour value reported (1, 2 or 3). |
| 184 | Onset Of Labour value is outside valid range | Error | Ensure the record's onset of labour value is between 1 and 3. |
| 187 | Perineal Status is not present | Error | Ensure the record has at least one perineal status value reported. |
| 190 | Plurality value is not present | Error | Ensure the record has a plurality of birth value reported between 1 and 9. |
| 192 | Intended Place of Birth value is not present | Error | Ensure the record has an intended place of birth at onset of labour value reported. |
| 193 | Intended Place of Birth value is outside the valid range | Error | Ensure the record's intended place of birth at onset of labour is a valid value (1,2,3,4 or 8). |
| 194 | Presentation value is not present | Error | Ensure the record has a fetal presentation value reported. |
| 195 | Presentation value is outside of the valid range | Error | Ensure the record's fetal presentation value is a valid value (1,2,3,4 or 8). |
| 201 | Resuscitation is not present | Error | Ensure the record has an infant resuscitation at birth value reported. |

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| Valid ID | Validation message | Val Type | Action |
|----------|--|----------|---|
| 207 | Status of The Baby value is not present | Error | Ensure the record has an infant birth status value reported. |
| 219 | Time value not numeric | Error | Ensure the time of birth value reported is a valid time in numeric format i.e. 0230 or 2347 |
| 220 | Time value is outside of the valid range | Error | Ensure the time of birth value is between 0000 and 2359 |
| 222 | Client Identifier like UMRN or URN is not present | Error | Ensure the record has a Unit Medical Record Number reported for the mother and for each liveborn infant. |
| 223 | Date Of Birth is not present | Error | Ensure the record has a date of birth value reported for the mother and the infant. |
| 224 | Gender code is not present | Error | Ensure the record has a valid infant sex reported (1-male, 2-female, 3-indeterminate) |
| 239 | The mother date of birth must be at least 10 years greater than the baby date of birth | Error | Ensure the mother's DOB and the infant's DOB are accurately reported. Calculation of years between mother's DOB and infant's DOB indicate the mother is less than 10 years old and is not clinically feasible. |
| 242 | The baby date of birth is greater than the separation date | Error | Review and correct the infant's date of birth or infant's separation/discharge/transfer from birth site date as it is not reported accurately. The dates reported indicate that the infant was discharged before it was born and the dates must be corrected. |
| 255 | Ethnic Origin is not present | Error | Ensure the record has an ethnic origin reported for the mother. |
| 257 | Basis Expected Due Date is not present | Error | Ensure the record has the basis on which the EDD was calculated reported. (1-dates, 2- ultrasound less than 20 wks, 3-ultrasound at 20 wks or greater). |
| 260 | Indigenous Code is outside valid range | Error | Ensure the record's aboriginal status for infant reported is a numeric value between 1 and 4. |
| 262 | When never married the maiden name must be the same as the surname | Warning | Ensure women who are unmarried have the same name recorded as Surname, family name and Maiden Name. The Maiden Name field is not for recording, alias names or different spellings of family name. |
| 263 | The name contains numeric characters | Error | Ensure the name of the mother reported does not contain numbers (Surname, First name, second name or maiden name). |
| 265 | The surname is mandatory and cannot be blank | Error | Ensure the record has a maternal surname reported in text. |
| 267 | The value for surname is UNKNOWN | Warning | A woman's surname is required to be reported. If it is genuinely unable to be determined by time of reporting then this must be confirmed in writing to MCH. |
| 289 | Invalid Suburb/Postcode combination | Error | Ensure the suburb reported in text is a valid value. If suburb is accurate then the postcode reported as a 4-digit number is not valid and must be corrected. |
| 295 | Analgesia value is not present | Error | Ensure the record has at least one analgesia during labour value reported even if it is 1-None. |
| 297 | Analgesia value does not exist in the reference codes | Error | Ensure the records' analgesia during labour values are valid. |
| 298 | Anaesthesia value is not present | Error | Ensure the record has at least one anaesthesia at delivery value reported even if it is 1-None. |
| 300 | Anaesthesia value does not exist in the reference codes | Error | Ensure the records' anaesthesia at delivery values are valid. |

| Valid ID | Validation message | Val Type | Action |
|----------|--|----------|--|
| 339 | Gender code is either 3- Indeterminate or 4-Other | Warning | If Infant's Gender has been reported as Indeterminate, please confirm that infant's gender was considered Indeterminate at time of first reporting. It is not recommended that infant's records for those originally considered Indeterminate are updated with more recent information. If infant's gender has been reported as "Other" please edit and report only one of Female, Male or Indeterminate." |
| 343 | Invalid postcode / suburb for State | Error | Ensure the suburb reported in text is a valid value. Ensure the postcode reported as a 4-digit number is valid for the suburb. If both these are accurate, then state value must be corrected e.g. state value of 5 for postcodes like 6####. |
| 351 | Marital Status reported is unlikely for the age category | Warning | Confirm data for records is correct when marital status of divorced, widowed or separated is correct for mothers less than 20 years old. |
| 377 | Anaesthesia value is invalid for the method of birth | Error | Ensure that the record for each infant has anaesthesia of General Anaesthesia, Spinal, Epidural etc if birth method was Caesarean section. Confirm data in record when anaesthesia of General Anaesthesia was reported for a vaginal birth. |
| 378 | Basis expected due date value is not a valid reference code | Error | Ensure the record's basis on which the EDD was calculated which was reported is one of the valid values: 1-dates, 2-ultrasound less than 20 wks, 3-ultrasound at 20 wks or greater. |
| 379 | Number of previous liveborn babies now dead is not reported | Error | Ensure record has number of liveborn babies that have since died from previous pregnancies reported, if none report 0. |
| 380 | Number of previous liveborn babies still living or liveborn babies now dead must be between 0 and 25 | Error | Ensure the number reported for liveborn babies from previous pregnancies that still living is between 0 and 25. |
| 381 | Number of previous pregnancies is 0, however liveborn babies still living and/or liveborn babies now dead is more than 0. Data combination is invalid. | Error | Ensure the number reported for liveborn babies from previous pregnancies that still living is between 0 and 25. |
| 385 | Complication during Labour/Delivery value is not a valid reference code | Error | Ensure the record's complications during labour and birth that were reported have values that are valid i.e. between 01 and 13 excluding 06. |
| 386 | Ethnic origin code is not a valid reference code | Error | Ensure the record's ethnic origin reported for the mother is a valid value between 01 and 12 and not 02. |
| 387 | Medical Condition value is not a valid reference code | Error | Ensure the records' medical condition values reported are valid options (01,03,04,05,06,08). |
| 400 | Method Of Birth value is not a valid reference code | Error | Ensure the record's method of birth values reported for the infant are valid values between 01 and 08. |
| 401 | Method Of Birth value is not valid for the presentation code | Error | Ensure the record has correct fetal presentation and birth mode reported. A breech presentation cannot have a vacuum delivery. A vertex presentation cannot have a breech extraction. |
| 405 | Method of birth values are unlikely combination please confirm | Warning | Ensure the methods of birth combinations reported are accurate. The unlikely combinations tested for are "01-Spontaneous" with any other item between 02 and 08 and 02-Vacuum Successful with 04 or 06 or 08. |

