

# WELSH INFORMATION STANDARDS BOARD

<b>DSC Notice:</b>	DSCN 2020 / 02
<b>Date of Issue:</b>	5 <sup>th</sup> February 2020

<b>Ministerial / Official Letter:</b> n/a	<b>Subject:</b> Maternity Indicators Data Set (AMD)
<b>Sponsor:</b> Karen Jewell, Nursing Officer for Maternity and Early Years, Office of the Chief Nursing Officer, Health and Social Services Group, Welsh Government	
<b>Implementation Date:</b> 1 <sup>st</sup> March 2020	

## DATA STANDARDS CHANGE NOTICE

A Data Standards Change Notice (DSCN) is an information mandate for a new or revised information standard.

This DSCN was approved by the Welsh Information Standards Board (WISB) at its meeting on the 18<sup>th</sup> September 2019 (out of committee).

**WISB Reference:** ISRN 2019 / 007

### Summary:

To update the Maternity Indicators Data Set and associated definitions

### Data sets / returns affected:

- Maternity Indicators Data Set

Please address enquiries about this Data Standards Change Notice to the Data Standards Team in NHS Wales Informatics Service

E-mail: [data.standards@wales.nhs.uk](mailto:data.standards@wales.nhs.uk) / Tel: 02920502539

The Welsh Information Standards Board is responsible for appraising information standards. Submission documents and WISB Outcomes relating to the approval of this standard can be found at:

<http://howis.wales.nhs.uk/sites3/page.cfm?orgid=742&pid=24632>

## **DATA STANDARDS CHANGE NOTICE**

### Introduction

DSCN 2016/02 mandated the introduction of the Maternity Indicators Data Set and associated definitions.

Following a review of the standard, some amendments are being made and further clarification is being provided.

### Description of Change

To update and clarify details in relation to the collection and provision of the Maternity Indicators Data Set.

## Data Dictionary Version

Where applicable, this DSCN reflects changes introduced by DSCN and/or DDCN since the release of version 4.10 of the NHS Wales Data Dictionary.

The changes introduced by such DSCNs will be published in version 4.11 of the NHS Wales Data Dictionary.

## Actions Required

Actions for Local Health Boards:

- Ensure that the local data warehouse infrastructure is set up to enable data (relating to the Maternity Indicators data set) to be extracted via a SQL-to-SQL view from the Local Health Board data warehouse into the national (NWIS) data warehouse.
  - A temporary arrangement that had been in place to allow some Local Health Boards to provide data via csv files has now ended.
- Ensure data is available for NWIS to collect on a monthly basis, by the 15th calendar day of each month.

Actions for the NHS Wales Informatics Service:

- Update the relevant tables and processes to allow for the increase in length of two data items.

## **Appendix A: Table reflecting areas that are impacted as a result of this DSCN**

The following table shows where there are changes to the scope and/or definitions of applicable data sets, data items, terms and other associated areas that are linked with the changes documented within this DSCN.

Each data definition type is listed in alphabetical order and is shown in the sequence in which it appears in this DSCN.

<b>Data Definition Type</b>	<b>Name</b>	<b>New/Retired/Changed</b>	<b>Page Number</b>
Patient Level Data Set	Maternity Indicators Data Set	Changed	5
Data Item	Gestation at onset of labour	Changed	8
Data Item	Gravida	Changed	8
Data Item	Maternal Weight at 36-38 weeks or onset of labour	Changed	9
Data Item	Maternal Weight at Initial Assessment / Booking	Changed	9
Data Item	NHS Number	Changed	10
Data Item	Sex (of Baby)	Changed	12
Data Item	Site Code (of Treatment)	Changed	12

## **Appendix B: Highlighted changes to be made to the NHS Wales Data Dictionary**

Changes to the NHS Wales Data Dictionary are detailed below, with new text being highlighted in **blue** and deletions are shown with a **strikethrough**. The text shaded in **grey** shows existing text copied from the NHS Wales Data Dictionary.

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### a) Amendment to the Maternity Indicators Data Set under 'Patient Level Data Sets'

#### **Maternity Indicators Data Set (MI DS)**

##### **Return Submission Details**

Data is to be extracted via a SQL-2-SQL view from the Local Health Boards data warehouse into the national (NWIS) data warehouse.

Full details of this implementation can be found here [Maternity Dataset Technical Implementation](#).

