London Ambulance Service NHS
NHS Trust

Maternity Care Policy
(formally known as the Obstetric Care Policy)

DOCUMENT PROFILE and CONTROL.

Purpose of the document: To ensure that the provision of maternity care provided by the Trust is delivered in accordance with the UK Ambulance services Clinical Practice Guidelines (JRCALC 2016), in use at the time. Throughout the document, these guidelines will be referred to as "clinical practice guidelines".

Sponsor Department: Medical Directorate

Author/Reviewer: Medical Director. To be reviewed by Service Consultant Midwife Advisor. To be reviewed by January 2019 or as required as detailed below.

Document Status: Final

Amendment History			
Date	*Version	Author/Contributor	Amendment Details
07/12/17	4.5	IG Manager	Document Profile and Control update
09/11/17	4.4	Consultant Midwife Advisor	Wording amendment for consistency
21/04/17	4.3	IG Manager	Document Profile and Control update
08/03/17	4.2	Consultant Midwife Advisor	Further amendment
07/03/17	4.1	Consultant Midwife Advisor	Amendments following PMAG
01/02/17	3.3	IG Manager	Document Profile and Control update and formatting
08/11/16	3.2	Consultant Midwife Advisor External Reviewers: Stephanie Michaelides Midwifery Lecturer, Programme Leader for Neonatal Care, Middlesex University. Clare Capito London Local Supervisory Support Midwife Sally Luck Clinical Quality Manager (Patient Safety and Maternity) NHS England London LAS Education Manager – Keith Miller, Claire Henderson.	Rename to reflect the renaming of the clinical practice guidelines. Rewritten to reflect the range of maternity calls to which the LAS respond in carrying out the commissioned role
03/02/14	3.1	IG Manager	Document Profile and Control

			update
14/01/14	2.2	Snr Clinical Adviser	Re-word to S.6.5 in the light of the recent 2013 JRCALC Guidelines update and the recommendation from SI report (SI 2012 – 21226).
26/09/12	2.1	Consultant Midwife Advisor	Minor amendment following approval – reference to maternal hand held notes
07/09/12	1.8	IG Manager	Document Profile & Control update
07/09/12	1.7	Deputy Medical Director	Minor amendments
03/09/12	1.6	AD CS	Review & update
30/08/12	1.5	Governance Manager	Rework of scope, responsibilities and general policies to include specifics on obstetrics emergencies. Addition of references to Control Room Procedures
11/07/12	1.4	Consultant Midwife Advisor	Minor amendments and addition of monitoring table
26/08/10	1.3	Senior Clinical Advisor	Minor amendments to responsibilities, education and monitoring sections.
03/06/10	1.2	Assist Head of CARU	Added introduction
12/12/08	1.1	Assist Head of CARU	8.1.3 amended
24/09/08	0.1	Clinical Education Manager and Medical Director	first draft

***Version Control Note:** All documents in development are indicated by minor versions i.e. 0.1; 0.2 etc. The first version of a document to be approved for release is given major version 1.0. Upon review the first version of a revised document is given the designation 1.1, the second 1.2 etc. until the revised version is approved, whereupon it becomes version 2.0. The system continues in numerical order each time a document is reviewed and approved.

For Approval By:	**Date Approved**	**Version**
PMAG	02/02/17	4.0
SMT	22/01/14	3.0
Associate Directors Group	14/09/12	2.0
Senior Management group	29/09//08	1.0
Clinical Governance Committee	12/11//08	1.0
Ratified by (If appropriate):		

Published on:	Date	By	Dept
The Pulse	07/12/17 (v4.5)	Digital Media Officer	Comms
The Pulse	24/04/17 (v4.3)	Governance Administrator	G&A
The Pulse	03/02/14 (v3.1)	Governance Co-ordinator	GCT
The Pulse	05/10/12 (v2.1)	Governance Co-ordinator	GCT
The Pulse	05/10/10	Governance Administrator	GCT
LAS Website	07/12/17 (v4.5)	Digital Media Officer	Comms
LAS Website	24/04/17 (v4.3)	Governance Administrator	G&A
LAS Website	03/02/14 (v3.1)	Governance Co-ordinator	GCT
LAS Website	05/10/12 (v2.1)	Governance Administrator	GCT
LAS Website	05/10/10	Governance Administrator	GCT
Announced on:	**Date**	**By**	**Dept**
The RIB	25/04/17	IG Manager	G&A
The RIB	04/02/14	IG Manager	GCT
The RIB	09/10/12	IG Manager	GCT
Equality Analysis completed on		**By**	
14/02/17		Medical Directorate team	
29/06/10		Medical Directorate team	
Staffside reviewed on		**By**	

Links to Related documents or references providing additional information		
Ref. No.	**Title**	**Version**
2013	LAS London Wide Maternity Divert Policy	**2**
TP/018	Suspected Cases of Child Abuse Procedure and Recognition of Abuse notes.	
OP/021	Sharing of Information Agreement between LAS and Metropolitan Police Service Child Protection Unit.	
OP031	Policy for Consent to Examination or Treatment	**3.3**
	Operational Procedure (OP/028) - Procedure for Specific Named Patient Protocols and No Resuscitation Orders / Advanced Directives.	
OP039	Resuscitation Policy	
TP056	Core Training Policy (inc. Training Needs Analysis)	
OP060	Control Services – Call Taking Procedures	**1.8**
OP061	Control Services – Dispatch Procedures	**1.0**
TP006	Serious Incident Policy and Procedure	
JRCALC	UK Ambulance Services Clinical Practice	

Guidance	Guidelines (2016)	

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1. Introduction

The most important aspect of managing a “maternity call” is to ensure a rapid and accurate assessment of the mother, and where birth has occurred, an assessment of the newborn baby.

The Trust recognises that maternity and neonatal care can be high risk for both the mother and her new born baby notably when birth occurs, unplanned, in the pre-hospital setting. This guidance includes, and makes reference to, additional London Ambulance Service (LAS) guidance to ensure staff can discharge their duties safely and effectively.

