Professional Record Standards Body

Better records for better care

MATERNITY RECORD STANDARD
FINAL REPORT

JULY 2018

Document Management

Revision History

Version	Date	Summary of Changes
0.1	27.03.2018	First draft created by Nicola Quinn, Project Manager, RCP Health Informatics Unit
0.2	25.04.2018	Second draft created by Nicola Quinn, Project Manager, RCP Health Informatics Unit incorporating feedback from Karen Selby, Jan Hoogewerf, Andy Thompson, Catherine Porter, Darren Wooldridge and Geraldine Hughes
0.3	15.05.2018	Third draft created by Nicola Quinn, Project Manager, RCP Health Informatics Unit incorporating updates following expert review group meeting on 9 May 2018
0.4	21.05.2018	Fourth draft created by Nicola Quinn, Project Manager, RCP Health Informatics Unit incorporating feedback from Geraldine Hughes, Jan Hoogewerf and Andy Thompson
0.5	20.07.2018	Fifth draft created by Nicola Quinn, Project Manager, RCP Health Informatics Unit incorporating feedback from PRSB Assurance Committee
0.6	27.07.2018	Sixth draft created by Nicola Quinn, Project Manager, RCP Health Informatics Unit incorporating feedback from PRSB Assurance Committee and project board

Reviewers

This document must be reviewed by the following people:

Reviewer name	Title / Responsibility	Date	Version
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Jan Hoogewerf	RCP, Health Informatics Unit, Programme Manager		
Karen Selby	Clinical Lead, Obstetrician		
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Andy Thompson	Higher Business Analyse, NHS Digital		
PRSB assurance committee			

Approved by

This document must be approved by the following people:

Name	Signature	Title	Date	Version
Project board				

Glossary of Terms

Term / Abbreviation	What it stands for
AoMRC	Academy of Medical Royal Colleges
BA	Business Analyst
BCS	British Computer Society
BMA	British Medical Association
CCG	Clinical Commissioning Groups
CCIO	Chief Clinical Information Officer
CIO	Chief Information Officer
CDGRS	Clinical Documentation and Generic Record Standards
DHR	Digital Health Record
FHIR	Fast Healthcare Interoperability Resources
HIG	Health Informatics Group (of the RCGP)
HIU	Health Informatics Unit (of the RCP)
HL7	Health Level 7
HV	Health Visitor
LMC	Local Medical Committees
NIB	National Information Board
NHSCC	NHS Clinical Commissioners
PHR	Personal Health and Care Record
PID	Project Initiation Document
PRSB	Professional Record Standards Body for Health and Social Care
RCGP	Royal College of General Practitioners
RCM	Royal College of Midwives
RCN	Royal College of Nursing
RCOG	Royal College of Obstetricians and Gynaecologists
RCP	Royal College of Physicians
RCPCH	Royal College of Paediatrics and Child Health
RCPsych	Royal College of Psychiatrists
SNOMED-CT	Systematized Nomenclature of Medicine - Clinical Terms

Related Documents

These documents will provide additional information.

Ref no	Title
[1]	Digital maternity discover report. Work stream 7: Harnessing digital technology: end of discovery phase findings (NHS Digital, April 2017)
[2]	Digital maternity discovery report. Appendix 8. Maternity record and interoperability approach: Guide to scope and implementation (NHS Digital, March 2017)
[3]	Standards for the Clinical Structure and Content of Patient Records. http://www.rcplondon.ac.uk/resources/standards-clinical-structure-and-content-patient-records
[4]	Digital maternity discover report. Appendix 7. Maternity digital app: Requirements and options for delivery (NHS Digital, March 2017)
[5]	Children and Young People's Health Services Data Set http://content.digital.nhs.uk/maternityandchildren/CYPHS
[6]	Maternity Services Data Set (MSDS) http://content.digital.nhs.uk/maternityandchildren/maternity MSDS version 2.0 consultation https://nhs-digital.citizenspace.com/data-set-development-service/msdsv2/b
[7]	'Better Births', National Maternity review (2016)

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Contents

1 Introduction

1.1 Purpose of this document

This document is a summary report of the maternity record standard project. It presents:

- Evidence and consensus based standard headings and content definitions for a maternity record with supporting data models and implementation guidance.
- The methodology adopted to develop the standard headings, content definitions, data models and implementation guidance for a maternity record.

NHS Digital commissioned the Professional Record Standards Body (PRSB) to undertake this project. This report has been prepared by the Royal College of Physicians' Health Informatics Unit, which was subcontracted by the Professional Record Standards Body to facilitate development of the standard, to the point where formal endorsement is sought from the Professional Record Standards Body members. The Royal College of Midwives were represented at project board level[1].