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| alid ID | Validation message | Val Type | Action |
|---------|---|----------|--|
| 406 | Method of birth value 3 or 5 cannot be on its own | Error | Ensure the record's method of birth values reported for unsuccessful methods of assisted delivery are also accompanied by a successful method. |
| 407 | Perineal Status code is an invalid reference code | Error | Ensure the record's perineal status values reported for the mother are valid values between 01 and 08 excluding 06. |
| 408 | Method of Birth is invalid for the perineal status | Error | Ensure the method of birth reported is accurate. If method of birth is 7-Elective CS then perinatal status can only be 01-Intact. |
| 409 | reference code | | Ensure the birth plurality value reported is between 1 and 9. |
| 410 | equal to birth order reported for all infants cannot be greater than the plurality value. For example, if bir | | Ensure the birth plurality value reported is accurate. If accurate, then the highest birth order reported for all infants cannot be greater than the plurality value. For example, if birth plurality is 2 for twins, then no baby can have a birth order of 3 or 3rd baby born from pregnancy. |
| 411 | Procedure/Treatment is not a valid reference code | Error | Ensure the record's procedure or treatment values reported for the mother are valid values between 01 and 07. |
| 413 | Previous pregnancy value is outside of the valid range | Error | Ensure the record's number of previous pregnancies reported is between 0 and 20. |
| 414 | When no previous pregnancy, children living/died and stillbirth values must also be 0 | Error | Ensure that 0 reported as number of previous pregnancies is correct and if yes, then ensure that only 0 is reported for number of infants previously born alive and still alive, number of infants previously born alive but now dead and number of infants previously stillborn are all also 0. |
| 415 | Resuscitation code is not a valid reference code | Error | Ensure the record's method of resuscitation reported for the infant is between 1 and 8 |
| 416 | Status of the baby code is an invalid reference code | Error | Ensure the record's birth status for the infant is between 1 and 4. |
| 418 | Type of augmentation value is not present, 01 must be reported if no augmentation | Error | Review and correct the method of augmentation reported. If no augmentation of spontaneous labour then must report 01-None. |
| 419 | Type of augmentation value is not a valid reference code | Error | Ensure the record's method/s of augmentation reported only includes 01, 02, 03, 04 and 08 |
| 421 | Induction method value has not been provided | Error | Ensure that at least one method of induction is reported if onset of labour has been reported as INDUCTION. |
| 422 | Type of induction value is not a valid reference code | Error | Ensure the record's method/s of induction reported only includes 01, 02, 03, 04, 05 and 08 |
| 457 | Separation Date is not present | Error | Ensure the infant's separation/discharge/died date is reported. |
| 458 | Apgar 5 minute score not present | Error | Ensure the infant's Apgar score at 5 minutes of age is reported. If unable to be determined report 99, If infant stillborn, then report 0. |
| 459 | Birth time is not present | Error | Ensure the infant's time of birth is reported. |
| 460 | Previous pregnancies living is not present | Error | Ensure the record has a value reported for the number of children still alive that were born from a previous pregnancy. This data item must have a value between 0 and 20. |

| Valid ID | Validation message | Val Type | Action |
|----------|---|----------|---|
| 461 | Method of birth value is not present | Error | Ensure the infant's method or methods of birth are reported. |
| 464 | Midwife Registration number must be present | Error | Ensure the reporting midwife's AHPRA registration number is reported in the correct format. |
| 488 | The expected due date must be within six months of the delivery date. | Error | Ensure that the EDD (expected due date) is accurate, ensure that the Baby DOB is accurate. The period calculated between dates currently reported is greater than 6 months which means infant's calculated gestation is less than 20 weeks and thus is not within scope for reporting. |
| 538 | Complication during pregnancy is not a valid reference code | Error | Ensure the record's complications during pregnancy reported only include valid values e.g. between 01 and 12 and 99, excluding 10. |
| 572 | One or more baby cases contain errors - Mothers case held | Warning | There is no direct issue to manage this validation rule. Manage all other validation issues for this baby and this validation rule will also be managed. |
| 579 | Apgar # Status of Baby # and Time of Respiration ## is an invalid combination | Error | Ensure that the birth status for the infant is reported accurately as stillbirth and if true, then ensure that Apgar Scores are 0 and time of respiration is 0 minutes. |
| 609 | The telephone number must only be numeric. | Error | Ensure the maternal telephone number is in numeric format and does not include any text or other characters. |
| 610 | The plurality value cannot be greater than the total number of babies | Error | Ensure the birth plurality value reported is accurate. If accurate, then the highest birth order reported for all infants cannot be greater than the plurality value. For example, if birth plurality is 2 for twins, then no baby can have a birth order of 3 or 3rd baby born from pregnancy. |
| 623 | Mothers age greater than 50 years old | Warning | Please check the maternal date of birth for accuracy. |
| 625 | Separation Establishment cannot be the same as current Establishment | Error | Ensure that the hospital that is site of birth is accurate then ensure that the infant is actually being transferred. Then ensure that the hospital to which the infant is being transferred is accurate. The current data indicates the infant was born at the same site as the one to which it is being transferred. |
| 637 | Analgesia value is inappropriate for the onset of labour | Error | Onset of Labour has been reported as NO LABOUR, analgesia during labour can only be reported as NONE. Ensure that onset of labour is accurately reported and if necessary, change Analgesia during labour to NONE. |
| 670 | Stillbirth separation date must = DOB | Error | Ensure that the date of separation (death) of a stillborn infant equals the date of birth. |
| 671 | Nulliparous women must not have Prev Caesar or multi birth | Error | Ensure that 0 reported as number of previous pregnancies (gravidity) is correct and if correct, then ensure that answer to "CS for previous birth" = No (2) and "previous multiple birth" = No (2) AND Ensure that 0 reported as number of previous pregnancies resulting in a birth (parity) is correct and if correct, then ensure that answer to "CS for previous birth" = No (2) and "previous multiple birth" = No (2). |
| 681 | First Forename should not be blank | Warning | The maternal first name should be known and must be reported. If not known, please confirm it is not known. |

| Valid ID | Validation message | Val Type | Action |
|----------|---|----------|--|
| 691 | When Onset of Labour = 2 (Induction) then Method of Induction must have value other than 1 (none) | Error | When Onset of Labour = 2 (Induction) then Method of Induction must have value other than 1 (none) |
| 795 | Gestational weeks at first antenatal visit required | Error | Ensure the gestation at first antenatal visit is reported. |
| 796 | Cigarettes per day before/after 20 weeks is required. | Error | Ensure the average number of cigarettes smoked per day is reported for both before 20 weeks gestation and beyond 20 weeks gestation. |
| 816 | Number of Previous Caesareans mandatory | Error | Ensure that a value has been reported for number of Previous CS between 0 and 25. |
| 817 | Baby indigenous status mandatory | Error | Ensure that a value has been reported for baby's Aboriginal status between 1 and 4. |
| 818 | Prev Caesar, Num Caesar, Caesar Last Birth and Prev Pregnancies do not correspond | Error | Ensure the Previous CS Yes/No value, CS Last delivery Yes/No value, and the Number of Prev Caesareans is reported accurately and is consistent. For example, if Number of Prev Caesareans = 3 then Previous CS Yes/No value must be Yes. |
| 819 | Mothers weight outside range of 40kg to 140kg | Warning | Please check the maternal weight at booking. If confirmed - advise MCH. |
| 820 | Number antenatal visits mandatory | Error | Ensure that a value has been reported for number of Antenatal Visits attended during pregnancy is between 0 and 30. The value "99" to be reported if antenatal care was attended but actual number is unable to be determined. |
| 822 | Postal address provided, only residential address required | Warning | The maternal street address should be provided to enable visiting by Child Health Nurses to be directed appropriately. The maternal street address is also used for determining how isolated women are in WA. A street address is preferred to a postal address. If only a postal address can be provided, please advise MCH. |
| 823 | Postcode corresponds to a postal address, only residential postcodes are permitted | Warning | The maternal street address should be provided to enable visiting by Child Health Nurses to be directed appropriately. The maternal street address is also used for determining how isolated women are in WA. A street address is preferred to a postal address. If only a postal address can be provided, please advise MCH. |
| 828 | Perineal trauma cannot be reported if Intact Perineum (01) is already selected | Error | Ensure that value reported 01 for Intact Perineum is accurate, if not remove value 01 and report the correct values. |
| 829 | Perineal Status can only be one degree of tear | Error | Ensure that all values reported for perineal status are accurate. Current data reported indicates two different degrees of tear which is clinically incorrect. The values 05 for Episiotomy and 08 for Other are the only values that can be reported with a degree of trauma i.e. Episiotomy + 3rd degree tear would be reported as both 04 and 05. |
| 830 | Number of infants born equals number of previous CS, Caesarean Last Delivery cannot be No | Error | Ensure that the number reported as number of livebirths previously born (still living and now dead) is accurate, and that number of stillbirths previously born is accurate, and that number of previous CS is accurate. If all correct, then response to question CS last delivery must be changed from 2-No to 1-Yes. |