The data will be extracted on a daily basis. However this does not mean that the data has to be up to date on a daily basis – the intention is simply to allow flexibility into when LHBs would like to make any new data available. **LHBs are required to populate their data warehouse prior to the 15<sup>th</sup> of each month with data relating to events that took place up to and including the end of the previous month.**

~~Any publications requiring the data to be updated by certain time point in time every month across all the health boards, for a consistent viewpoint of maternity information for the whole of Wales, will require a monthly deadline date to meet the reporting requirements – this will be confirmed in a subsequent DSCN.~~

##### **Patient Security & Confidentiality**

'Patient Name' and 'Patient Usual Address' (not 'Postcode of Usual Address') should not be populated in the Maternity Indicators Data Set where a valid NHS Number is present.

A valid NHS Number is one that has passed the check digit calculation on entry into the source system. If an NHS Number is not valid (i.e. does not conform with the check digit algorithm) then Patient Names and Patient Usual Addresses should not be removed, as the reliability of the NHS Number will not be known.

The NHS Number Status Indicator is a mandatory data item within the Maternity Indicators data set. 'Patients Name' and 'Patients Usual Address' should be removed when a valid NHS Number is present, even if the NHS Number Status Indicator does not have a value of 'nn - Number present and traced using Welsh NHS AR' or '01 - Number present and traced'.

##### **Scope**

The scope of the data is as follows:

- The Maternity Indicators Data Set captures data relating to the woman at initial assessment and to mother and baby (or babies) for all births. This relates to initial assessment and birth activity undertaken in Wales only. Each Health Board must make available data in relation to the initial assessments and/or birth events which they managed.

- For example, if they only carried out the initial assessment the Health Board would only be required to provide the initial assessment data. This is further detailed in the technical specification (see 'return submission details').
- Where the initial assessment and birth events take place in different Health Boards, data will be linked nationally by the NHS Wales Informatics Service.
- Velindre NHS Trust are excluded from this requirement, as they do not provide any maternity services.
- Monthly activity data must include only initial assessment and birth activity that took place in the previous month. No initial assessment activity that took place prior to 1<sup>st</sup> April 2014 or birth activity that took place prior to 1<sup>st</sup> April 2015 should be included. All activity from those dates onwards, up until and including the day prior to the start of the current month should be included.

## Data Set Structure

### 1) Data items relating to the Initial Assessment

Data Items Relating to Mother / Woman	Format
Patient Name	Unstructured alpha numeric 70 or structured with two alpha character elements
Patients Usual Address	175 character alpha numeric
NHS Number	10 digit numeric
NHS Number Status Indicator	2 digit numeric
Case Record Number	10 character alpha numeric
Postcode of usual address	8 character alpha numeric
Organisation Code (Code of Provider)	5 character alpha numeric
Organisation Code (LHB Area of Residence)	3 character alpha numeric
Birth Date (Woman)	8 digit numeric , CCYYMMDD
Ethnic Category Group (Woman)	1 alpha character
Date of Initial Assessment / Booking Visit	CCYYMMDD
Data Items Relating to the Pregnancy / Initial Assessment	Format
Site Code (of Treatment)	5 character alpha numeric
Gestation at Initial Assessment / Booking Visit	2 digit numeric
Parity	1 digit numeric
Gravida	±2 digit numeric
Maternal Weight at Initial Assessment / Booking Visit	45 character alpha numeric, kg.g
Maternal Height at Initial Assessment / Booking Visit	3 digit numeric
Smoker at Initial Assessment / Booking Visit	1 digit numeric
Previous Caesarean Sections	2 digit numeric
Existing Mental Health Condition	1 digit numeric
Mental Health Care Plan	1 digit numeric