Clinical leadership has been provided by an obstetrician who is a member of the Royal College of Obstetricians and a Chief Clinical Information Officer (CCIO), a midwife who is a member of the Royal College of Nursing, a GP who is a member of the Royal College of General Practitioners, and a health visitor. In addition, a paediatrician and paediatric nurse with clinical informatics expertise and who were involved in the child health record standard project provided advice on the interface of the maternity record standard with the child health record.

1.2 Nomenclature

The project team has grappled with the language to use when describing the pregnant individual. We have received mixed feedback at every stage of the project consultation. We have used 'woman' in this report because it was the majority position. However, we recognise that this may change as further work is done within service user representative groups, Royal colleges and other specialist societies.

[1] The Royal College of Midwives has a membership of 46,788 midwives, 6224 student midwives and 1214 maternity support workers

Likewise, the project struggled to come up with nomenclature to describe within the record structure and data model the health care professional that is undertaking a clinical task. We have used 'performing professional'. This term caused some debate in the first consultation workshop; however, we do not have a satisfactory alternative.

1.3 Background

1.3.1 Project summary

This project seeks to improve care experienced by pregnant women and their babies by developing standards for a digital maternity record to allow clinical information to be recorded, exchanged and accessed consistently across care settings.

The aims of this work are:

- to ensure that information about the health of pregnant women and their babies will be easily available on a timely basis to anyone that may need the information (parents, health and care professionals and public health professionals), whenever they need it.
- to enable information to be recorded in a common language and made available to women and health and care professionals.
- to ensure recommendations are practical and fit for purpose by adopting an evidence-based approach and consulting widely with pregnant women and parents, health and care professionals and suppliers of maternity health information systems.
- to enable information to be effectively re-used for secondary purposes, such as research, audit and public health surveillance, without requiring separate data collection exercises.
- to support the delivery of the NHS England's Maternity Transformation Programme and Better Births agenda.

The project built on the outputs of previous PRSB projects, including the healthy child record, the hospital discharge summary and other transfer of care standards (emergency care, mental health and ambulance to ED), and crisis care documentation.

The information models produced by this project will be used by NHS Digital to develop technical specifications which will enable interoperability between maternity records in different care settings. The implementation will be managed by NHS Digital working in collaboration with the PRSB, INTEROPen, industry and implementation sites. The ongoing maintenance of the standard will be managed through a maintenance process.

1.3.2 Policy context

‘Better births’ National maternity review (2016) and Maternity Transformation Board

The national maternity review recommended that NHS England and the National Information Board (NIB) should support the national roll out of interoperable maternity records for professional use, combined with support for a digital tool (or personal health record) for women as an urgent priority.

Four different recommendations were made, each of which relies on interoperability of health information, that is, information on an individual’s pregnancy will need to be exchanged with a range of health professionals in the network of maternity care outside of the hospital setting. These settings potentially all use different systems. The information should also be made accessible to/shared with the woman.

In the September 2016 report to the Maternity Transformation Board, NHS Digital made two recommendations in respect of a record data model and interoperability:

(1) Assume a common approach to interoperability, personal health records and use of central digital infrastructure

Child health has defined an approach to interoperability and personal health records which relies on the creation of a set of common messages (events), which will be exchangeable across systems. This approach will be tested further in the discovery period and validated within a field test. A similar model should prove viable for maternity and can be taken forward as a common requirement to be hosted on central digital infrastructure. Assuming a satisfactory discovery period, this element could be taken forward in the same programme business case for maternity: the common approach reducing overall costs and timelines for delivery.

(2) Begin work early on a maternity record specification
For interoperability of maternity information to be possible, there must be standardisation of content (data items), followed by an agreement on the technical specification for exchange. Even if a discovery phase recommends a ‘view only’ approach to professional and personal maternity records, this still requires a definition of what elements are to be viewable. Professional agreement on standard data is often difficult to achieve, so work needs to be started early given the centrality of interoperability to the digital ambitions of the Maternity Review.

The need for a standard record data model (digital maternity discovery report)

Health and care information which is to be exchanged between information systems automatically (e.g. from maternity services systems to GPs' systems, or between different providers of maternity care using different information systems) must be in a recognisable structure and format for the receiving system to correctly present the information to a healthcare professional in an understandable manner. There is no such 'recognisable structure and format' agreed for maternity data, other than that required to support secondary uses of information via the Maternity Services Data Set (MSDS). This means that not only can maternity systems not talk to each other without a recognisable structure and format, (ie there is a lack of interoperability between maternity information systems), neither can they talk to information systems in other care settings. A standard record data model is the 'recognisable structure and format' needed, so that systems can 'talk to each other' in a common language.