| Valid ID | Validation message | Val Type | Action |
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| 831 | Record with CS Birth should not have Precipitate Delivery as a Complication of Labour | Error | Ensure that value reported 07 or 08 for method of birth of CS is accurate. If accurate, then remove value 02 for precipitate delivery from complication of labour. These data are clinically incompatible and must be changed. |
| 834 | Number of AN Visits is not valid as cannot be between 31 and 98 | Error | Ensure that the value reported for number of Antenatal Visits attended during pregnancy is between 0 and 30. The value "99" to be reported if antenatal care was attended but actual number is unable to be determined. Any value between 31 and 98 is not acceptable. |
| 835 | Number of AN Visits cannot be 0, if first AN Visit occurred between 1 and 45 weeks gestation | Error | Ensure that the value reported as gestation at first antenatal care visit is accurate. If this number is between 1 and 45 then the number of AN Visits must be at least 1 or if unable to be counted can be 99. The data combination reported is clinically incompatible and must be changed. |
| 836 | Hypertension cannot be reported in Medical Conditions as well as Pregnancy Cond | Error | Ensure that the value reported as hypertensive condition is reported correctly. A hypertensive condition can only be reported as a pregnancy complication arising in pregnancy or as a pre- existing medical condition. For example, Gestational Hypertension and Pre-Eclampsia can only be reported as a pregnancy complication value 11 or 04. Essential hypertension can only reported as pre-existing medical condition value 01. If the woman has Pre-Eclampsia superimposed on Essential hypertension then it must be reported as a pregnancy complication value 12. Each of these conditions cannot be reported in combination. That is a woman cannot have both Pre-Eclampsia and Gestational Hypertension reported. The data combination reported is clinically incompatible and must be changed. |
| 837 | Diabetes cannot be reported in Medical Conditions as well as Pregnancy Condition | Error | Ensure that the value reported as diabetes condition is reported correctly. Diabetes can only be reported as a pregnancy complication arising in pregnancy or as a pre-existing medical condition. For example, Gestational Diabetes can only be reported as a pregnancy complication value 09. Diabetes Type 1 or Diabetes Type 2 can only reported as pre-existing medical condition value 05 or 06. Each of these conditions cannot be reported in combination. That is a woman cannot have both Gestational Diabetes and Diabetes Type 2. The data combination reported is clinically incompatible and must be changed. |
| 847 | Number Previous Caesareans must be numeric | Error | Ensure that the value reported for number of Previous CS is a valid number between 0 and 9. |
| 858 | Pregnancy parity value is not present | Error | Ensure that a value has been reported for number of previous pregnancies resulting in a birth at 20 weeks gestation or greater (Parity). |
| 859 | Pregnancy parity value is outside of the valid range | Error | Ensure that the value reported for number of previous pregnancies resulting in a birth at 20 weeks gestation or greater (Parity) is between 0 and 25. |
| 860 | Pregnancy parity number is greater than previous pregnancies number, one of these numbers must be corrected | Error | Ensure that the number reported as number of previous pregnancies (gravidity) is correct and if correct, then ensure that the number of previous pregnancies resulting in a birth (parity) is correct and is less than or equal to gravidity. |
| 861 | Postnatal blood loss value is not present | Error | Ensure that a value has been reported for number of mLs blood lost in 3rd stage and up to 24 hours post birth (Primary blood loss). If unable to be determined report 99999 mLs. |

| Valid ID | Validation message | Val Type | Action |
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| 862 | Postnatal blood loss value must be between 5 and 20000 or 99999 if unknown | Error | Ensure that the value reported for number of mLs blood lost in 3rd stage and up to 24 hours post birth (Primary blood loss) is between 5 and 20000 mLs. If unable to be determined report 99999 mLs. |
| 863 | Principal reason for Caesarean is not valid reference code | Error | Ensure that the value reported for reason for CS this birth is accurate and that it is included in the valid options able to be reported i.e. is between 01 and 20. |
| 864 | Principal reason for Caesarean has not been recorded for Caesarean birth | Error | Ensure that the value reported for method of birth which includes 07 or 08 for CS is accurate. If accurate, then ensure a reason for CS has been reported as a value between 01 and 20. |
| 865 | Principal reason for Caesarean indicates unsuccessful attempted vaginal delivery and is not consistent with Method of Birth. | Error | Ensure that the value reported for method of birth which includes 07 or 08 for CS is accurate and that 03 or 05 for unsuccessful instrumental delivery not being reported is accurate. If method of birth values reported are accurate, then reason for CS cannot be value 12 unsuccessful assisted delivery and a reason for CS must be reported that is clinically compatible with methods of birth reported. |
| 866 | Principal reason for CS provided is incompatible with No Labour. | Error | Ensure that the onset of labour value reported of 3-No labour is correct, then review actual reason for CS is correct. The current combination is clinically incompatible and must be changed. |
| 867 | Principal reason for Caesarean can only occur in multiple birth and plurality is singleton. | Error | Ensure that the value of 1-Singleton reported for plurality of birth is accurate. If plurality is accurate, then reason for CS cannot be value 11 multiple pregnancy and a reason for CS must be reported that is clinically compatible with plurality of birth. |
| 868 | Principal reason for Caesarean is previous Caesarean and Number of previous Caesareans is 0 | Error | Ensure that the value of 0 for number of previous CS is accurate. If accurate, then reason for CS cannot be value 15 previous CS and a reason for CS must be reported that is clinically compatible with history of CS. |
| 869 | Principal reason for Caesarean can only occur with induction with or without labour and onset of labour is not induction. | Error | Ensure that the value of 1-Spontaneous or 3-No Labour for onset of labour is accurate. If accurate, then reason for CS cannot be value 13 unsuccessful induction as no induction occurred. Reason for CS must be reported that is clinically compatible with onset of labour. |
| 870 | Principal reason for Caesarean is recorded for non-Caesarean birth | Error | Ensure that the value reported for method of birth which does not include either 07 or 08 for CS is accurate. If accurate, then there was no CS and a reason for CS must not be reported. |
| 871 | Principal reason for Caesarean is not reported as Complication of Labour & Delivery | Error | Ensure that the value of 1 or 4 or 5 or 6 or 14 or 15 reported as Reason for CS is accurate. If accurate then values 2 or 3 or 10 or 11 or 12, or 13 (with corresponding ICD code), must be reported as a complication of labour and delivery. As reason for CS cannot be one of these values if this was not a complication of the labour or delivery. |
| 872 | Complications of Pregnancy, Pre- Eclampsia and Gestational Hypertension cannot occur together | Error | Ensure that the value reported as hypertensive condition is reported correctly. Only one hypertensive condition can be reported as either a pregnancy complication arising in pregnancy or as a pre-existing medical condition. Each of these conditions cannot be reported in combination. That is a woman cannot have both Pre-Eclampsia and Gestational Hypertension reported. The data combination reported is clinically incompatible and must be changed. |