For ambulance service clinicians, the demarcation of pregnancy is considered between whether or not the pregnancy is more or less than 20 completed weeks of pregnancy. This differentiates the location to which a mother will be conveyed as well as ensuring the most appropriate clinician assesses the woman. The current practice is to:

- Convey a mother of less than 20 completed weeks of gestation i.e. up to 19 weeks plus 6 days (19+6 weeks) to the emergency department for assessment unless the maternity unit advises of an alternative location during the pre-alert, (and where indicated the baby, if born will accompany her).
- A mother of 20 completed weeks or more will be conveyed to a maternity unit for assessment; the location will be determined by the history detailed during the assessment of the attending crew and in the first instance it should be the nearest maternity unit (this may not be the booked unit).
- A mother who has recently given birth may be conveyed initially to the nearest ED with an Obstetric Unit. The ED may indicate, during the pre-alert, to direct the ambulance clinician to the maternity unit where the woman is up to and including 14 days post-delivery.

This maternity guidance should be viewed alongside the current clinical practice guidelines. Whereby further evidence becomes available that impacts upon pre-hospital maternity care, this guidance will be reviewed to reflect any changes to practice required.

Within the LAS, the Consultant Midwife role acts as a professional point of contact for the Maternity Services across London and also acts as the conduit for the maternity risk leads (employed within each maternity service) in ensuring that risk and governance are escalated to the respective trusts, as well as where a maternity unit has concerns with the delivery of pre-hospital care by the LAS.

2. Scope

The policy embraces the guidance in the Clinical Practice Guidelines (2016) on Maternity care (including Obstetrics and Gynaecology). It also details the specific management pathways across London that are unique to the management of women and babies within this area as well as those that are not alluded to in the above guidance, but require clarification to ensure that staff can discharge their duty to patients in the course of their clinical practice.

The guidance acknowledges that pregnancy, birth, and the postnatal period are covered herein, however, there is further detail in regards the management of fetal tissue and pregnancy remains as well as resuscitation of the newborn at the extreme of viability (less than 24 completed weeks of pregnancy)

Whilst the postnatal period is commonly considered to be up to and including the 6 weeks after birth, consideration is given to the occurrence of secondary postpartum haemorrhage that can occur up to 12 weeks after birth.

3. Objectives

The Key objectives of the policy are:

To provide safe, effective and evidence based emergency maternity and neonatal care outlined in the Clinical Practice Guidelines (2016) and focusing on the special responsibilities with regard to the treatment of mothers experiencing normal and abnormal labour or birth and any obstetric complication, prior, during and after labour (antenatal, labour and postnatal period.) *(The postnatal period being classified as the time from birth of the baby, delivery of the placenta and membranes to six completed weeks after the birth or delivery has taken place. Of note, is that the postnatal period in considering some complications, may extend up to 12 weeks postpartum.)*

To ensure that staff are equipped with the necessary knowledge and skills to exercise their respective clinical roles within the LAS.

To ensure that all grades of staff provide compassionate care in line with their individual scope of practice to which they are employed, including the respective professional code of conduct including those for paramedics, and where attending, midwives.

4. Responsibilities

4.1 The **Clinical Safety and Standards Committee** has overall responsibility for managing compliance with the requirements of this policy.

4.2 The **Medical Director** has overall responsibility for the implementation of this policy in accordance with the Clinical Practice Guidelines and for ensuring that all clinical and appropriate non-clinical staff deliver care in accordance with this policy.

4.3 The **LAS Consultant Midwife** will advise the Medical Director of current best practice that may be adopted by the LAS over and above that of the Clinical Practice Guidelines for emergency maternity care. The **LAS Consultant Midwife** will engage with other Trusts' maternity services to ensure that their processes and procedures are aligned with LAS Control Services and Operational policies.

4.4 All **Clinical Staff** should ensure that they maintain and update their maternity care assessment, diagnosis and treatment skills according to the training needs analysis (Appendix 11)

4.5 All **Control Room** staff should ensure that they follow the rel**e**vant Control Services Call Taking (OP060) and Dispatch (OP061) Procedures when handling maternity calls, and ensure that they apply internal and external escalatory measures where a pre-attendance assessment indicates that the mother and/or baby may be at risk. If there is risk of delay to clinical staff arriving on scene, the Watch Manager / Area Controller will decide whether to make the request for a midwife to attend whilst the crew are en route.

5. Policy Statement

5.1 The London Ambulance Service NHS Trust (the 'Trust') supports the Clinical Practice Guidelines (2016). The Trust recognises that the treatment of pregnant women, women in labour and birthing, and newborn babies require additional measures to ensure that appropriate care is delivered.

5.2 This policy is designed to be read in conjunction with other Trust policies which are detailed on page 4.

6. General Policy – Process for Managing Emergency Care

6.1 The Trust acknowledges that the best clinical care for a mother who is experiencing an abnormal labour or birth is for her to be transferred for further care at the nearest maternity unit in a timely and safe manner. .

6.2 For some women in normal labour it is appropriate for them to receive an enhanced clinical telephone assessment in order for them to identify who

can safely and appropriately make their own way to their chosen place for birth i.e. birthing centre or labour ward

7. Telephone Triage for maternity advice

7.1 Every maternity unit is available for midwifery advice, 24 hours a day. This is available for LAS staff whom can contact either the maternity triage (if available) or labour ward:

- By use of the woman's phone, contact the booked maternity unit using the contact details at the front of the maternity hand held records.
- Via the clinical hub (this can enable the teleconferencing of the conversation and recording into the patient record if required)

7.2 For those maternity calls requiring further triaging, the clinician in the clinical hub can contact the "Triage" service, within the booked maternity unit, for midwifery advice. This telephone advice can be relayed to the woman directly through the conferenced telephone line and then manually recorded into the call log as a record, including the name of the midwife providing the clinical information.

7.3 Where an ambulance clinician arrives on scene and assesses either a pregnant woman or a woman who has recently given birth in the previous 10-15 days, advice may be sought from the local maternity unit, and where appropriate, the ambulance clinician may discharge the woman from their care with the relevant advice including a plan for any on-going follow-up. The name of the midwife (including the name of the maternity unit where advice was sought) must be documented in the hand held maternity records (where available) (including the postnatal records up to 10-15 days) and the patient record form (PRF). A copy of the PRF should remain with the maternity notes where care is discharged on scene.

8 The Booked Maternity Unit versus the Nearest Unit

8.1 The majority of women will have booked at a maternity unit by 10-12 weeks of gestation. They will be furnished with a set of maternity records that will detail the relevant maternity and medical history noting significant risk factors. Each maternity unit in London uses a different set of notes. The booked maternity unit is the unit whereby a woman will either receive her antenatal care or plan her birth there (or both). She may also plan to have a homebirth.