1.3.3 Project scope

The project scope was set out in the project initiation document (PID). The scope included:

- to agree evidence and consensus based standard maternity record requirements.
- to agree requirements that are practical and feasible to implement and which provide stakeholders (citizens and health and care professionals) with the information that they need, noting any clinical safety and information governance considerations that arise.
- To achieve consensus of professional and citizen organisations to establish the maternity record as a national standard. The standard will be endorsed by appropriate professional and citizen representative bodies and the PRSB and published on the PRSB website. For a list of the main PRSB member organisations: http://www.theprsb.org/members/. The final report (this document) containing the final draft record structure and data models will be published on the PRSB website after the project board has agreed the final draft.

Exclusions from the scope included:

- Records that are used in the provision of maternity and perinatal care in one healthcare service/setting only and which do not need to be shared outside that service/setting.
- Administrative headings and content definitions which do not have clinical content or use.

- The header information, which will be the same for all messages, for example 'identifying type', 'originating organisation', 'IT system' etc.
- What and how information pertinent to the baby contained in the maternal record including post-natal care is transferred to the child health record, HV & primary care
- What & how maternal postnatal information is transferred to HV & GP records
- Technical specifications (eg Fast Healthcare Interoperability Resources [FHIR] profiles), which will be developed by NHS Digital based on the requirements produced by this project.
- Authoring of any new SNOMED CT terms that are required. NHS Digital will provide a terminologist to work closely with the project and to provide relevant Systematized Nomenclature of Medicine - Clinical Terms (SNOMED CT).

1.3.4 Project governance

Oversight of the project was provided by a project board. End user representation at project board level was provided by:

- An obstetrician
- A user of maternity services
- NHS Digital
- A health visitor
- A midwife
- A GP with specialist interest in perinatal mental health
- A paediatrician

Clinical leadership and advice at project team level was provided by an obstetrician, a midwife, a GP and a health visitor.

2 Record structure

Please refer to the data model and NHS Digital's implementation guidance when reading this document. These can be found on the PRSB website at www.theprsb.org/standards/maternityrecord/ in supporting documentation.

3 Data models

Please refer to the record structure document above and NHS Digital's implementation guidance when reading this document. These can be found on the PRSB website at www.theprsb.org/standards/maternityrecord/ in support documentation.

4 Methodology

4.1 Project approach

The project was conducted according to the editorial principles for the development of record standards, developed by the RCP and adopted by the PRSB. The focus was on:

- Identifying what information pregnant women and their healthcare professionals require in a maternity record and what information it would be preferable to have in a coded form.
- Identifying what structured (and coded) information it is feasible to include in a maternity record and how this may change with the implementation of more integrated digital patient record systems. This will help to inform phasing of implementation in trusts.
- Engaging with pregnant women, parents, specialists and relevant professional bodies to ensure that the standard meets their needs, they are engaged and support implementation of a maternity record, based on the standard.

4.2 Evidence gathering and review, and mapping to existing PRSB headings

This section outlines the evidence gathering and review processes undertaken to develop the first draft of the standard.

Purpose:

- To develop a first draft of the record headings, content definitions and data models that are evidence based.

Following the national maternity review and recommendations (Better Births https://www.england.nhs.uk/wp-content/uploads/2016/02/national-maternity-review-report.pdf) NHS Digital commenced the discovery process in February 2017 to establish an understanding of the variation and the issues related to record structure and data collection within maternity services country wide. The first expert reference group for midwives was held in February 2017 during which there was an introduction to the record review and participants were asked to share their local hand held notes.

Following this an extensive review of both the hand held notes and several leading maternity digital record systems in England was undertaken and general themes identified.[2]. This content was:

[2] Data sources consulted in development of initial draft

- reviewed to identify the purpose for which the information was collected and how it would be used;
- mapped against PRSB endorsed standards to identify where existing headings could be used as they are, what existing headings needed to be amended for the maternity use case and what new headings needed to be developed for the maternity use case. The content was mapped to the PRSB Heathy Child Record standard, the 2013 Academy of Medical Royal College's (AoMRC) clinical record standards and subsequent PRSB standards, including transfer of care standards and crisis care documentation standards.

Findings from the mapping exercise were used to create draft 1 of the maternity record structure.

4.3 Consultations via workshop 1 and survey 1

This section outlines the consultations that happened at workshop 1 and via survey 1.