| Valid ID | Validation message | Val Type | Action |
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| 873 | Complications of Pregnancy, Pre- Eclampsia and Pre-eclampsia on Essential Hypertension cannot occur together | Error | Ensure that the value reported as hypertensive condition is reported correctly. Only one hypertensive condition can be reported as either a pregnancy complication arising in pregnancy or as a pre-existing medical condition. Each of these conditions cannot be reported in combination. That is a woman cannot have both Pre-Eclampsia and Pre-Eclampsia superimposed on Essential Hypertension reported. The data combination reported is clinically incompatible and must be changed. |
| 874 | Complications of Pregnancy, Gestational Hypertension and Pre- Eclampsia on Essential Hypertension cannot occur together | Error | Ensure that the value reported as hypertensive condition is reported correctly. Only one hypertensive condition can be reported as either a pregnancy complication arising in pregnancy or as a pre-existing medical condition. Each of these conditions cannot be reported in combination. That is a woman cannot have both Gestational Hypertension and Pre-Eclampsia superimposed on Essential Hypertension reported. The data combination reported is clinically incompatible and must be changed. |
| 875 | Medical Condition, Essential Hypertension cannot occur with Gestational Hypertension reported in pregnancy condition | Error | Ensure that the value reported as hypertensive condition is reported correctly. A woman cannot have both Essential Hypertension reported as a pre-existing medical condition and Gestational Hypertension arising in pregnancy. The data combination reported is clinically incompatible and must be changed. |
| 876 | Medical Condition, Type 1 diabetes and Type 2 diabetes cannot occur together | Error | Ensure that the value reported for diabetes is reported correctly. Only one diabetes condition can be reported as a medical condition. Type 1 Diabetes and Type 2 Diabetes are mutually exclusive and a woman cannot have both. The data combination reported is clinically incompatible and must be changed. |
| 877 | Medical Condition, Type 1 diabetes cannot occur with Complication of Pregnancy, Gestational Diabetes | Error | Ensure that the value reported for diabetes is reported correctly. Only one diabetes condition can be reported as either a medical condition or a condition arising in pregnancy. Gestational Diabetes, Type 1 Diabetes and Type 2 Diabetes are mutually exclusive and a woman cannot have more than one. The data combination reported is clinically incompatible and must be changed. |
| 878 | Medical Condition, Type 2 diabetes cannot occur with Complication of Pregnancy, Gestational Diabetes | Error | Ensure that the value reported for diabetes is reported correctly. Only one diabetes condition can be reported as either a medical condition or a condition arising in pregnancy. Gestational Diabetes, Type 1 Diabetes and Type 2 Diabetes are mutually exclusive and a woman cannot have more than one. The data combination reported is clinically incompatible and must be changed. |
| 879 | Type of induction cannot be reported as both None and a type | Error | Ensure that the value reported for onset of labour as 2-Induction is accurate. If accurate, then at least 1 value must be reported as method of induction and this method cannot be 1-None. An induction method of 1-None cannot be reported with any other value for method of induction. The data combination reported is clinically incompatible and must be changed. |

| Valid ID | Validation message | Val Type | Action |
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| 880 | Principal reason for Caesarean is not the same for babies born from this Pregnancy | Error | Ensure that the value of method of birth of all infants born from the pregnancy are accurate and that more than one infant was born by CS. If accurate, then reason for CS of first infant born by CS will be the same for all infants born by that CS. Ensure that all infants born by CS have the same reason for CS reported. |
| 884 | Complication of Labour and Birth is incompatible with Method of Birth - Elective Caesarean | Warning | Confirm both the L&B complication and method of birth reported as a L&B complication that arises in labour is incompatible with an elective CS which can only occur when there is no labour. |
| 885 | Principal reason for Caesarean is incompatible with Method of Birth - Elective Caesarean | Error | Ensure that the value of method of birth of 07 elective CS is accurate. If accurate then Reason for CS reported (1, 4, 5, 6, 8, 10, 12, 13, or 14) is not compatible with this method of birth. |
| 889 | Vaginal Method of Birth is not valid if first and second stage of labour duration is 0 hrs, 0 mins | Error | Ensure that the value of method of birth reported is accurate. If both accurate, then duration of labour must be greater than 0 minutes for both 1st and 2nd stage. It is not clinically compatible to have no minutes of labour for 1st and 2nd stage if an infant was born vaginally. |
| 890 | If Other (99) Pregnancy Complication indicated, must be described with an ICD10 code | Error | Ensure that the value of 99-Other condition for pregnancy complication is accurate. If accurate, then at least one condition must be reported as an ICD-10 code to describe the condition. |
| 891 | If Other (8) Medical Conditions indicated, must be described with an ICD10 code | Error | Ensure that the value of 8-Other condition for pre-existing medical condition is accurate. If accurate, then at least one condition must be reported as an ICD-10 code to describe the condition. |
| 892 | If Other (13) Labour & Birth Complication indicated, must be described with an ICD10 code | Error | Ensure that the value of 13-Other condition for labour and birth complications is accurate. If accurate, then at least one condition must be reported as an ICD-10 code to describe the condition. |
| 893 | If other Pregnancy Complication described with an ICD10 code, then Other (99) Pregnancy Complication must be indicated | Error | Ensure that the value of 99-Other condition for pregnancy complication is reported if any other condition has been reported as an ICD-10 code to describe the condition. |
| 894 | If other Medical Condition described with an ICD10 code, then Other (8) Medical Condition must be indicated | Error | Ensure that the value of 8-Other condition for pre-existing medical condition is reported if any other condition has been reported as an ICD-10 code to describe the condition. |
| 895 | If other Labour & Birth Complication described with an ICD10 code, then Other (13) Labour & Birth Complication must be indicated | Error | Ensure that the value of 13-Other condition for labour and birth complications is reported if any other condition has been reported as an ICD-10 code to describe the condition. |
| 896 | Onset of Labour is not consistent with duration of labour for 1st stage and 2nd stage of labour e.g. if spontaneous onset then 1st stage must be at least 1 minute. | Error | Ensure that the value reported for onset of labour is accurate. If accurate, then duration of labour must be greater than 0 minutes for 1st stage. It is not clinically compatible to have no minutes of labour for 1st stage if labour commenced spontaneously. |