8.2 A woman can choose to book her "planned" maternity care and birth in a maternity service of her choosing. The following detail the current options available to women to plan for her birth

- **Home birth** – care will be provided either by community midwives from the local/nearest geographical maternity service or by independent midwives (employed directly by the woman).
- **Stand-alone birth centre** – For women at low risk of complications. Currently there are three, Edgware Birth Centre, Barkantine Birth Centre and Barking Community Birth Centre (run by midwives and requests for ambulance conveyance from these sites will be through the Health Care Professionals line).
- **Birth centre** within a maternity unit – For women at low risk of complications and enable transfer to a labour ward if required
- **Labour ward** within a maternity unit – These are for women with existing risk factors and those women that choose to opt for epidural anaesthesia for pain relief in labour.

8.3 The booked maternity unit may not be the nearest maternity unit. In the context of the LAS, when a woman calls the emergency service, she should be taken to the nearest maternity unit for a maternal and fetal assessment as soon as reasonably possible even if this is not the booked maternity unit. It is not appropriate for the emergency services to be used as a "taxi" service and as such, where the woman reports a normal history, the ambulance clinician, should engage the midwife in the booked unit in the discussion about on-going plans for care and organise a taxi or the woman can make her own arrangements where safe to do so. This should not involve conveying the mother where the risk assessment by the midwife does not identify any signs or symptoms that are immediately life threatening and require a time critical transfer. It is appropriate therefore to discharge the woman with advice.

8.4 In an emergency, the mother may require immediate maternity care, which can be provided at a nearby maternity unit. In the situation where the booked unit is likely to incur a delay to the receipt of emergency care, then the nearest maternity unit should be located and the mother taken there.

8.5 Unless a maternity unit is on divert (the activity of the London Maternity Units is managed through the LAS London-Wide Divert Policy), a mother needs to be seen at the nearest maternity unit and should be taken there. Crews should ensure the clinical coordination desk (PD09) is provided with the information about the emergency and where the planned destination is. Where staff are not familiar with a particular maternity unit or if staff feel the woman is clinically unstable, a request for maternity staff to meet them at ED or a designated entrance can be helpful to expedite rapid midwifery or obstetric involvement and reduce delays incurred by locating the point of care, or navigation of lifts.

8.6 Where a midwife is required to attend the scene or home to assist LAS staff, the midwife will be attending from the maternity unit responsible for the

geographical delivery of community care in the area and this is likely to be the nearest maternity unit. This may not be the booked unit if the mother does not live in the nearby area. To identify which maternity unit is responsible for care, crews should contact clinical Hub, who can contact the respective maternity unit to provide appropriate guidance where required.

8.7 Except if the maternity unit is on divert, a request for a midwife to attend the scene to assist is a reasonable request and should be complied with by the nearest maternity unit. If clinical advice is sought, the clinical hub or the advanced paramedic practitioner can be contacted to provide further information; this is particularly important in the following scenarios where additional clinical advice and instructions can be provided as well as leadership support on scene:

- Pre-eclampsia/eclampsia
- Pre-term birth <37 weeks gestation and at the extreme of prematurity 20-24 weeks
- Maternal collapse or arrest (consider the reversible causes such as pulmonary Embolism, shock secondary to hypovolaemia).
- Possible maternal sepsis
- Newborn collapse or arrest (normally respiratory in origin)
- Shoulder Dystocia/Breech Birth/Cord Prolapse
- Where there is difficulty in extricating a pregnant woman

8.8 All cases of maternal or neonatal collapse or cardiopulmonary arrest **must** be taken to the nearest emergency department (ED) with an Obstetric Unit attached.

- A pre-alert must be placed as soon as reasonable to enable the hospital to deploy the specialist team from within the hospital to the ED. This can take 5-10 minutes from receipt of the pre-alert in the ED, It is always preferable to enable the team to wait upon your arrival. The following range of staff will be summoned by the ED staff:
  - Obstetrician (at least 2)
  - Midwives (at least 2)
  - Neonatal Team (at least 2)
  - Anaesthetic team (at least 2)
  - ED team (up to four depending upon activity)

The resuscitation needs of a mother or baby are a priority and as such, irrespective if a maternity unit is on “divert”, the woman must be conveyed to the nearest ED with an Obstetric unit.

8.9 In the event that a baby is conveyed separately to the mother, it must be taken to the nearest ED with an Obstetric Unit, with a pre-alert placed and requesting the neonatal team. The mother must also be conveyed to the same ED at the earliest time resources are available to convey with a pre alert notifying the maternity unit staff to attend the ED.

8.10 The updated maternity pack (Appendix 11) includes two identification bands, one for the mother and one for the baby. These should be applied in all cases and should not delay care in doing so. Checking of the identification bands can involve the mother as she may want to be involved in the checking of the information.

- Mother's Band – Her name, Sex of the baby, time of birth. Placed around the mother's wrist.
- Baby's Band – "Baby of" and give the mother's surname (must be the same as the mother at this point). Date and time of birth. Wristband placed around the baby's wrist.
- Twin's – A second maternity pack will be required to ensure enough bands in this instance the information above for the baby should be used and include "Twin 1" and "Twin 2". Twin 1 is the first born baby, Twin 2 second birth.
- Where the birth has higher multiples of babies, additional maternity packs will be required and labelling as per each baby and the order of birth.

8.11 The pre-alert placed by the priority dispatch desk (PD09) to the receiving ED/Maternity unit should detail whether the baby is conveyed with or without the mother so it is clear to the receiving unit how many "patients" to expect. This provides for the appropriate deployment of staff.

8.12 Upon arrival of the midwife on scene, she/he is the responsible clinician for the provision of midwifery care (NMC 2013). Communication and teamwork are key; therefore, ensure each team member understands each other's role and responsibility. Where the mother deteriorates, and becomes unconscious OR has a respiratory or cardiac arrest, the ambulance clinicians will have primacy of care and lead the emergency response for this. They will continue to work within the normal emergencies pathway. They will also be responsible for placing the pre-alert via the priority dispatch desk (PD09).

8.13 Whilst the midwife; in the situation of a maternal arrest, may ring ahead to the maternity unit, the LAS staff lead the communication. LAS staff **must** place the pre-alert as stated above, and must always take the woman to the nearest ED with an Obstetric unit attached.