## 2) Data items relating to Labour/Birth

<b>Data Items Relating to Mother / Woman</b>	<b>Format</b>
Patient Name	Unstructured alpha numeric 70 or structured with two alpha character elements
Patients Usual Address	175 character alpha numeric
NHS Number	10 digit numeric
NHS Number Status Indicator	2 digit numeric
Case Record Number	10 character alpha numeric
Postcode of usual address	8 character alpha numeric
Organisation Code (Code of Provider)	5 character alpha numeric
Organisation Code (LHB Area of Residence)	3 character alpha numeric
Birth Date (Woman)	8 digit numeric , CCYYMMDD
Ethnic Category Group (Woman)	1 alpha character
Date of Initial Assessment / Booking Visit	CCYYMMDD
<b>Data Items Relating to Woman at 36-38 weeks or onset of labour</b>	<b>Format</b>
Maternal Weight at 36-38 weeks or onset of labour	45 character alpha numeric, kg.g
Smoker at 36-38 weeks or onset of labour	1 digit numeric
<b>Data Items Relating to Labour and Birth</b>	<b>Format</b>
Site Code (of Treatment)	5 character alpha numeric
Mode of onset of Labour	1 digit numeric
Augmentation of Labour	1 digit numeric
Gestation at onset of Labour	±2 digit numeric
Number of Foetus(es) at Onset of Labour	2 digit numeric
Estimated Blood Loss	4 digit numeric
Epidural Status	1 digit numeric
Perineal Trauma	1 digit numeric
Episiotomy	1 digit numeric
Foetal Lie at Onset of Labour	1 digit numeric
Foetal Presentation at Onset of Labour	1 digit numeric
Outcome of Birth	1 digit numeric
<b>Data Items Relating to the Baby</b>	<b>Format</b>
Sex (of Baby)	1 digit numeric
NHS Number (Baby)	10 digit numeric
NHS Number Status Indicator (Baby)	2 digit numeric
Case Record Number	10 character alpha numeric
Birth Date (Baby)	8 digit numeric, CCYYMMDD
Time of Birth	4 character alpha numeric, hhmm
Birth Order	1 digit numeric
Mode of Birth	1 digit numeric
Apgar Score	2 digit numeric
Birth Weight (g)	4 digit numeric
Breast Feeding	1 digit numeric

## b) Changes to Existing Data Items

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### **Gestation at Onset of Labour**

This data item is / was included in the following data sets / collections between the dates shown:

Data Set / Collection	Valid From	Valid To
MI ds	1 <sup>st</sup> April 2016	

The gestation period at onset of labour, in completed weeks (rounded down).

When a birth takes place without labour occurring (e.g. when a caesarean takes place prior to the onset of labour), the gestation at birth is to be provided.

Gestation is the carrying of an embryo or foetus inside a woman. The time interval of a gestation is known as the gestation period. This should be estimated based on the findings of ultrasound scan at the initial assessment / booking visit, which is regarded as the most reliable means of calculating the gestation period.

When an ultrasound scan is not undertaken, the gestation period should be measured from the first day of the last menstrual period (LMP), where this is thought to be reliable. Where the LMP is unknown and an ultrasound scan is not undertaken, this should be a best estimate based on likely LMP.

Please use the example below to calculate and report the gestation period at onset of labour in completed weeks:

- 39 weeks + 6 days = 39 completed weeks.
- 140 weeks + 0 days = 140 completed weeks
- 140 weeks + 1 day = 140 completed weeks etc.

Format: ± 2 digit numeric

Value	Meaning
nn	Gestation Period (completed weeks)

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### **Gravida**

This data item is / was included in the following data sets / collections between the dates shown:

Data Set / Collection	Valid From	Valid To
MI ds	1 <sup>st</sup> April 2016	

Gravida indicates the number of times the woman has been pregnant, regardless of whether these pregnancies were carried to term. A current pregnancy, if any, is included in this count.



Format:  $\pm 2$  digit numeric

Value	Meaning
nn	Gravida (Number of pregnancies)

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### Maternal Weight at 36-38 weeks or onset of labour

This data item is / was included in the following data sets / collections between the dates shown:

Data Set / Collection	Valid From	Valid To
MI ds	1 <sup>st</sup> April 2016	

The weight of the woman (in kg, to the nearest 100g), as measured at 36-38 weeks, or at onset of labour. The aim is that the information relates to a point as late in the pregnancy as is practically possible.

Format: 45 character alphanumeric – kg.gnnn.n

e.g. 82.5, 102.7

Value	Meaning
nn.n (e.g. 82.5)	Maternal Weight at 36-38 weeks or onset of labour

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### Maternal Weight at Initial Assessment / Booking Visit

This data item is / was included in the following data sets / collections between the dates shown:

Data Set / Collection	Valid From	Valid To
MI ds	1 <sup>st</sup> April 2016	

The weight of the woman (in kg, to the nearest 100g), as measured at the Initial Assessment (Booking Visit), or within the 10-12 week gestation period (when not undertaken at Initial Assessment).