| Valid ID | Validation message | Val Type | Action |
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| 897 | When Onset of Labour is Spontaneous or No Labour, then Method of Induction must only be 01 - None. | Error | Ensure that the value reported for onset of labour is accurate. If accurate, then there was no induction of labour attempted and method of induction must be reported as 1-None. |
| 898 | When Onset of Labour is Induction or No Labour, then Method of Augmentation must only be 01 - None. | Error | Ensure that the value reported for onset of labour is accurate. If accurate, then there was no spontaneous onset of labour and thus labour could not be augmented. Method of augmentation must be reported as 1-None. |
| 899 | If method of Augmentation is value 01 – None, then no other augmentation method may be reported. | Error | Ensure that no Augmentation of labour occurred, if so, then only 01-None can be reported as method of Augmentation. If there was an augmentation then onset of labour must be reported as 1-Spontaneous, and the method of Augmentation must be reported and 01-None cannot be reported. |
| 900 | If method of Analgesia in labour is value 01 – None, then no other Analgesia method may be reported. | Error | Ensure that no Analgesia in labour was administered, if so, then only 01-None can be reported as method of Analgesia during labour. If there was analgesia during labour, then the method must be reported and 01-None cannot be reported. |
| 901 | If place of birth = 0906 (Homebirth) then Analgesia in labour values for epidural and/or spinal are not valid methods. | Error | Ensure that the site of birth reported (homebirth) is accurate. If accurate, then it is extremely unlikely that epidural and/or spinal was administered as analgesia during labour. If this unlikely scenario occurred and the data reported is accurate, please contact the Maternal and Child Health Unit by email (birthdata@health.wa.gov.au) to explain the scenario to be recorded. |
| 902 | If Caesarean Last Delivery is 1 (Yes) then Previous Caesarean Indicator must be 1 (Yes) | Error | Ensure that the value of 1-Yes recorded for Caesarean Last Delivery is accurate, if accurate than the number of Previous CS must be more than 0 and whether the woman had a previous CS cannot be 2-No. This is an unfeasible clinical scenario and reporting must be corrected. |
| 903 | Number of previous pregnancies is less than number of infants born previously, Previous Multiple Pregnancy is not set to 1 (Yes) | Error | Ensure that the number of previous pregnancies reported and whether the value of 2-No for a previous multiple pregnancy is accurate. If accurate, then the number of infants born alive or stillborn cannot be more than the total number of previous pregnancies. This is an unfeasible clinical scenario and reporting must be corrected. |
| 904 | Number of previous pregnancies is >0 and the number of infants born previously is < 2 and Previous Multiple Pregnancy is set to 1 (Yes) - invalid combination | Error | Ensure that the total number for infants born previously alive or stillborn of 0 or 1 is accurate. If accurate, then the value of 1-Yes for a previous multiple pregnancy cannot be accurate. This is an unfeasible clinical scenario and reporting must be corrected. |
| 905 | Gestation at 1 st Antenatal visit must be between 1 and 45 or 98 or 99 | Error | Ensure that the gestation at first Antenatal visit is between 1 and 45 completed weeks. Report 98 if no antenatal care was attended. Report 99 if gestational age at first Antenatal visit was unable to be determined. |
| 906 | Gestation at 1st Antenatal visit if not 98 or 99 cannot be greater than infant's estimated gestational age in weeks at time of birth. | Error | Ensure that the estimated gestation of infant at time of birth is accurately reported. If accurate, then the value reported for gestation at first antenatal care visit cannot be more than the gestation of infant at birth. This is an unfeasible clinical scenario and must be corrected. Report 98 if no antenatal care was attended. Report 99 if gestational age at first Antenatal visit was unable to be determined. |

| Valid ID | Validation message | Val Type | Action |
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| 907 | Number of AN Visits cannot be between 1 and 30 or 99 if Estimated Gestation at 1st Antenatal Visit value is 98 (no antenatal care) | Error | Ensure that the estimated gestation of infant at time of birth is accurately reported as 98 - no antenatal care. If accurate, then the value reported for number of AN Visits reported must be 0. This is an unfeasible clinical scenario and must be corrected. |
| 908 | Number of Previous Caesareans must be 0 if Previous Caesarean Indicator is No. | Error | Ensure that the value of 2-No recorded for Previous Caesarean? is accurate, if accurate than the number of Previous CS must be 0. This is an unfeasible clinical scenario and reporting must be corrected. |
| 909 | Estimated date of delivery is indicated to be based upon LMP date and is not between 38 and 42 weeks after LMP, please edit the incorrect date or dates. | Error | Ensure that the dates reported for LMP and EDD are accurate. EDD is a mandatory data item, LMP is only mandatory if the dates are certain. A calculation of difference between these dates does not equal 40 weeks +/- 2 weeks indicating that one of the dates reported is not clinically feasible. If LMP is unknown then do not report a date. |
| 911 | If Previous Multiple Birth Indicator = 2-No, then Previous Parity must equal number of previous infants born alive (still live and now dead) and stillborn. | Error | Ensure that the value reported for previous multiple birth indicator of 2-No is accurate. If accurate, then the number of previous pregnancies resulting in a birth at 20 weeks gestation (Parity) must equal the total number of infants born alive or stillborn. The data reported is not clinically feasible and must be corrected. |
| 912 | If Caesarean Last Delivery = 2-No, then total number of previous CS must be 0 or less than Previous Parity | Error | Ensure that the value of 2-No recorded for CS last delivery is accurate, if accurate than the number of Previous CS must be 0 or may be at least 1 less than the total number of previous pregnancies resulting in a birth at 20 weeks or greater gestation (Parity). This is an unfeasible clinical scenario and reporting must be corrected. |
| 913 | Smoking During Pregnancy Indicator is No but average number of cigarettes before or beyond 20 weeks of pregnancy is not 0 or 999 | Error | Ensure that the value between 001 and 998 reported for average number of cigarettes before 20 weeks gestation and after 20 weeks gestation is accurate. If correct, then it is known that the woman smoked tobacco during pregnancy and thus Smoking during pregnancy indicator must be 1-Yes. 999 is reported as average number of cigarettes if it is unable to be determined if the woman smoked. 998 is to be reported if the woman smoked occasionally. |
| 914 | Average number of cigarettes smoked before 20 weeks of pregnancy is very high (greater than 50 per day) | Error | Ensure that the value between 051 and 997 reported for average number of cigarettes before 20 weeks gestation is accurate. To smoke more than 50 cigarettes per day seems improbable as it equates to a cigarette every 30 minutes even while sleeping. If accurate, please contact the Maternal and Child Health Unit to explain why the data is accurate. 999 is reported as average number of cigarettes if it is unable to be determined if the woman smoked. 998 is to be reported if the woman smoked occasionally. |

| Valid ID | Validation message | Val Type | Action |
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| 915 | Average number of cigarettes smoked after 20 weeks of pregnancy is very high (greater than 50 per day) | Error | Ensure that the value between 051 and 997 reported for average number of cigarettes after 20 weeks gestation is accurate. To smoke more than 50 cigarettes per day seems improbable as it equates to a cigarette every 30 minutes even while sleeping. If accurate, please contact the Maternal and Child Health Unit to explain why the data is accurate. 999 is reported as average number of cigarettes if it is unable to be determined if the woman smoked. 998 is to be reported if the woman smoked occasionally. |
| 916 | Method of Birth is Elective CS (7), but Onset of Labour is not "No Labour (3)". One is incorrect. | Error | Ensure that the value reported for method of Birth 07 for Elective CS is accurate. If accurate, then onset of labour must be reported as 3-No labour. If labour commenced before birth then urgency of CS must be reported as Emergency value 08. |
| 917 | If Method of Birth for baby born first was Elective CS (7) then other babies from pregnancy must also have birth by Elective CS (7). | Error | Ensure that the value reported for method of Birth 07 for Elective CS for first infant of a multiple birth is accurate. If accurate, then all infants born from the pregnancy must have method of birth of 07-Elective CS also. |
| 918 | If Previous Caesarean Indicator = 1 (Yes) then number of previous Caesareans must be equal to or less than Previous Parity | Error | Ensure that the value of 1-Yes recorded for previous CS is accurate, if accurate than the number of Previous CS must be equal to or less than the total number of previous pregnancies resulting in a birth at 20 weeks or greater gestation (Parity). This is an unfeasible clinical scenario and reporting must be corrected. |
| 919 | Baby's length of stay is 10 or more days at birth site, days in SCN is blank (or hours of SCN not reported) | Warning | Confirm that a baby stayed at the birth site more than 10 days but did not require admission to the Special Care Nursery. This length of stay is unusual. |
| 920 | If baby BBA = "yes" then Analgesia in labour values for epidural and/or spinal are not valid methods. | Error | Ensure that the value reported for born before arrival (BBA) of 1-Yes is accurate. If accurate, then it is very unlikely that an epidural or spinal would have been administered for analgesia during labour. If this very unlikely clinical scenario did occur then contact Maternal and Child Health Unit to advise of actual case details. |
| 921 | If Birth mode includes 02, 03, 04,05, 07,08 then Birth attendant must include 1 or 2 | Error | Ensure that the method of birth value/s reported were accurate. If accurate, then birth attendants must include a medical officer. |
| 922 | Mother is reported as Aboriginal, TSI or Aboriginal and TSI and baby is reported as "other" aboriginal status. This is unlikely. | Warning | Confirm that Aboriginal or Torres Strait Islander status has been reported correctly for both mother and infant. It is very unlikely that a mother is Aboriginal or Torres Strait Islander and her baby is NOT Aboriginal or Torres Strait Islander. |
| 924 | If method of Anaesthesia at delivery is value 01 – None, then no other Anaesthesia method may be reported. | Error | Ensure that there was no Anaesthesia at delivery. If no Anaesthesia then report 1-None. If there was a method of Anaesthesia at delivery then 1-None cannot be included in methods reported. |