Purposes:

- To develop a second draft of the record headings, content definitions in relation to antenatal care, and evidence based implementation guidance. The views of key stakeholders on the draft were captured and considered at this early stage.
- To ensure that the project products are consensus-based.

Consultation workshop

Draft 1 of the headings and content definitions were discussed at a consultation workshop held on 9 November 2017. There were 57 attendees (see Section 5.3), comprising parents, voluntary sector, health/care professionals, industry and other stakeholders.

Areas consulted on in the workshop were:

- Review of the overall maternity record structure headings and definitions, to identify gaps and overlaps
- Detailed discussion on 'medical history'
- Detailed discussion on 'clinical risk factors'.

Perinatal institute notes: http://www.preg.info/PerinatalNotes/Default.aspx
NICE pathway standards - https://www.nice.org.uk/guidance/service-delivery--organisation-and-staffing/maternity-services/pregnancy.
Maternity Services Dataset - http://content.digital.nhs.uk/maternityandchildren/maternity
NHS Data Dictionary - http://www.datadictionary.nhs.uk/
Public Health England Screening Programmes
Several Maternity Department Record notes in England
Several Clinical System Supplier records in England
PDS requirements for patient demographic details

Post consultation review

Following the workshop, the consultation findings were discussed with the project clinical lead and clinical advisors in a telephone call. This informed the second draft of standard headings and content definitions, data models and the first draft implementation guidance.

The project team used the findings from the workshop to identify:

- areas to be discussed in three specialist review meetings, held in January 2018;
- items to be put to wider consultation via survey.

Survey 1
The survey was open from 8 December 2017 to 22 January 2018.

Areas covered in the survey were:
1. What types of 'investigation results' would be expected to be included in a maternity record?
2. How should ‘family history’ be recorded?
3. How should ‘clinical risk factors’ be recorded?
4. What types of information should be recorded under ‘past obstetric history’?
5. Should a pregnancy that ends before 24 weeks be referred to as ‘fetal loss’ or ‘fetal demise’?

There were 815 responses to the survey. Findings from the survey can be found at www.theprsb.org/standards/maternityrecord/ in supporting documentation. A breakdown of respondents can be found in section 5.1 of this report.

The project team reviewed the findings from the survey and recommended changes to the draft record headings, definitions and implementation guidance. The following criteria were used by the project team when reviewing the findings
a) a significant majority of respondents demonstrate a preference for a position;
b) a stronger rationale for an alternative minority position is demonstrated, e.g. patient safety;
c) a suggestion is not assessed as practical to implement at this time.

4.4 Consultation via specialist review group meetings

The project team identified early in the project that some areas of the record needed dedicated time with clinical and subject specialists to work through the maternity use cases. In response three specialist review meetings were convened.

Purposes:

- To gain expert input into areas of the maternity record identified as requiring specialist exploration, before being consulted on more widely.
- To ensure that the draft models developed are evidence and consensus based.

There were three specialist meetings in January 2018. The themes were mental health and well-being, safeguarding and tobacco and alcohol intake. The outputs from the specialist meetings informed:

- the second and third drafts of the headings, definitions and data models
- content for the implementation guidance
- items to be put to wider consultation via survey 2.

A list of those who attended the specialist review group meetings can be found in sections 5.5 – 5.7 of this report.

4.5 Consultation via workshop 2 and survey 2

Please find below the consultation processes employed in workshop 2 and survey 2.

Purposes:

- To develop a third draft of the record headings, content definitions in relation to intrapartum and postnatal, and evidence based implementation guidance. Please note that extensive consultation on the components of a postnatal baby record took place during the Healthy Child project (2017). It was decided by the project team that a repeat of that consultation was not necessary; therefore resources went into consulting on areas of the record not previously consulted on.
- To ensure that the project products are consensus-based.

Consultation workshop

Draft 2 of the headings and content definitions were discussed at a consultation workshop held on 14 December 2018. There were 67 attendees, comprising of parents, voluntary sector, health/care professionals, industry and other stakeholders.

Areas consulted on in the workshop were:

- Pregnancy assessment and intrapartum assessment
- Birth record
- Birth and management plan

Post consultation review

Following the workshop, the outcomes were discussed with the project clinical lead and clinical advisors in a telephone call. This informed the third draft of standard headings and content definitions, data models and the first draft implementation guidance.

The project team used the findings from the workshop to identify items to be put to wider consultation via survey 2.

Survey 2
The survey was open from 1 March 2018 to 19 March 2018.