8.14 Ambulance clinicians may be confronted with different birth support partners when attending a birth at home; this may include a doula. A doula is a non-registered birth support partner that the woman employs. They are NOT midwives or registered health professionals. They do not have formal training and therefore, where discussions are necessary to act in the best interests of the woman, it is the pregnant woman to whom the conversation should be aimed. Where a clinician incurs a delay to decision making, due

to the involvement of a doula, or birth partner, it is imperative that the ambulance clinician articulate clearly the concerns in regards to the wellbeing of the mother and the unborn child and that any delay incurred could impact upon their wellbeing. This discussion must be documented in the PRF and escalated to the Incident Response Officer (IRO) to ensure staff are supported, and where necessary, additional on scene support is provided.

8.15 Where clinician/clinicians, are faced with confrontation or challenge by family members, and this delays the conveyance of the mother in an emergency situation, this should be reported, via Datix and EBS in the first instance (reporting safeguarding in regards the unborn child). The clinician should notify the Consultant Midwife, via Datix, so that liaison can take place with the respective maternity unit to ensure this is communicated effectively.

9 Maternal Assessment and the Maternity Pre-Hospital Screening and Action Tool

9.1 The assessment of the mother can be aided by the LAS Maternity Screening and Action Tool – Appendix 1. The tool is composed of two sections, the first that covers the screening, assessment and management pathway for a pregnant woman. It also includes reference to the postnatal period, where the risk of secondary post-partum haemorrhage continues up to 12 weeks. The second part of the card highlights the management of maternity emergencies such as cord prolapse, breech birth, and shoulder dystocia.

9.2 The Maternity Screening and Action Tool should be used to guide decision making by on scene clinicians and focus upon prioritising the management of care in the emergency situation compared to the non-emergency (urgent) situation.

9.3 For management of haemorrhage, it is important to consider the likely cause of bleeding at any gestation in pregnancy and consider the timely extrication from the scene to the nearest appropriate care facility where the mother can be effectively resuscitated.

9.4 Attending staff should actively manage pain at a level appropriate to their scope of practice and skill level. If the management of pain for a women is beyond their competence level they should promptly seek further advice to request attendance of a midwife or a clinician with more advanced skills, or transfer the patient to an appropriate unit

9.5 The most important feature of managing attendance at a maternity call is a rapid and accurate assessment of the mother to ascertain if anything abnormal is taking place and, if so, to take prompt and appropriate action. Review of the maternity hand held notes is important to ascertain

information and the maternal assessment must be carried out according to the Clinical Practice Guidance which includes assessment of the following:

- Is the mother presenting with an obvious non-pregnancy related emergency (e.g. Trauma)?

- Is the mother presenting with one of the following obstetric high risk complications:

    1. Pregnancy related hypertension / Eclampsia
    2. Severe vaginal bleeding
    3. Prolapsed cord
    4. Continuous severe abdominal pain (indicating placental abruption)
    5. Contractions associated with on-going bleeding
    6. Twins or higher birth multiples
    7. Presentation of a body part other than the baby's head, buttocks, or feet (e.g. one foot or a hand or arm).

- Is the period of gestation 20-37 weeks?

- Is birth imminent?

- Is there significant previous history of obstetric complications (e.g. miscarriage, ectopic pregnancy, eclampsia, rapid labour, born before arrival, previous placental abruption, previous massive obstetric haemorrhage with associated history of blood transfusion or ITU admission)

- Note that a history of diabetes (gestational or pre-existing) should alert the attending staff to the increased risk of shoulder dystocia.

- Attending staff should also consider the likelihood of multiple births and should request immediate assistance if this is confirmed by the assessment.

9.6 If birth is imminent the Clinical Practice Guidance (2016) is as follows:

- On scene but birth imminent – contact the EOC to request a midwife and second vehicle/paramedic and prepare for birth using the clinical practice guidelines.

- Manage birth as per procedure

- If any complications arise, proceed to the nearest Obstetric Unit (unless birth is in progress and the patient cannot be moved), having first provided a pre alert via the priority dispatch desk (PD09).

9.7 Where there is a delay in a midwife attending, the attending staff should re-assess the situation and liaise with the EOC if escalation of the request for a midwife is required and should request clinical assistance.

10. Birth prior to 24 weeks and management of Placental Tissue and Pregnancy Remains

10.1 The term 'pregnancy remains' is used in relation to all pregnancy losses, for example as a result of ectopic pregnancy, miscarriage or early intrauterine fetal death; it also applies to terminations of pregnancy that have not exceeded the 24th week of pregnancy.

10.2 Fetal tissue may be passed by the mother during a miscarriage. It may resemble blood stained tissue, or demonstrate a discernible baby with the placenta still attached. The management of fetal tissue must follow the principles below to ensure that staff comply with the Human Tissue Act (March 2015)

- Where a woman has passed a pregnancy, whether miscarriage or following a medical induction, she may or may not have been given advice by the service provider (this is likely to be an early pregnancy unit or termination service) regarding its disposal. This would include the choice to dispose of the pregnancy remains herself.
- In ALL cases offer the woman the opportunity to transfer the tissue/baby with her into the hospital.
- Whatever the size or state of the pregnancy remains, always treat and refer to them with respect and sensitivity. If you don't know what term the woman prefers, ask (if appropriate) and suggest options if necessary: 'your baby', 'the remains of your baby', 'the pregnancy' or 'pregnancy tissue'.
- Where it is difficult to identify fetal tissue, transport this tissue, using a soft item from the maternity pack (gauze), and label it with the mother's name.
- Where the baby is noticeably developed, and has fragile skin, you may want to place the baby on a gauze pad. The mother may then wish to have the baby wrapped within a towel and placed with her during conveyance to hospital; this may be an important part of her grieving process.
- If the mother declines to see or hold the pregnancy tissue or baby, wrap it accordingly in a sensitive way using a piece of gauze and placed in the towel or soft item from the maternity pack and convey to hospital.

- Where the pregnancy remains have been passed into a toilet, ask if the mother wants them to be removed and bought with her to the hospital, if not, ask if she wants you to flush the toilet or not - do not flush it without her permission.
  Where the mother is unable to make a decision, or is not able to articulate her wishes at that time, in order to act in the best interests of the mother, it is appropriate to remove the pregnancy remains from the toilet, wrapping them sensitively as detailed above.
- In ALL cases, document how the fetal tissue was managed and conveyed, and hand the tissue over to the nurse or midwife at hand over of care.

