

# CHAPTER 1

# Obstetric services

## Learning outcomes

After reading this chapter, you will be able to:

- Discuss the relationship between the different professional groups involved in the management of the obstetric patient
- Describe the function and importance of hand-held records and how to use them effectively

### 1.1 Organisation of obstetric services, epidemiology of obstetric emergencies and role of the ambulance service, general practitioner and midwife

#### Organisation

Around 700 000 women a year use obstetric services. The birth rate in the United Kingdom (UK) has slowed in recent years following a rise throughout the last decade. Multidisciplinary teams provide maternity services with midwifery and obstetric medical staff working together to provide optimal care. Community midwives perform the majority of care in the out-of-hospital setting. Inpatient antenatal care is now uncommon and not usually for long periods. Similarly, the postnatal length of stay for all women, including those delivered by caesarean section, has been reduced with the majority of care occurring in the community.

General practitioners (GPs) have in recent years become less and less involved in all aspects of pregnancy care, although there are still a small number who are involved in care in labour.

#### Place of delivery

The *Maternity Matters* report confirmed that women should be the central focus of obstetric care, emphasising the need for those providing obstetric services to support women in making informed choices and to provide easy access to care (DoH, 2007). Women undergo a risk assessment prior to delivery to help them choose where to deliver. This assessment is undertaken by their midwife in conjunction with medical staff, if required, and will involve assessment of previous medical history, previous obstetric history and the progress of the current pregnancy. The women will then be offered advice to help them choose the place of birth.

A woman may choose to have a home birth; deliver in a midwife-led unit, which may be either 'stand-alone' or attached to a consultant-led unit (co-located); or deliver in a consultant-led unit. Women may also choose to 'free birth': a growing phenomenon in which the baby is delivered unassisted and unattended by a healthcare professional. Whilst this is perfectly legal, one should note it is illegal for someone without midwifery qualifications to assist in the birth unless in an emergency.

The 2011 Birthplace in England study identified that nulliparous women (those having their first baby) were more at risk for adverse perinatal outcomes (stillbirth, neonatal encephalopathy, brachial plexus injury, clavicle fracture, etc.) with a planned

home birth than multiparous women (BECG, 2011). There was no statistical increase in risk for adverse outcomes for nulliparous women delivering in a midwife-led unit. It was found that for multiparous women, there is no increased risk for adverse outcomes between each planned place of delivery. It was also found that women who plan to deliver at home or in a midwife-led unit are more likely to have a 'natural' birth with reduced interventions compared with those who deliver in an obstetric unit. Choosing an appropriate place of delivery relies on effective communication between healthcare professionals and women regarding any specific risk factors.

In the majority of cases, women choose the appropriate place to deliver their baby. Midwives have a duty of care to support the woman's final choice of place for delivery even if there are factors that make this a high-risk decision. Occasionally this causes difficulties, for example, in home delivery where access is poor, there is no phone signal or the home environment is less than ideal. Some women with a high-risk pregnancy also request home delivery. As long as the woman has capacity (see Chapter 2), is informed of the risks to herself and her baby and is not under duress, she is entitled to make that decision.

### Mode of delivery

The majority of deliveries are uncomplicated, however the national caesarean section rate is 26.2% of births. In contrast, the rate in 1990 was only 12%. Caesarean section delivery requires major surgery and can have significant associated risks for both mother and baby.

### Common pre-hospital emergencies

- Labour +/- delivery (term or preterm)
- Bleeding antenatally or postnatally (including miscarriage) and postoperative vaginal haemorrhage
- Abdominal pain other than labour
- Pre-eclampsia and eclampsia (this is now less common: 2:10 000 cases due to the use of magnesium sulphate in hospital in at-risk cases; however, this does mean that one of the more common places to have a convulsion will be in the community)
- Prolapsed umbilical cord

### Transfer

Transfer may be necessary where risk factors develop before or during labour and after birth that necessitate moving the woman or baby from one location to another. Transfer may be required from all places of delivery.

In the 2011 Birthplace in England study, it was found that for the three non-obstetric unit settings (home, stand-alone midwifery unit and co-located midwifery unit), transfer rates were much higher for nulliparous women (36–45%) than for multiparous women (9–13%).