Areas covered in the survey were:

1. Smoking of tobacco and alcohol intake
2. Mental health and well-being
3. Safeguarding and social risk factors
4. Delivery and birth record
5. Immunisations

There were 761 responses. Findings from the survey can be found at www.theprsb.org/standards/maternityrecord/ in supporting documentation. A breakdown of survey respondents can be found in section 5.2 of this report.

The project team reviewed the findings from the survey and recommended changes to the draft record headings, definitions and implementation guidance. The following criteria were used by the project team when reviewing the findings:

a) A significant majority of respondents demonstrate a preference for a position;
b) A stronger rationale for an alternative minority position is demonstrated, e.g. patient safety;
c) A suggestion is not assessed as practical to implement at this time.

4.6 Clinical informatician review

Draft 3 headings, definitions and data models were shared with clinical informaticians and other experts. The whole record structure and data models were circulated to thirty-four system suppliers, clinical informaticians and terminology/ technical specialists for their review. An additional fifty-two clinicians and specialists were invited to feedback on subsections of the record related to their specialities/area of expertise. The clinicians and specialists had attended earlier consultations, e.g. workshop or specialist review group meeting.

One hundred and thirty-seven comments were received from seventeen respondents. The comments were collated and reviewed in an all-day project team meeting on 11 April 2018. The record standard and data model was updated.

4.7 Expert review group meeting

Draft 4 of the headings, definitions and data models were reviewed at an expert review group meeting held from 10am-4pm on 9 May 2018. The purpose of this meeting was to discuss any issues not resolved through the previous consultation processes. The project team took examination findings, social context and relevant past, medical, surgical and mental health history to the meetings. Attendees brought the use of SNOMED CT and medications and medical devices. A list of attendees can be found in section 5.8 of this report.

4.8 Expert review group meeting

The PRSB Assurance Committee were asked to review an earlier draft of this document for quality and adherence to the PRSB standard development process. They were content that the PRSB process had been followed but raised concerns about whether the content of two standard headings, 'relevant past medical, surgical and mental health history' and 'examination findings', would support interoperability outside maternity settings, a key benefit of having a standard and a driver behind the project. The project team devised revised structures for these headings being mindful of the findings from extensive consultations on this area with healthcare professionals and women during the project. The revisions were discussed with the assurance committee and a draft agreed. The draft was circulated to expert review group meeting attendees and others identified by project board members for comment. The project team reviewed the feedback, which was positive, and confirmed the final draft included in this document.

5 Participation in consultation processes

5.1 Participation in survey 1

Eight hundred and fifteen people participated in the survey. A breakdown by respondent role is presented below:

Role	*No.*	*%*
Pregnant woman or parent	115	13.81%
Allied health professional	9	1.08%
General practitioner	15	1.80%
Health visitor	11	1.32%
Health/care system vendor or developer	6	0.72%
Informatician	9	1.08%
Midwife	552	66.27%
NHS administration/ management	32	3.84%

Nurse	19	2.28%
Obstetrician	52	6.24%
Pharmacist	2	0.24%
Secondary care doctor (not obstetrician)	11	1.32%
Total	**833***	**100.00%**

* some respondents chose to enter two roles, eg informatician and clinician

Respondents were asked to provide their speciality or discipline, healthcare professional respondents had experience of at least one of the following specialties or service areas:

- Ambulatory care
- Anaesthesia
- Antenatal care
- Clinical practice facilitator
- General practice
- Gynaecology
- Home birth specialist
- Infectious diseases
- Information systems
- Maternity
- Nursing
- Obstetrics
- Paediatrics
- Patient safety
- Perinatal mental health
- Pharmacy
- Pregnant persons and parent representation
- Provision to pregnant migrants
- Psychiatry
- Public health
- Research
- Risk and governance
- Safeguarding
- Screening

5.2 Participation in survey 2

Participation Seven hundred and sixty-one people participated in the survey. A breakdown by respondent role is presented below.

Role	***No.***	***%***
Pregnant woman or parent	250	29.4
Allied health professional	20	2.4
General practitioner	10	1.2
Health visitor	25	2.9
Health/care system vendor or developer	10	1.2
Informatician	25	2.9
Midwife	336	39.6
NHS administration/ management	46	5.4
Nurse	35	4.1
Obstetrician	38	4.5
Pharmacist	0	0.0
Secondary care doctor (not obstetrician)	42	4.9
Other	12	1.4
Total	**849***	**100**

* some respondents chose to enter two roles, eg informatician and clinician

Respondents were asked to provide their speciality or discipline, healthcare professional respondents had experience of at least one of the following specialties or service areas:

Acute medicine
Anaesthesia
Obstetric anaesthetist
Antenatal care
General practice
Dietetics
Domestic abuse
Gynaecology
Home birth specialist
Infectious diseases
Information systems
Midwifery
Neonatal medicine
Nursing
Obstetrics
Occupational therapy
Oncology
Paediatrics
Paramedic
Patient safety
Perinatal mental health
Physiotherapy
Pregnant persons and parent representation
Provision to pregnant migrants
Psychiatry
Psychology/therapy
Public health and policy
Radiographer
Research
Risk and governance
Social work
Safeguarding
Screening

5.3 Participation in workshop 1 held on 9 November 2017

Fifty-seven people attended representing:

Pregnant women and parents
Allied health professionals
Analysts
Chief Clinical Information Officers (CCIOs)
Child health information systems support staff
General practice
Health visiting
Informatics
IT
Midwifery
Obstetrics
Public health
Policy makers
System developers

5.4 Participation in workshop 2 held on 14 December 2017

Sixty-seven people attended representing:

Pregnant women and parents
CCIOs
Child Information systems support staff
General practice
Health visiting
Informatics
IT
Midwifery
Neonatology
Obstetrics
Paediatrics
Perinatal psychiatry
Public health
Policy makers
System developers

5.5 Participation in alcohol and tobacco specialist meeting on 15 January 2018

Amanda Farley	Lecturer in Public Health and Epidemiology Institute of Applied Health Research, University of Birmingham *(joined via WebEx)*
Andy Thompson	Business Analyst, NHS Digital
Darren Wooldridge	Project Manager, Health Informatics Unit, Royal College of Physicians
Don Lavoie	Alcohol Programme Manager, Public Health England
Geraldine Hughes	SME Midwife (Clinical Informatics), NHS Digital (Child Health – Maternity) and clinical adviser to the maternity record standard project
Hazel Cheeseman	ASH Action on Smoking and Health**,** Director of Policy
Helen Harger	Senior Clinical Product Manager, NHS Digital and clinical adviser to and NHS Digital project Manager (interim) for the maternity record standard project
Janet Duckworth	Community Midwife, Morecambe Bay NHS Trust
Jill Demilew	Consultant Midwife Public Health, King's College Hospital NHSFT
Jo Locker	Tobacco in pregnancy lead, Public Health England
Karen Selby	Consultant, Obstetrics, Gynaecology and Neonatology, Sheffield Teaching Hospitals NHS Foundation Trust, CCIO and clinical lead to the maternity record standard project
Michael Lumb	Obstetrician and CCIO North West Anglia NHS Foundation Trust
Michael Ussher	Professor of Behavioural Medicine, St George's, University of London

Michelle Littlejohn	Health and Wellbeing Midwife, University Hospitals of Morecambe Bay, NHS Foundation Trust *(joined via WebEx)*
Neill Jones	Senior Clinical advisor to NHS Digital working on GP Systems of Choice (GPSoC) and clinical adviser to the maternity record standard project
Nick Sheron	Faculty of Medicine, CES Academic Unit, University of Southampton
Nicola Quinn	Project Manager, Health Informatics Unit, Royal College of Physicians
Yvonne Herman	Smoking in Pregnancy Consultant and Pregnancy Lead for NCSCT, Office of Public Health, Dudley
Shamil Haroon	Academic Clinical Lecturer, Institute of Applied Health Research, University of Birmingham *(joined via WebEx)*

5.6 Participation in mental health and well-being specialist meeting on 16 January 2018

Adrian Burke	Consultant Adult Psychiatrist, Cheshire and Wirral NHS Trust
Andy Thompson	Business Analyst, NHS Digital
Geraldine Hughes	SME Midwife (Clinical Informatics), NHS Digital (Child Health – Maternity) and clinical adviser to the maternity record standard project
Helen Harger	Senior Clinical Product Manager, NHS Digital and clinical adviser to and NHS Digital project Manager (interim) for the maternity record standard project
Jill Demilew	Consultant Midwife Public Health, King's College Hospital NHSFT
Juli Broder	Advanced Nurse Practitioner for Perinatal Mental Health, Peterborough and Borders Adult Locality
Julie Fallows	Community Midwife – Specialist in Mental Health, Royal Lancaster Infirmary/Westmorland General Hospital
Lesley Edwards	Advanced Midwife Practitioner for Mental Health and Learning Disabilities, Peterborough
Karen Selby	Consultant, Obstetrics, Gynaecology and Neonatology, Sheffield Teaching Hospitals NHS Foundation Trust, CCIO and clinical lead to the maternity record standard project
Livia Martucci	Consultant Perinatal Psychiatrist
Maurina Baron	Senior Lecturer in Midwifery, Middlesex University
Michael Lumb	Obstetrician and CCIO North West Anglia NHS Foundation Trust
Nazmin Begum	Specialist Midwife for Perinatal Mental Health, Bart's Health NHS Trust
Neill Jones	Senior Clinical advisor to NHS Digital working on GP Systems of Choice (GPSoC) and clinical adviser to the maternity record standard project
Nicola Quinn	Project Manager, Health Informatics Unit, Royal College of Physicians