11. Resuscitation at Extremes of Gestation

11.1 The following classification can be used to identify the extremes of prematurity:

Classification of preterm babies by gestation – Bliss (2011)	
Pre-term	Born before 37 weeks
Moderately late preterm	Born between 32-37 weeks
Very preterm	Born between 28-32 weeks
Extremely preterm	Born less than 28 weeks

11.2 Birth at the threshold of viability (23+0 weeks to 24+6 weeks) is considered both a medical and ethical challenge (RCOG 2014). The following guidance acknowledges the difficulty that a crew may face in the presence of an extremely pre-term infant being born, with a parental expectation of resuscitation. This also allows for the type of cases seen where woman may have not attended for maternity care, are not sure of their dates or may have concealed the pregnancy.

11.3 Staff should be aware that occasionally babies born **before 20 weeks** may show transient signs of life (the odd gasp or movement). In these circumstances, **no resuscitation should be attempted**.

11.4 **When attending a birth between 20-23 weeks plus 6 days and there are NO signs of life:**

- Manage the baby as per the guidance in 10.2
- Transfer the mother and baby to the nearest Maternity unit placing a pre alert call via PD09 informing them of the situation and proceed under normal driving conditions giving an approximate time of arrival. Where necessary, a request for maternity staff to meet the ambulance clinicians can be placed to safeguard the mother and baby where transfer in the hospital requires public areas and lifts.

11.5 **When attending a birth at 20-24 weeks OR the gestation is unknown, and there are Signs of Life the recommendations are:**

- Maintain ventilation using the smallest paediatric mask – Size 00
- Provide effective ventilations with the baby lying flat, assess heart rate and do not expect the chest to move at this gestation. If ventilations are effective the heart rate will remain stable or improve.
- Use of the foil blizzard crib, with the baby placed within, to reduce heat loss through convection whilst maintaining ventilations.
- Ensure the head is covered with the small baby hat.
- Place a pre-alert including whether the mother is travelling with the baby
- Convey to the nearest **Emergency Department** with an Obstetric Unit

Where there are signs of life, ventilations should be continued until the neonatal team can assess the gestation and weight of the baby. The team will then consider the on-going management in the best interests of the baby and the family.

Neither a midwife or ambulance clinician should discontinue resuscitative attempts; this decision sits within the expertise of the neonatologist.

11.6 **Guidance on Resuscitation of the apparently Stillborn Baby (unexpected stillbirth) after 24 weeks**

In the event that you attend a birth where the baby shows no apparent signs of life and there is no evidence of maceration/skin slippage **commence** resuscitation of the baby. You should convey to the nearest ED with a Consultant Obstetric Unit with a pre-alert.

11.7 **Guidance on resuscitation of a baby who was known to have died in utero (an expected stillbirth)**

Rarely, a mother may deliver a baby who was already known to have died in utero at home. This situation, of a predicted stillbirth, may occur out of hospital on occasions, such as when the mother has had her labour induced after a termination of pregnancy for fetal malformation, for example.

In this situation, do not attempt resuscitation of the baby but, convey both mother and stillborn baby to her booked hospital (if the nearest) with a pre-alert placed, via PD09, driving under normal conditions. The mother and baby should be taken to the labour ward, and request for a midwife to meet the crew at the maternity entrance to safeguard the mother and stillborn baby through public access areas. Follow the guidance in 10.2 with regards to the management of the baby, considering the wishes of the parents and using the contents of the maternity pack to wrap the baby sensitively.

12. Management of Newborn Temperature

12.1 Most cooling of the newborn occurs during the first minutes after birth. In the first 10-20 minutes, the new-born who is not thermally protected may lose enough heat for the body temperature to fall by 2-4 degrees Celsius.

12.2 The optimal newborn temperature is 36.5^0C and 37.5^0C. Newborn temperature should be taken upon assessment, where possible, and recorded on the patient record form for the newborn baby.

12.3 Hypothermia is associated with increased mortality and morbidity especially in small and preterm babies. Every 1^0C below 36.50C the risk of mortality increases up to 28% (NLS 2016, p8)

12.4 Signs of hypothermia include:

- Shallow breathing, apnoea and bradycardia
- The term newborn will exhibit expiratory grunting if hypothermic
- Decreased activity and apparent lethargy
- Hypotonic (loss of muscle tone) with diminished reflexes
- Pale mottled skin – cool to touch, cold extremities
- Weak suck, poor feeding, poor gastric emptying, abdominal distension
- Hypoglycaemia

12.5 Hypothermic babies are often hypoxic so saturations should be measured and oxygen administered as per clinical practice guidelines. Stabilisation or resuscitation of significantly preterm babies (30 weeks or less) may be started with air or supplemental oxygen up to 30%. However, use of oxygen should be monitored using pulse oximetry (on the right arm) (NLS 2016).

12.6 Dry the baby with a towel before wrapping in a second towel. Ensure the head is dried and the hat applied with the second towelled hood overlaying the hat

12.7 Where available, apply the nappy to reduce further heat loss from exposure to urine and meconium.

12.8 Where appropriate and where the newborn temperature is normal, place skin to skin with mother, ensuring the airway is continuously observed.

12.9 There is no current definitive guidance on where to take a baby, born at <37 weeks, that is born in the pre-hospital setting. There is low probability of a baby born between 34-37 weeks requiring more than initial drying and stimulation at birth, similar to more mature babies (NLS 2016). However,

babies born in the pre-hospital setting at <37 weeks are more likely to suffer with hypothermia, and at less than 30 weeks the challenges to resuscitation and maintaining normal saturation levels are dependent upon a number of factors and as such the following acts as a guide

1. Any baby requiring ongoing resuscitation or where hypothermic convey to the nearest ED with an Obstetric Unit with a pre-alert
2. **More than and equal to 36 weeks** – May be conveyed to the respective maternity unit OR if a midwife arrives on scene, she may stand down the ambulance, and following assessment of the mother and baby, provide ongoing midwifery care at the woman's home.
3. **35 weeks plus 6 days and less (<35+6 weeks)** – Convey to the nearest ED with an Obstetric Unit with a pre-alert
4. A baby born prematurely is at risk of hypothermia, hypoxia, and respiratory difficulties which require the specialist care of a neonatal team. Assessment of newborn temperature is critical and repeated during conveyance, where necessary, further management of hypothermia should be assessed and, where necessary the use of the heated mattress placed into the foil crib to ensure thermoregulation is optimised.