Format: 45 character alphanumeric – kg.gnnn.n

e.g. 82.5, 102.7

Value	Meaning
nn.n (e.g. 82.5)	Maternal Weight at Initial Assessment

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## NHS Number

This data item is / was included in the following data sets / collections between the dates shown:

Data Set / Collection	Valid From	Valid To
APC ds99	1 <sup>st</sup> April 1999	
EAL ds	1 <sup>st</sup> April 1999	21 <sup>st</sup> November 2012
OP ds	1 <sup>st</sup> April 1999	
CC ds	1 <sup>st</sup> April 2007	
OPR ds	1 <sup>st</sup> July 2008	
EDDS	1 <sup>st</sup> April 2009	
PAP ds	1 <sup>st</sup> April 2013	
SM ds	1 <sup>st</sup> April 2014	
RTDS	1 <sup>st</sup> April 2014	
MI ds	1 <sup>st</sup> April 2016	

It is mandatory to record the NHS Number

- (in the MI ds) for each woman and baby
- (in every other data set) for each patient registered with a GP practice in England and Wales.

It is mandatory to record the NHS Number for each patient registered with a GP practice in England and Wales. The NHS number is allocated to an individual, to enable unique identification for NHS health care purposes.

The MI ds captures data relating to the woman at initial assessment and to mother and baby for all births. Each Health Board makes data available in relation to the events which they managed, and initial assessment and birth data will be linked nationally regardless of whether both events took place in the same or at different health boards. The NHS number is needed on each record to enable this data to be linked.

This NHS Number format was mandated for use effective 1<sup>st</sup> November 1997. Prior to this, the NHS Number was an alphanumeric code which ranges in size from 10 – 17 characters.

If known, the patient's Health and Care Number should be used to populate this field for patients resident in Northern Ireland.

If known, the patient's Community Health Index (CHI) Number should be used to populate this field for patients resident in Scotland.

Format: 10 digit numeric

See [Health and Care Number](#)

See [Community Health Index \(CHI\) Number](#)

## Check Digit Algorithm

*(This algorithm applies to the Welsh and English NHS Number and the Northern Ireland Health & Care Number. The check digit algorithm for the Scottish CHI Number is available on request from the NHS Wales Informatics Service.)*

Step 1 Multiply each of the first nine digits by a weighting factor as follows:

Digit Position (starting from the left)	Factor
1	10
2	9
3	8
4	7
5	6
6	5
7	4
8	3
9	2

Step 2 Add the results of each multiplication together

Step 3 Divide the total by 11 and establish the remainder

Step 4 Subtract the remainder from 11 to give the check digit

Step 5 Check the remainder matches the check digit. If it does not, the number is invalid.

If the result of Step 4 is 11 then a check digit of 0 is used

If the result of Step 4 is 10 then the number is invalid and not used

## Sex of Baby

This data item is / was included in the following data sets / collections between the dates shown:

Data Set / Collection	Valid From	Valid To
NCCHD		
MI ds	1 <sup>st</sup> April 2016	

This is the sex of a baby who is born or who is registered with the Local Health Board.

~~Allowable values are:-~~

For NCCHD the allowable values are

- Male
- Female
- Not Known

~~FOR MI ds:-~~

For MI ds sSee [Sex](#)

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## Site Code (of Treatment)

This data item is / was included in the following data sets / collections between the dates shown:

Data Set / Collection	Valid From	Valid To
APC ds99	1 <sup>st</sup> April 1999	
OP ds	1 <sup>st</sup> April 1999	
CC ds	1 <sup>st</sup> April 2007	
EDDS	1 <sup>st</sup> April 2009	
PAP ds	1 <sup>st</sup> April 2013	
MI ds	1 <sup>st</sup> April 2016	

The organisation code for the site where the patient will be or is treated.

For MI ds (Birth): The organisation code for the site where the woman gave birth. This may be the same as or different to the where she may have been treated during labour.

Format: 5 character alpha-numeric

See [ORGANISATION CODE](#)

~~For outpatients and MI ds:-~~

For outpatients and MI ds, ~~A~~activity may take place outside the hospital, such as in the patient's home; in such cases, raising a site code is impractical. The following default codes should be used ~~in the Outpatient ds~~ when required:

For MI ds:-

Value	Meaning	Valid From	Valid To
R9998	Not a hospital site	1 <sup>st</sup> April 2016	

For Outpatients:-

Value	Meaning	Valid From	Valid To
R9998	Not a hospital site	21 <sup>st</sup> January 2002	
89999	Not applicable: Non-NHS providers where no site code has been requested and issued	1 <sup>st</sup> April 2002	
89997	Not applicable: Non-UK provider	21 <sup>st</sup> January 2002	

Where treatment for an NHS patient is sub-commissioned to an overseas provider the default code 89997 is applicable.