5.7 Participation in safeguarding specialist meeting held on 16 January 2018

Aileen Masson	Screening, Public Health England
Andy Thompson	Business Analyst, NHS Digital
Anna Davies	Named Midwife for Safeguarding, Bart's Health NHS Trust
Catherine Randall	Deputy Head of Safeguarding, Nursing and Midwifery Team, NHS England *(joined via WebEx)*
Chris Dickson	Principal Clinical Informatics Specialist, NHS Digital
Claire Mathews	Deputy Head of Maternity, NHS England *(joined via WebEx)*
David Low	NHS Digital and Paediatrician
Geraldine Hughes	SME Midwife (Clinical Informatics), NHS Digital (Child Health – Maternity) and clinical adviser to the maternity record standard project
Helen Harger (CHAIR)	Senior Clinical Product Manager, NHS Digital and clinical adviser to and NHS Digital project Manager (interim) for the maternity record standard project
Jan Hoogewerf	Programme Manager, RCP Health Informatics Unit
Jane Heath	Midwife Specialist in Safeguarding
Jasvir Jutle	Specialist Midwife for Safeguarding, Bart's Health NHS Trust
Jill Demilew	Consultant Midwife Public Health, King's College Hospital NHSFT
Karen Selby	Consultant, Obstetrics, Gynaecology and Neonatology, Sheffield Teaching Hospitals NHS Foundation Trust, CCIO and clinical lead to the maternity record standard project
Livia Martucci	Perinatal Psychiatrist
Michael Lumb	Obstetrician and CCIO North West Anglia NHS Foundation Trust
Neill Jones	Senior Clinical advisor to NHS Digital working on GP Systems of Choice (GPSoC) and clinical adviser to the maternity record standard project
Nicola Quinn	Project Manager, RCP Health Informatics Unit
Sarah Green	Clinical Quality and Safety Manager (Safeguarding Portfolio), NHS England(London Region)
Yetunde Akinnuoye	Lecturer in Midwifery and Safeguarding Lead, Middlesex University

5.8 Participation in expert review group meeting held on 9 May 2018

- Peter Badger, MD, Clevermed Ltd
- Dave Barnet, NHS Digital
- Jonathan Behr, GP and Chief Medical Officer, Vision (In Practice Systems Ltd)
- Andrea Blotkamp, Clinical Fellow (Midwifery), National Maternity and Perinatal Audit, Lindsay Stewart Centre for Audit and Clinical Informatics, Royal College of Obstetricians and Gynaecologists
- Lia Brigante, Quality and Standards Advisor, Royal College of Midwives
- Colin Brown, GP and informatician
- Silas Collinge, Business Analysis Manager, NHS Digital
- Rhona Dalziel, Product Owner - Maternity, Healthcare and Life Sciences DXC technology (Lorenzo)

- Chris Dickson, Principal Clinical Informatics Specialist, NHS Digital
- Chris Ruddick, Regulatory Strategist, Cerner
- Helen Duncan, Programme Director, National Child and Maternal Health Intelligence Network, Public Health England
- Herjit Sehgal, Integration Architect, Cerner
- Alison Elderfield, Head of Lindsay Stewart Centre for Audit and Clinical Informatics, Royal College of Obstetricians and Gynaecologists
- Agnès Freydier, Registered Midwife/ Senior Associate Consultant, Maternity, Cerner
- Julia Gudgeon, Clinical Advisor (Midwife), NHS Digital
- Helen Harger, Senior Clinical Product Manager, NHS Digital
- Jan Hoogewerf, Programme Manager. Health Informatics Unit, Royal College of Physicians
- Geraldine Hughes, SME Midwife (Clinical Informatics), NHS Digital
- Mervi Jokinen, Practice and Standards Professional Advisor, Royal College of Midwives
- Matthew Jolly, National Clinical Director for Maternity and Women's Health, NHS England
- Phil Koczan, Clinical Director of Health and Care, CCIO, GP, Professional Record Standards Body
- Tom Latham, Dataset Maintenance Operational Delivery Manager, NHS Digital
- David Low, Clinical Advisor to Digital Child Health and Child Protection Information Sharing Project (CP-IS), NHS Digital
- Michael Lumb, Obstetrician and CCIO, North West Anglia NHS Foundation Trust
- Wendy Mawdsley, PBR/Screening Specialist Midwife - Womens Health Warrington and Halton Hospitals NHS Foundation Trust
- Vicky Mudd, System Developer, Sevelschsc
- Martin Orton, Director of Delivery and Development, Professional Record Standards Body
- Andrew Perry, Terminology Specialist, NHS Digital
- Nicola Quinn, Project Manager, Health Informatics Unit, Royal College of Physicians
- Karen Selby, Consultant, Obstetrics, Gynaecology and Neonatology & CCIO, Sheffield Teaching Hospitals NHS Foundation Trust
- Anoop Shah, Consultant in Clinical Pharmacology and General Medicine, University College London Hospitals NHS Foundation Trust
- Michael Thick, Chief Medical Officer and CCIO, IMS MAXIMS
- Andy Thompson, Higher Business Analyst, NHS Digital