13. Safeguarding

13.1 All staff that deal in any way with a case of suspected abuse must ensure that a full and accurate contemporaneous record of the events on the PRF, their findings and concerns are made. Additionally, they must record their actions and the details of those to whom their concerns were reported i.e. EBS or the hospital.

13.2 All staff must be aware of issues relating to Adult and Child protection issues, while dealing with obstetric, gynaecological and neonatal emergencies. LAS treat safeguarding as a priority. All safeguarding concerns must be passed to the receiving midwife, documented on the patient report form and a safeguarding referral made as per Safeguarding policy via EBS, including that of any Female Genital Mutilation (FGM) concerns.

14. Maternal Death – A maternal death is defined as the death of a woman while pregnant or within 42 days of the end of the pregnancy from any cause related to or aggravated by the pregnancy or its management and not from accidental causes (WHO 2010). (MBRRACE 2016)

14.1 Maternal deaths will be notifiable on the Strategic Executive Information System (STEIS) which captures all Serious Incidents where they meet the

definition of a serious incident in accordance with the NHS England 2015 Serious Incident Framework. Where there is uncertainty, STEIS should be completed by default, pending further investigation.

14.2 A 72 hour review is undertaken internally by the Trust, Head of Midwifery, a clinical governance facilitator and the Clinical Director for Obstetrics.

14.3 A Maternal Death Panel is convened within 6 weeks and contact will be made by the relevant trust to the Coroner/Pathologist.

14.4 If the LAS have conveyed a pregnant woman in cardiac arrest, and she subsequently dies, the LAS will be required to provide a review of the care provided, as well as provide the investigating Acute Trust a copy of the care review including statements that form part of the investigation forwarded to the Coroner.

14.5 If the LAS attend a pregnant woman, or a woman who is known to have given birth in the previous 6 weeks, and is confirmed as "life extinct" on scene, follow 14.6 and complete an incident form via the DATIX system. Upon receipt of this information, NHS England (London) will be notified and the maternity unit responsible for the provision of maternity care (if accessed previously by the mother) will be notified, including the GP.

14.6 Staff working in the LAS are required to notify, via the DATIX system, any known maternal death that occurs once they have conveyed the woman into the ED. Once this takes place the following will occur:

- Consultant Midwife, Consultant Paramedic and Quality Governance and Assurance Manager (an experienced Paramedic) and Assistant Medical Director review the care provided to identify areas of good practice
- The LAS review team will liaise with Clinical Team Leaders to notify staff of outcome for both mother and baby if known, as well as ensure support for staff is provided
- Ensure staff involved are invited to any hospital debriefs that take place
- Risk score, via Datix, and inform the Potential SI Group, for noting, the reported death and where necessary, escalate for consideration
- Liaise directly with the Risk Lead for the Acute Trust and Director of Maternity Services.
- Inform the LAS Legal Services team in preparation for collation of witness statements and clinical review of care
- Share learning with the teams involved and the LAS through the respective communication mechanisms.

15. Education

15.1 The Maternity Training Needs analysis (Appendix 11) details the training requirements across the service and the recommended frequency.

15.2 On occasions the content of the Clinical Skills Refresher will include on-going learning from experience from both staff and patients through the themes highlighted from the 6-weekly Maternity Risk Summit.

15.3 The Maternity Risk Summitt will evaluate on going themes from the following groups:

- Patient Experience Departments
- Governance and Assurance Department
- Legal Services Department
- Clinical Education and Standards
- Staff feedback
- Control Services Quality Assurance
- Clinical Hub
- Staff representatives.

The themes will be incorporated into an on-going programme of communication to staff including:

- Medical Directorate Bulletins – as required according to clinical priority
- Routine Information Bulletin (RIB) every week
- Feedback through Datix
- Clinical Updates
- Learning from Experiences newsletters

15.4 All staff responding to general accident and emergency calls involving maternal or postnatal emergencies should receive the relevant level of Obstetric training in their preparation for role and as reflected in the training needs analysis. Delivery, attendance and completion will be monitored as detailed by the Clinical Education and Professional Standards group.

15.5 Whenever there is a major change in an associated Clinical Practice Guidance (2016) or relevant practice guidance relevant to LAS staff, this will be communicated to staff and where applicable further/ update training for all relevant staff will be provided. This is documented in **every copy** which is distributed to staff, with a lead in period stated which allows for queries or extra educational needs required. The LAS Consultant Midwife will ensure that all relevant clinical staff are made aware of these changes to practice via the Medical Director Bulletin process.

15.6 Staff should indicate during the PDR process whether they require update training in obstetric emergencies and will also be reminded of any changes to clinical practice as outlined above.

16. Review

16.1 Where risks, failings or deviations from the Clinical Practice Guidelines are identified through the monitoring of this policy, an action plan will be created with clear timescales and actions delegated to relevant clinical leads. This action plan will be performance managed by the Medical Director, and the LAS Consultant Midwife and reported to the Clinical Safety and Standards Committee.

16.2 Where gaps are identified in clinical practice, systems or processes from the sources listed below, a review of the guidance will take place through the maternity risk summit and a review of the guideline undertaken (this will be required at the point of recognition of the gap) and consideration given to the level of risk to patient safety and staff safety. Where necessary, further information will be detailed as and when required:

- Staff report area's of practice not currently captured
- Incident reporting via Datix
- Update in evidence or practice knowledge

16.3 This policy will be reviewed on an annual basis or sooner in the light of any changes in the clinical practice guidelines.