Common reasons for transfer from home or from a midwife-led unit are concerns about the progress of labour, fetal or maternal well-being, or neonatal well-being. A common reason for transfer between consultant-led obstetric units is the need to access a neonatal cot for the baby either because the unit they are in does not have the appropriate neonatal facilities or all the cots are full. In these situations, the outcome is better for the baby if they are transferred while still in utero rather than after delivery. Occasionally, women need to be moved to other units for maternal specialist care.

Generally, a midwife (or medical staff) will accompany the woman and will be an invaluable source of advice and knowledge if problems occur during transfer. See Table 1.1 for the roles undertaken by clinical staff.

Further information on the management of inter-hospital transfers generally and neonatal transfers specifically can be found in the Neonatal Adult Paediatric Safe Transfer and Retrieval (NAPSTaR) manual (Fortune et al., 2019).

#### TOP TIP

**Many features of the clinical management of an obstetric patient during secondary transfer are similar to that required in the home or during primary hospital admission. For example, remember to transport the patient who is unable to maintain their own position in the 15–30° left lateral tilt position or manually displace the uterus.**

**Table 1.1** Roles of healthcare staff

	Paramedic	Midwife	GP (if on scene)	Obstetrician (via telephone)
Clinical condition	Assess	Assess	Assess	
Initiate holding treatment	Advanced life support (ALS) Obstetric support	Assist with ALS Obstetric expertise	Assist with ALS Obstetric support*	Advise on treatment
Transfer	Provide transportation Liaise with receiving unit Confirm exact location of receiving obstetric unit within hospital	Advise on most appropriate receiving unit Liaise with receiving unit Advise on timing/need for transfer		Advise on most appropriate receiving unit Liaise with referring crew Advise on timing/need for transfer
Advice	Transportation options/positioning in the ambulance	Obstetric expertise	General issues	Obstetric expertise

\*Some GPs have specific expertise in obstetrics.

## Admissions procedures

These depend on local policies. Obstetric patients are usually admitted directly to the obstetric service via a triage assessment unit or delivery suite. In the case of major trauma, obstetric patients should be transferred to the emergency department or major trauma centre depending on the systems in place locally. In the case of medical problems admit via urgent care pathways.

In many units, women with problems in early pregnancy will be admitted to the gynaecology department via an early pregnancy assessment unit.

## 1.2 Using patient hand-held notes

Most maternity units in the UK provide women with their own maternity hand-held notes. Figure 1.1 shows an example of the national pregnancy notes that are currently used by approximately 60% of obstetric units in England (produced by the Perinatal Institute [www.preg.info](http://www.preg.info); accessed February 2018).

The pregnancy notes aim to facilitate a partnership between the mother, her family and the care provider, placing emphasis on patient safety and informed choice. They are designed to 'support comprehensive history taking, promote effective communication between the mother and the multidisciplinary care team and between members of that team'. The notes are given to the woman by her midwife at her booking appointment in early pregnancy, enabling the expectant mother and her family to be informed and involved in decisions that affect her and her baby. To deal with special issues during pregnancy, a personalised management plan will outline specific treatment and care agreed between the mother and her care team. This plan will be reviewed at each antenatal contact and updated if the mother's risks/needs change.

The woman's medical/obstetric and social details are available to all healthcare professionals who may care for her during her pregnancy.

The notes enable effective communication within the multidisciplinary team, including ambulance clinicians who may attend the woman in her home or the community. All clinicians should document clinical care in these notes when they attend a woman during pregnancy if she is not transferred. Contemporaneous record keeping is a fundamental component of good clinical practice. Therefore the hand-held pregnancy notes are an important link for healthcare professionals to improve care and reduce error.