| Valid ID | Validation message | Val Type | Action |
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| 925 | If infant is stillborn, baby separation must be 8 (died) and separated to establishment must be 912 (deceased) | Error | Ensure baby birth status is accurately reported as either 2-stillborn, 3-stillborn (antenatal) or 4- stillborn (intrapartum). If accurate, then baby separation/outcome must be reported as 8-died and cannot be blank and separated to establishment value must be 912 -deceased. |
| 926 | If method of Induction is value 01 – None, then no other induction method may be reported. | Error | Ensure that there was no Induction method used. If accurate, then report 1-None. If there was an induction method used then 1-None cannot be included in methods reported. |
| 927 | The reported maternal height is equal to reported maternal weight. Are both values correct? | Warning | Confirm maternal height and weight reported. They are both equal i.e. 150cm high and 150kg in weight. This combination is possible but may indicate a data entry error. |
| 928 | The average number of Cigs smoked per day is higher after 20 weeks then before 20 weeks. Did the woman increase her tobacco smoking in pregnancy? | Warning | Confirm that average number of Cigarettes smokes per day has been reported accurately. It is possible that a woman increases number of cigarettes smoked during pregnancy but it is unlikely. |
| 929 | Combination of birthweight with estimated gestational age is unlikely | Warning | Confirm that infant's birthweight and estimated gestational age at birth is reported accurately. A combination like 1800 grams and 41 weeks gestation is unlikely. |
| 930 | Combination of estimated gestational age with birthweight is unlikely | Warning | Confirm that infant's birthweight and estimated gestational age at birth is reported accurately. A combination like 28 weeks gestation and 3200 grams is unlikely. |
| 931 | Gest age calculated from Estimated date of delivery and Baby DOB is more than 7 days different from estimated gestational age reported. | Error | Ensure that the EDD reported is accurate. Ensure that the estimated gestation of infant at time of birth is accurately reported. The calculation of difference between EDD (when baby would be 40 weeks gestation and actual baby DOB should equal the estimated gestation of infant at time of birth within 7 days accuracy. data reported indicates that either EDD or estimated gestation or infant's DOB is not accurately reported. This is an unfeasible clinical scenario and must be corrected. |
| 932 | A combination of birth attendant of Obstetrician and a baby born before arrival at site is unlikely. | Warning | Confirm that infant's birth attendant and born before arrival Yes/No response have been reported accurately. It is unlikely that an obstetrician was in attendance when a baby was born before arrival at the hospital. |
| 933 | A combination of baby born before arrival with this birth attendant and birth method is unlikely. | Warning | Confirm that infant's birth attendant, method of birth and born before arrival Yes/No response have been reported accurately. For example, it is unlikely that an obstetrician was in attendance or that vacuum extraction was performed when a baby was born before arrival at the hospital. |
| 934 | If baby BBA = "yes" then Anaesthesia at delivery values for epidural, spinal or general anaesthetic are not valid. | Error | Ensure that the value reported for born before arrival (BBA) of 1-Yes is accurate. If accurate, then it is very unlikely that an epidural or spinal would have been administered for anaesthesia at delivery. If this very unlikely clinical scenario did occur then contact Maternal and Child Health Unit to advise of actual case details. |
| 935 | Number of days between infant DOB and Separation date is less than the | Error | Ensure that the infant's DOB is reported accurately. Ensure that the infant's separation date is reported accurately. Ensure that the number of days spent in SCN at birth site is accurately reported. The calculation of days between infant's DOB and discharge date is less than the |

| Valid ID | Validation message | Val Type | Action |
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| | number of days spent in SCN during the admission at birth site. | | number of days the infant spent in SCN. This is an unfeasible clinical scenario and must be corrected. |
| 936 | More than 0 days in SCN at birth site was reported. The birth site reported does not have a SCN. | Error | Ensure that the number of days spent in SCN at birth site is accurately reported. For sites that do not have a SCN it is possible that an ill infant is cared for a short period before transfer. If this occurred please contact the Maternal and Child Health Unit to explain the details of the case. |
| 937 | Maternal BMI calculated from height and weight reported is not between 15 and 55. This is unlikely | Warning | Confirm maternal height and weight reported. A BMI calculated from them is unusually low or high. This combination is possible but may indicate a data entry error. |
| 939 | Baby length is greater than 57 cm but weight is less than 3500 grams. This is unlikely. | Warning | Confirm baby length and weight reported. It is unlikely that such a long baby would have such a low birthweight. |
| 942 | Method of birth value combination is not clinically possible | Error | Ensure that the value/s reported for method of birth are accurate. The combination provided is not clinically feasible e.g. breech extraction and vacuum extraction for one infant and must be corrected. |
| 943 | When Onset of Labour was Induced and duration of labour was 0 minutes then Method of Birth must be Emergency CS. | Error | Ensure that the value of 2-induction for Onset of labour is accurately reported. Ensure that the duration of labour was 0 hours and 0 minutes in total i.e. labour did not commence before CS was warranted. If both accurate then Method of birth must be 08 - Emergency CS. |
| 944 | The duration of labour reported is not valid for method/s of birth reported. | Error | Ensure that the duration of labour was accurately reported. If duration of labour was 0 hours and 0 minutes in total then only a method of birth of CS 07 or 08 value can be reported. If duration of labour was not 0 hours and 0 minutes then value 07 - elective CS cannot be reported. |
| 945 | Second stage of labour of reported is not valid when first stage is 0 hours and 0 minutes. | Error | Ensure that the duration of labour for first stage was accurately reported as 0 hours and 0 minutes in total. If accurate, then second stage of labour cannot be more than 0 hours and 0 minutes. |
| 948 | If onset of labour = 3-No Labour, then method of birth must include 7 or 8 | Error | Ensure that the value of 3-No labour for Onset of labour is accurately reported. If accurate, then method of birth must include either 7 - elective CS or 8 - emergency CS. |
| 949 | If separation date is > than current date then error | Error | Review and correct the infant's separation (discharge or died) date as it is not reported accurately. The date reported is a future date or was after the date the record was submitted to the Midwives Notification System. |
| 950 | If baby DOB > than current date then error | Error | Review and correct the infant's date of birth as it is not reported accurately. The date reported is a future date or was after the date the record was submitted to the Midwives Notification System. |
| 962 | If Failure to Progress and prolonged 1st & 2nd stage is reported as a Complication of Labour and Birth then 1st stage of labour must be more than 0 minutes. | Error | Ensure that 1st stage of labour is greater than 0 minutes, if complications of labour and birth include failure to progress <= 3cm, failure to progress > 3 cm, 20 Prolonged 1st stage &/or 21 Prolonged 2nd stage |