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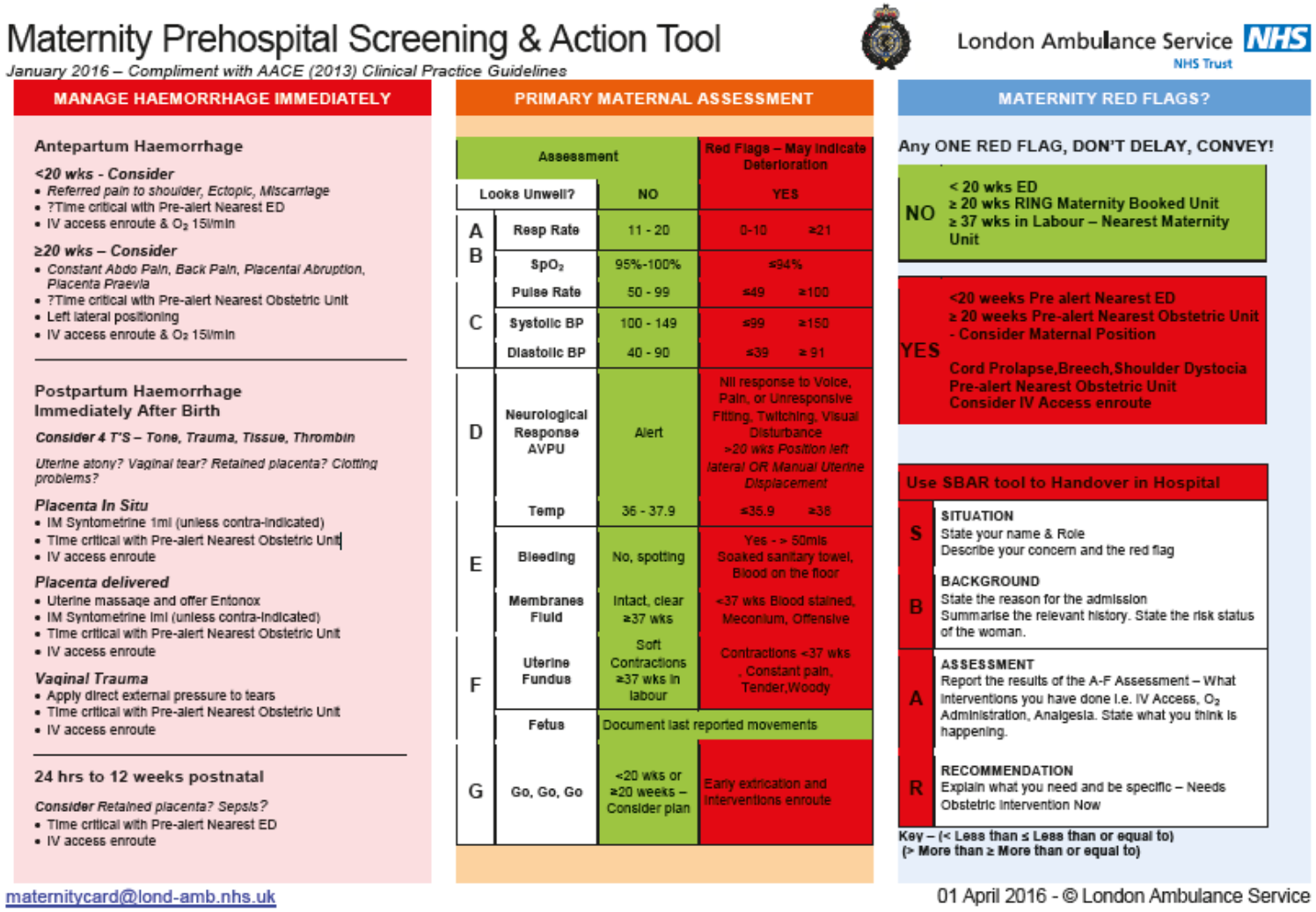
IMPLEMENTATION PLAN				
Intended Audience	All clinical staff			
Dissemination	Available to all staff on the Pulse			
Communications	Revised Procedure to be announced in the RIB and a link provided to the document			
Training	CPD update for all clinical staff, see TNA			
Monitoring:				
Aspect to be monitored	**Frequency of monitoring AND Tool used**	**Individual/ team responsible for carrying out monitoring AND Committee/ group where results are reported**	**Committee/ group responsible for monitoring outcomes/ recommendations**	**How learning will take place**
Duties (assessment, diagnosis and treatment regimens) (Section 4) including the Minimum standards of obstetric care training that must be achieved (Section 7)	Quarterly audit, And other auditing, including Clinical Performance Indicator measure of documentation standards Annual review continuous professional development via the development of reports and compliance of clinical staff with Obstetric emergencies via Personal Development Review	Clinical Audit and Research Unit will report results to the Clinical Safety and Standards Committee Clinical Managers	Quality Governance Committee (and Trust Board if required)	Dissemination of lessons via various mechanisms including Improving Patient Experience Committee from Experience Group, Area Quality Committees, Medical Directorate Bulletins,

	process			
How obstetric care is managed (Section 6)	Quarterly Area Governance Report (includes CPI checks). Risks, failings or deviations from the Clinical Practice Guidelines are identified through the monitoring of this policy creating an action plan.	Assistant Director of Operations for each area reports to the Clinical Safety and Standards Committee Medical Director, and the LAS Consultant Midwife will performance manage the action plan, with clear timescales and actions delegated to relevant clinical leads, reporting to the Clinical Safety and Standards Committee		



Maternity Prehospital Screening & Action Tool

London Ambulance Service NHS Trust

January 2016 – Compliment with AACE (2013) Clinical Practice Guidelines

MANAGE HAEMORRHAGE IMMEDIATELY

Antepartum Haemorrhage

<20 wks - Consider
- *Referred pain to shoulder, Ectopic, Miscarriage*
- ?Time critical with Pre-alert Nearest ED
- IV access enroute & O_2 15l/min

≥20 wks – Consider
- *Constant Abdo Pain, Back Pain, Placental Abruption, Placenta Praevia*
- ?Time critical with Pre-alert Nearest Obstetric Unit
- Left lateral positioning
- IV access enroute & O_2 15l/min

Postpartum Haemorrhage Immediately After Birth

Consider 4 T's – Tone, Trauma, Tissue, Thrombin

Uterine atony? Vaginal tear? Retained placenta? Clotting problems?

Placenta In Situ
- IM Syntometrine 1ml (unless contra-indicated)
- Time critical with Pre-alert Nearest Obstetric Unit
- IV access enroute

Placenta delivered
- Uterine massage and offer Entonox
- IM Syntometrine 1ml (unless contra-indicated)
- Time critical with Pre-alert Nearest Obstetric Unit
- IV access enroute

Vaginal Trauma
- Apply direct external pressure to tears
- Time critical with Pre-alert Nearest Obstetric Unit
- IV access enroute

24 hrs to 12 weeks postnatal

Consider Retained placenta? Sepsis?
- Time critical with Pre-alert Nearest ED
- IV access enroute

PRIMARY MATERNAL ASSESSMENT

	Assessment		Red Flags – May Indicate Deterioration
	Looks Unwell?	NO	YES
A B	Resp Rate	11 - 20	0-10 ≥21
	SpO_2	95%-100%	≤94%
C	Pulse Rate	50 - 99	≤49 ≥100
	Systolic BP	100 - 149	≤99 ≥150
	Diastolic BP	40 - 90	≤39 ≥ 91
D	Neurological Response AVPU	Alert	Nil response to Voice, Pain, or Unresponsive Fitting, Twitching, Visual Disturbance *>20 wks Position left lateral OR Manual Uterine Displacement*
	Temp	36 - 37.9	≤35.9 ≥38
E	Bleeding	No, spotting	Yes - > 50mls Soaked sanitary towel, Blood on the floor
	Membranes Fluid	Intact, clear ≥37 wks	<37 wks Blood stained, Meconium, Offensive
F	Uterine Fundus	Soft Contractions ≥37 wks In labour	Contractions <37 wks , Constant pain, Tender,Woody
	Fetus	Document last reported movements	
G	Go, Go, Go	<20 wks or ≥20 weeks – Consider plan	Early extrication and interventions enroute

MATERNITY RED FLAGS?