6 Implementation guidance

The maternity record standard implementation guidance is being developed by NHS Digital in collaboration with the project team responsible for this work. Please find below items for inclusion in the NHS Digital implementation guidance document identified during the consultation processes outlined above.

General points

- Only send information recorded at a point in time, not what was recorded previously as this information will already be available in the record.
- Where no information has been recorded, a blank record should not be sent, except for mandatory items where a 'null' record should be sent, with explanatory coded text eg 'no information recorded'.

Time stamps
Time stamps in the record should be GMT.

Movement between services
Any transfer of care or movement between services, eg during labour, can be recorded using existing headings. Some systems may decide to create a template for transfers of care using the headings.

Performing professional, date and location
All records of clinical activity MUST include the following information: the professional performing the activity, date and location. The professional undertaking clinical work may be a separate person to the person entering the data on the system. In this instance both should be recorded.

Social context
It is not necessary to include the 'performing professional' and 'location' for social context information. This is because social context does not record a clinical intervention. The date that the information is entered into the system and who enters it should be recorded. It is important that the recipient knows the date that the information is recorded so that changes can be tracked over time, if needed.

Social context – smoking
Whether a woman attended a smoking cessation referral appointment can be recorded under the 'smoking' 'comment' section of the record.

Social context - Alcohol
Current alcohol consumption, alcohol consumption prior to pregnancy and alcohol consumption during the first few weeks of pregnancy should all be recorded. Where frequency of alcohol consumption and frequency of binge drinking are greater than one a week the actual number of days should be recorded.

Professional summary/comment
This is the place to record day-to-day/ case notes.

Relevant past, medical, surgical and mental health history
This section is used to record inactive conditions.
Some systems may decide to add start and end dates to relevant past history.

Fertility treatment
Assisted conception can be recorded under gynecology history (relevant past medical, surgical and mental health history). Information on assisted conception of the current pregnancy can be linked to the relevant dataset by NHS number if the treatment took place in England.

Obstetric history
Length of labour: length of labour should be stored in minutes, but displayed in hours and minutes..

Examination findings
A number of fields are marked as required but will be mandatory at some appointments. It is up to local settings to decide when a required element is upgraded to mandatory.

Crown-rump length must be measurable to one decimal place.

Fetal heart rate indication and method for measuring should be completed.

Birth details
Gestation at birth should be stored in days, but displayed in weeks and days.

Medication and medical devices

The purpose of the record is to record medication taken prior to and at conception and current medication (these will be snapshots as and when recorded). The relevant transfer of care information models can be used for referral, discharge, and outpatient medication.

Screening – sickle cell and thalassemia

The outcome of the 'venous sample performed to screen for sickle cell and thalassemia' will be recorded from the blood test result. This will be entered by the midwife until systems are integrated.

Screening – diabetic eye screening
The screening review may be repeated during the pregnancy, ie there may be more than one diabetic screening record.
Professional name: this should record the name of the person who graded the image. The name will be entered by the midwife from the screening report until the systems are integrated.

Family history
'Family' in this context refers to blood relations only. It is important to identify where the woman is not the biological mother.

Outcome of pregnancy
Where a pregnancy outcome is not a live birth, it is recommended that a local flag is displayed in the record so that it can easily be seen, and so prevent situations where a woman who has had a miscarriage presents to a service whose records show that she is still pregnant. There needs to be local agreement on information sharing and integration between early pregnancy assessment/ pregnancy related gynae and maternity services to allow for information transfer/sharing.