| lid ID | Validation message | Val Type | Action | | | | |
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| 969 | Interpreter Service Required indicator is not present | Error | Ensure the record has one interpreter service required value reported. | | | | |
| 970 | Mother's language is not present | Error | Ensure the record has one mother's language value reported, where interpreter required yes. | | | | |
| 971 | Influenza vaccination during pregnancy value is not present | Error | Ensure the record has one influenza vaccination during pregnancy value reported. | | | | |
| 972 | Pertussis vaccination during pregnancy value is not present | Error | Ensure the record has one pertussis vaccination during pregnancy value reported. | | | | |
| 973 | Principal reason for induction of labour value is not present | Error | Ensure the record has one principal reason for induction of labour value reported, where the onset of labour is induction. | | | | |
| 974 | Water immersion at birth value is not present | Error | Ensure the record has one water immersion at birth value reported. | | | | |
| 976 | Onset of labour is 2 and no value for reason for induction selected | Error | Ensure the record has one principal reason for induction of labour value reported, where the onset of labour is induction. | | | | |
| 977 | Onset of labour is not 2 and value for reason for induction selected | Error | Ensure the record does not have a principal reason for induction of labour value reported, where the onset of labour is not induction. | | | | |
| 978 | Water immersion at birth value is invalid, must be 1 or 2 | Error | Ensure the records' water immersion at birth value is valid. | | | | |
| 979 | Interpreter Service Required value is invalid, must be 1 or 2 | Error | Ensure the records' interpreter service required value is valid. | | | | |
| 980 | Principal reason for induction is not valid reference code | Error | Ensure the records' principal reason for induction value is valid. | | | | |
| 981 | Influenza vaccination during pregnancy value is not valid reference code | Error | Ensure the records' influenza vaccination during pregnancy value is valid. | | | | |
| 982 | Pertussis vaccination during pregnancy value is not valid reference code | Error | Ensure the records' pertussis vaccination during pregnancy value is valid. | | | | |
| 983 | Mother's language value is not valid reference code | Error | Ensure the records' mother's language value is valid. | | | | |
| 984 | Mother's language contains a value but Interpreter required is 2 (No) | Error | Ensure the record does not have a mother's language value reported, where interpreter required is no. | | | | |
| 985 | No value for Mother's language and interpreter required is 1 (Yes) | Error | Ensure the record has one mother's language value reported, where interpreter required is yes. | | | | |
| 999 | Alcohol frequency value is not present | Error | Ensure the record has the alcohol frequency value reported. | | | | |
| 1000 | Number alcohol drinks value is not present | Error | Ensure the record has the number alcoholic drinks value reported. | | | | |
| 1001 | Screening for depression/anxiety value is not present | Error | Ensure the record has the screening for depression/anxiety value reported. | | | | |

| Valid ID | Validation message | Val Type | Action |
|----------|---|----------|--|
| 1002 | Follow up for perinatal mental health value is not present | Error | Ensure the record has the follow up for perinatal mental health value reported. |
| 1006 | Alcohol frequency value is not valid reference code | Error | Ensure the alcohol frequency value is valid. |
| 1007 | Number alcohol drinks value is not valid reference code | Error | Ensure the number alcoholic drinks value is valid. |
| 1008 | Screening for depression/anxiety value is not valid reference code | Error | Ensure the screening for depression/anxiety value is valid. |
| 1009 | Follow up for perinatal mental health value is not valid reference code | Error | Ensure the follow up for perinatal mental health value is valid. |
| 1010 | Screening for depression/anxiety during 3rd trimester value is not valid reference code. Mandatory for Stork sites only | Error | Ensure the screening for depression/anxiety during 3rd trimester value is valid. |
| 1011 | Follow up for perinatal mental health during 3rd trimester value is not valid reference code. Mandatory for Stork sites only | Error | Ensure the follow up for perinatal mental health during 3rd trimester value is valid. |
| 1014 | The duration of labour reported is not valid for Principal reason for Caesarean | Error | Ensure that 1st stage of labour is greater than 0 minutes if Principal reason is Lack of Progress in the 1st stage, 4cm to <10cm. |
| 1015 | The duration of labour reported is not valid for Principal reason for Caesarean | Error | Ensure that 1st and 2nd stages of labour are greater than 0 minutes if Principal reason is Lack of Progress in the 2nd stage. |
| 1016 | If alcohol frequency during pregnancy = 01 never the number of standard drinks in typical day must be 00 zero | Error | Ensure that alcohol frequency during pregnancy is accurately reported as 01 Never. If accurate, then Number of standard drinks in typical day must be 00 Zero. |
| 1017 | The alcohol frequency during pregnancy reported is not valid for number of standard drinks on a typical day | Error | Ensure that value reported for alcohol frequency during pregnancy is accurately reported. If accurate, then number of standard alcohol drinks on a typical day must be greater than 00 zero or 99 unknown. |
| 1018 | The Principal reason for Caesarean is not valid for onset of labour and complication of labour & delivery | Error | Review and correct the Principal reason for Caesarean as it is not reported accurately when onset of labour is Induced, Complication of Labour & Delivery is Failure to progress <=3cm and Method of birth is Emergency Caesarean. |
| 1019 | When Principal reason for Caesarean indicates unsuccessful attempted vaginal delivery duration of labour 2nd stage must be greater than 0 minutes | Error | Ensure that 2nd stage of labour is greater than 0 minutes if Principal reason for Caesarean reported as unsuccessful attempt at assisted delivery. Ensure that method of birth value/s are accurately reported as vacuum unsuccessful and/or forceps unsuccessful. |