Any ONE RED FLAG, DON'T DELAY, CONVEY!

NO
- < 20 wks ED
- ≥ 20 wks RING Maternity Booked Unit
- ≥ 37 wks in Labour – Nearest Maternity Unit

YES
- <20 weeks Pre alert Nearest ED
- ≥ 20 weeks Pre-alert Nearest Obstetric Unit - Consider Maternal Position
- Cord Prolapse,Breech,Shoulder Dystocia Pre-alert Nearest Obstetric Unit
- Consider IV Access enroute

Use SBAR tool to Handover in Hospital

S – SITUATION
State your name & Role
Describe your concern and the red flag

B – BACKGROUND
State the reason for the admission
Summarise the relevant history. State the risk status of the woman.

A – ASSESSMENT
Report the results of the A-F Assessment – What interventions you have done i.e. IV Access, O_2 Administration, Analgesia. State what you think is happening.

R – RECOMMENDATION
Explain what you need and be specific – Needs Obstetric Intervention Now

Key – (< Less than ≤ Less than or equal to)
(> More than ≥ More than or equal to)

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Maternity Prehospital Screening & Action Tool

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January 2016 – Compliment with AACE (2013) Clinical Practice Guidelines

CORD PROLAPSE

1. Mother adopts Knee to Chest Position with head on forearms (in home) until ready to walk to ambulance

2. Protect the cord with dry dressing or underwear. Do not touch the cord.
3. Walk mother rapidly to ambulance – If nearby. **DO NOT** use carry chair
4. In ambulance convey in exaggerated left lateral position

5. Pre-alert to nearest Obstetric Unit

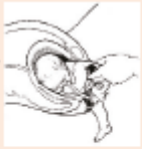
BREECH – Call the Midwife

Warm the area – Prepare for Newborn Resus

Mothers buttocks edge of bed or All Fours

1. "Hands Off" and allow body to hang, observe for progress
2. If **delay** occurs with:

a. **Legs** –apply gentle pressure behind knees



b. **Arms** – gently rotate baby's pelvis 90° and aid delivery of the arm, rotate baby opposite direction 180° and release arm, allow to hang (avoid pressure on fetal abdomen)

3. Keep "**Baby's Tum to Mums Bum**" - If back rotates gently hold back of baby's pelvis to rotate baby's back.
4. **Nape of the neck visible**?, Support the body with one arm, use other hand to aid flexion on the occiput lifting baby upward to deliver

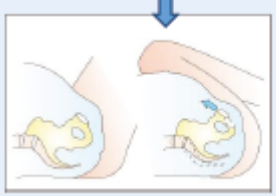
DO NOT pull the baby, Clamp or Cut the cord during birth

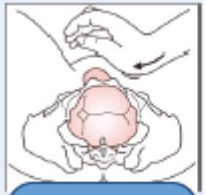
SHOULDER DYSTOCIA – Call the Midwife

Warm the area – Prepare for Newborn Resus

Baby not born within two contractions following birth of the head?

Get mother into **McRoberts Position** - Hyperflex legs then attempt delivery using gentle axial traction for 30 seconds





Identify fetal back

Undelivered? Apply **Continuous Suprapubic Pressure** to fetal back for 30 seconds – attempt delivery

Undelivered? Apply **Rocking Suprapubic Pressure** to fetal back for 30 seconds – attempt delivery

Undelivered? Position **ALL FOURS** attempt delivery

Undelivered? – Pre-alert nearest Obstetric Unit convey in left lateral position

Record time of delivery of head and baby

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Staff Group	Training/Method	Frequency	Monitoring
Consultant Midwife	POET online	Every 2 years	PDR
	NLS Update	Annual	PDR
	Maternity Skills Drills - (MDT)	Annual	PDR
Clinical Education & Standards			
Clinical Tutors	POET online Maternity Day (including NLS update)	3 yearly Upon appointment	PDR Skills database
Education Centre Lead for Maternity (2017)	Maternity Joint Training Facilitators Course (Consultant Midwife/Clinical Education & Training Manager)	Nominated	Education Manager
Control Services			
EMD	POET Online	On appointment	
Chub Staff	POET Online	On appointment	
Clinical Staff			
Consultant Paramedics	POET Online MDT Training including NLS	Every 2 years	PDR/OLM
Advanced Paramedic Practitioners	POET Online MDT Training including NLS	Every 2 years Every 2 years	
Paramedics	POET online MDT Training including NLS	3 yearly	
Nurses	POET online	On appointment	
Non-registered Clinicians TEAC/EAC/EMT	POET online	3 yearly	

Appendix 3

The New Maternity Pack Contents

Maternal Contents -		
	No	Rationale
Maternity Card	1	Clinician reminder of managing maternity emergencies
Inco pad	1	
Sanitary Towel	1	
Gauze 10cm x 10cm (X-ray detectable)	2	Wiping away body fluid/Use for any external compression of vaginal tears
Clear placenta bag with blank label for mother's name	1	Enables identity of the placenta to the mother and can be handed to midwife for inspection
Identity label with matched bar codes (one for mother/one for baby)	2	Where mother and baby are conveyed separately both are linked by name bands
Green large plastic apron	1	Protect clothing during birth
Yellow bag	1	Clinical waste
Newborn Contents		
Umbilical cord clamps	4	
Umbilical cord scissors	1	Single use, disposed of in sharps bin
Soft Hooded Towels	2	1 to dry, 1 to wrap
Newborn Hats	2	Reduce heat loss (size Large/Small)
Nappy	1	Reduce against heat loss from urine
Blizzard Blanket	1	Reduce heat loss