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<p>These Pregnancy Notes are a guide to your options during pregnancy, and are intended to help you make informed choices. The explanations in these notes are a general guide only, and not everything will be relevant to you. If you are asked to make a choice, feel free to ask any questions. Talk about your options with family/friends, write down anything you want to discuss and take it to your appointment. Key questions are:- What are my options? What are the advantages/disadvantages for each option for me? How do I get support to help me make a decision that is right for me? Additional information will also be available in leaflets which you will be given as needed.</p>																					
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<p>NHS Information Service for Parents Sign up for emails and texts at <a href="http://www.nhs.uk/parents">www.nhs.uk/parents</a></p>																					
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**Figure 1.1 Example of national patient hand-held records.** (Reproduced with kind permission of the Perinatal Institute)

Plans for Pregnancy and Parenthood																							
Topics	Discussed	Signature* and Date	Your intentions or preferences	Leaflets given																			
<b>Preparing for your new baby</b>		D D M M Y Y																					
Parent education	<input type="checkbox"/>			<input type="checkbox"/>																			
Hospital visit	<input type="checkbox"/>																						
Safe sleeping	<input type="checkbox"/>																						
Home environment	<input type="checkbox"/>																						
Equipment	<input type="checkbox"/>																						
Newborn screening and examination	<input type="checkbox"/>																						
Vitamin K	<input type="checkbox"/>																						
<b>BCG (see p26)</b>		D D M M Y Y	Reason: _____																				
Baby BCG indicated	No <input type="checkbox"/> Yes <input type="checkbox"/>																						
Discussed with mother	No <input type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/>																						
Mother agrees to vaccine	No <input type="checkbox"/> Yes <input type="checkbox"/>		If no, reason declined _____																				
Leaflet: 'TB, BCG vaccine and your baby' given to mother	No <input type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/>																						
<b>Connecting with your baby</b>		D D M M Y Y		<input type="checkbox"/>																			
Talking to your baby	<input type="checkbox"/>																						
Noticing and responding to baby's movements	<input type="checkbox"/>																						
How this can help your baby's brain development	<input type="checkbox"/>																						
<b>Greeting your baby for the first time</b>		D D M M Y Y		<input type="checkbox"/>																			
Skin to skin contact	<input type="checkbox"/>																						
Keeping baby close	<input type="checkbox"/>																						
Recognising feeding cues	<input type="checkbox"/>																						
<b>Responding to your baby's needs</b>		D D M M Y Y		<input type="checkbox"/>																			
Importance of comfort and love to help baby's brain develop	<input type="checkbox"/>																						
Responsive feeding	<input type="checkbox"/>																						
<b>Feeding your baby</b>		D D M M Y Y		<input type="checkbox"/>																			
Value of breastfeeding as protection, comfort and food	<input type="checkbox"/>																						
Getting off to a good start	<input type="checkbox"/>																						
Understanding how a baby breastfeeds	<input type="checkbox"/>																						
Where to get help including local support groups	<input type="checkbox"/>																						
Confirmation that a conversation has taken place around the topics outlined above																							
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Figure 1.1 (Continued)

Although there is variation in maternity hand-held notes throughout the UK, the same general principles apply throughout:

- The front cover will display the woman's name, address, named midwife, consultant and GP, next of kin and emergency contact
- Information within the notes for the woman to read, including appropriate support groups/advice line numbers, screening tests, pregnancy complications and routine visits
- The notes will identify whether the woman is on the low- or high-risk pathway of care. This is dependent on factors identified at the beginning of the pregnancy. The pathway may change during the pregnancy if complications arise, e.g. gestational diabetes, pre-eclampsia, obstetric cholestasis
- The antenatal section will display all screening tests/investigations performed, routine antenatal visits, scan results and fetal growth monitoring
- There will be a section for the woman to complete a birth plan, in discussion with her midwife
- There is a labour and postnatal section, which also includes detailed information regarding the baby, such as condition at birth, findings on the neonatal examination and details on feeding
- **Most hand-held notes have an alert/special features section.** This will identify any complications or potential complications, and may show a plan of care to address these complications. A plan of care could also be documented in the management plan section. **Any healthcare professional can and should annotate this page**
- There will be a section for correspondence between healthcare professionals, identifying potential problems and formulating plans of care. **Any healthcare professional can and should annotate this page**
- Ambulance clinicians attending an obstetric patient who has not been transported to hospital should leave a copy of their patient report form in the hand-held records. If a written or printed copy cannot be left, the hand-held notes must be annotated

It is paramount that the hand-held notes accompany the woman for all hospital admissions and routine antenatal visits. However, the notes may not have been issued to a woman in very early pregnancy if she has not booked through her midwife.

### Summary of key points

- It is important that you are aware of the roles of other healthcare professionals in the care of the obstetric patient
- Remember that any health professional can and should annotate the alert page in the patient's hand-held notes