| Valid ID | Validation message | Val Type | Action |
|----------|--|----------|---|
| 1025 | Check if baby length accurate as | Warning | Ensure baby length accurately reported greater than 57cm. |
| | 58cm or longer has been reported. | | |
| 1026 | The duration of labour reported | Error | Ensure unsuccessful induction of labour reported accurately for complication of labour and |
| | indicates that labour occurred and | | delivery. If accurate, then duration of labour 1st stage must be 0 minutes. |
| | therefore the unsuccessful induction | | |
| | of labour reported in complication of | | |
| 1007 | labour and delivery is incorrect. | - | Ensure unsuccessful industion of labour reported accurately for complication of labour and |
| 1027 | If the complication of labour and | Error | Ensure unsuccessful induction of labour reported accurately for complication of labour and |
| | delivery unsuccessful induction of labour is correct then onset of labour | | delivery. If accurate, then Onset of Labour must be Induced. |
| | must be induced. | | |
| 1028 | The duration of labour reported is | Error | Ensure that 1st stage of labour is greater than 0 minutes, If Principal reason for Caesarean |
| 1020 | not valid for Principal reason for | LIIOI | lack of progress <= 3cm. Unsuccessful induction may need to be reported for Principal reason |
| | Caesarean. Unsuccessful induction | | for Caesarean when onset of labour Induced. |
| | may need to be reported for | | |
| | Principal reason for Caesarean | | |
| | instead. | | |
| 1029 | Intended place of birth at onset of | Error | Ensure intended place of birth at onset of labour value reported accurately for site. |
| | labour reported as Home is not valid | | |
| | for site | | |
| 1042 | As the reason for Caesarean is 1 | Error | Please check value for complication of pregnancy is reported correctly. If it is reported |
| | (fetal compromise) there must be | | correctly, check if value of 1 or 2 is reported in reason for Caesarean. |
| | 30, 32 and/or 42 in complications of | | |
| | pregnancy OR 2 in labour and birth | | |
| | complications. | _ | |
| 1043 | If Apgars at 1 minute is <= to 5 | Error | Please check Apgar at 1 minute is reported correctly. If correct, check all resuscitation values |
| | Resus must report 4,5,6,7 or 8 | | are added. |
| 1044 | If Apgars at 5 minute is <= to 7 | Error | Please check Apgar at 5 minute is reported correctly. If correct, check all resuscitation values |
| 1044 | Resus must report 4,5,6,7 or 8 | Enor | are added. |
| 1048 | The Principal Reason for induction | Warning | Ensure that the gestational age is correct, if correct ensure that principal reason for Induction |
| 1040 | of prolonged pregnancy (>=41 | warning | of labour is correct. |
| | weeks) does not match the | | |
| | gestational age provided | | |
| 1049 | The Pregnancy complication | Warning | Ensure that the pregnancy complication and birth status are correct. |
| | indicates fetal death but birth status | | |
| | does not match. | | |
| 1050 | The Alcohol frequency > 20 weeks | Warning | Ensure that frequency of drinking alcohol > 20 weeks and number of alcohol drinks > 20 |
| | indicated never drank but number of | J. | weeks are correct. |
| | drinks > 20 weeks is NOT 0. | | |

| Valid ID | Validation message | Val Type | Action |
|----------|--|----------|---|
| 1051 | The Alcohol frequency > 20 weeks indicated they drank alcohol but number of drinks > 20 weeks is 0. | Warning | Ensure that frequency of drinking alcohol > 20 weeks and number of alcohol drinks > 20 weeks are correct. |
| 1052 | Estimated Gestation must be reported as whole weeks + days 0 to 6 | Error | Ensure the record has a gestational age (as estimated at time of birth) reported in weeks and days i.e. 38+6 |
| 1065 | If gestation is between 20 - 34 weeks and birth weight is below 2800grams then must have admission to special care nursery or separation = transfer. | Error | Ensure that gestation, weight, and separation of infant are all correct as confirmed by EDD. |
| 1067 | Screening for family violence value is not present | Error | Ensure the record has the screening for family value reported. |
| 1068 | Value provided for screening for family violence is not a valid value | Error | Ensure the screening for family violence value is valid |
| 1069 | The principal reason for induction of late term pregnancy (40+0 to 40+6 weeks) does not match gestational age provided. | Error | Ensure that the gestational age is correct, if correct ensure that principal reason for induction of labour is correct. |
| 1070 | Primary maternity model of care value is not present | Warning | Ensure the record has a primary maternity model of care value reported. |
| 1071 | Primary maternity model of care value provided does not match a maternity model of care available during this pregnancy. | Warning | Ensure Primary maternity model of care value provided is one from the approved list. |
| 1072 | Maternity model of care at the onset of labour value is not present | Warning | Ensure the record has a maternity model of care at the onset of labour value reported. |
| 1073 | Maternity model of care at the onset of labour value provided does not match a maternity model of care available at the time of this birth. | Warning | Ensure Maternity model of care at the onset of labour value provided is one from the approved list. |
| 1083 | Syphilis screening at first antenatal before 28 weeks value cannot be null for delivery dates on 1st July 2023 or beyond | Error | Ensure the record has a value for Syphilis screening at first antenatal before 28 weeks reported. |

| Valid ID | Validation message | Val Type | Action |
|----------|--|----------|---|
| 1084 | Value provided for field Syphilis screening at first antenatal is not valid. | Error | Ensure Syphilis screening at first antenatal value provided is one from the approved list. |
| 1085 | Syphilis screening value between 28 and 35 weeks cannot be null for delivery dates on 1st July 2023 or beyond | Error | Ensure the record has a 'Syphilis screening between 28 and 35 weeks' value reported. |
| 1086 | Value provided for field Syphilis screening between 28 and 35 weeks is not valid. | Error | Ensure 'Syphilis screening between 28 and 35 weeks' value provided is one from the approved list. |
| 1087 | Syphilis screening value after 36 weeks cannot be null for delivery dates on 1st July 2023 or beyond | Error | Ensure the record has a 'Syphilis screening value after 36 weeks' value reported. |
| 1086 | Value provided for field Syphilis screening after 36 weeks is not valid | Error | Ensure 'Syphilis screening value after 36 weeks' value provided is one from the approved list. |

Additional validation rules are managed by the staff of the MCH or Data Quality team. These additional rules are not described in this Manual.

Section 3

7 Access to HSECS Intranet Application

7.1 Internet Browser

Microsoft Edge is the browser of choice. Google Chrome or Firefox may not work as expected.

7.2 Approval to access the HSECS Intranet Application

All 'Edit Reports' made available for download will be stored in directories that have access managed through security groups assigned for each establishment.

Membership of a security group will be limited to WA Health staff that have responsibility for managing distribution of 'edit reports' and/or validation of MNS records.

A request for access form is to be used by WA Health employees and is available via email to <u>birthdata@health.wa.gov.au</u>.

A completed form must be:

- Submitted to birthdata@health.wa.gov.au
- Approved by the Principal Data Management Officer for MNS.
- Forwarded to Data Information Systems (DIS) for actioning.
- Completed with DIS emailing applicant with advice of Username and instructions for using the HSECS Intranet Application.

The new user should immediately ensure their login and functions work as expected.

Staff of the Maternal and Child Health or Data Quality Teams provide support to users on using this system and managing the MNS validation process.

7.3 Password reset for the HSECS intranet application

7.3.1 Introduction

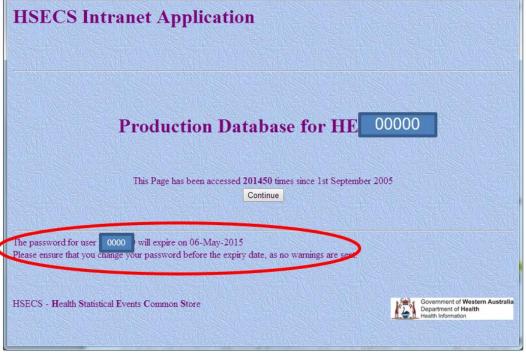
Passwords must be reset every 90 days or access will expire.

Users are notified of their password expiry date at the bottom left corner of the Login confirmation form.

Your HSECS password is not aligned with your Active Directory (AD) password required for email, Stork etc.

7.3.2 Change password

1. Login to HSECS Intranet Application:



- 2. Select the "Continue" button displayed in the above form
- 3. All options are displayed like below.

| | HMDS Query Batches | |
|--|------------------------|--|
| | HMDS Extract Retrieval | |
| | HMDS Change Password | |
| | | |

4. Select "Change Password" button or hyperlink at bottom of page to display form below:

| | Current Password | | | | |
|----------------------|----------------------|--|--|--|--|
| | New Password | | | | |
| Une classes of the s | Confirm New Password | | | | |

- 5. Complete this form and select "Process Change".
- 6. A password must be at least 6 characters with at least 1 numeric value. For example "tarzan1" or "w1nd0w" are both acceptable passwords.
- 7. Passwords can never be reused.
- 8. HSECS provides notice to user of success of password change.



This document can be made available in alternative formats on request for a person with a disability.

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