NICE National Institute for Health and Care Excellence

NICE Pathways

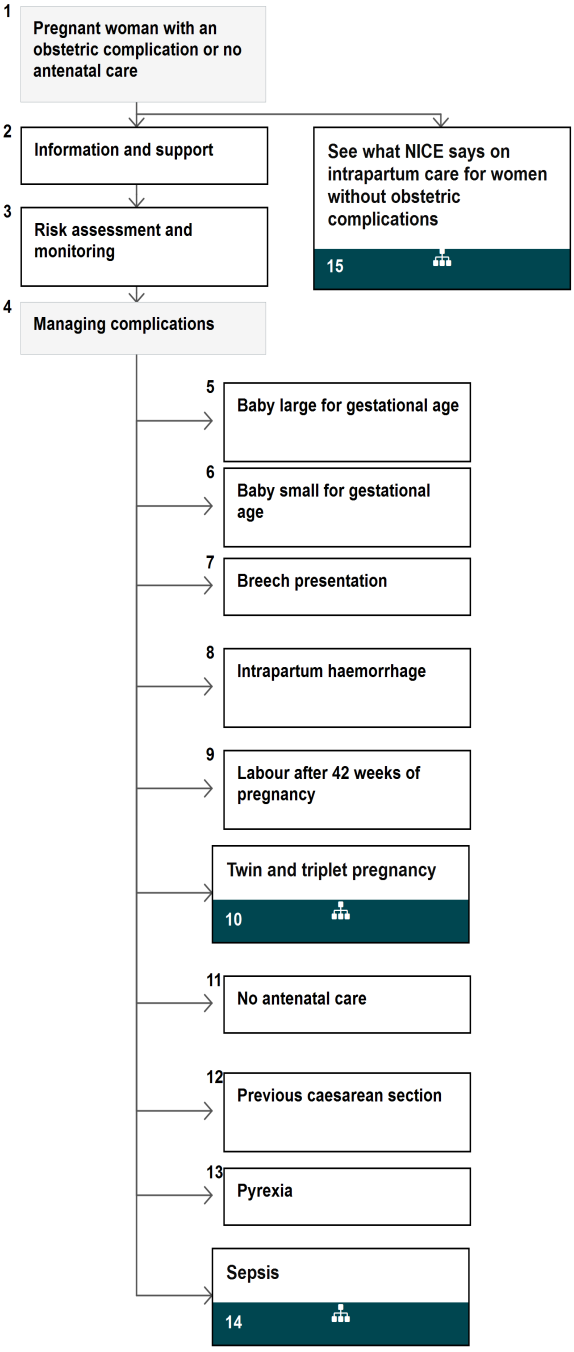
Intrapartum care for women with obstetric complications overview

NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

They are updated regularly as new NICE guidance is published. To view the latest version of this NICE Pathway see:

http://pathways.nice.org.uk/pathways/intrapartum-care-for-women-with-obstetric-complications
NICE Pathway last updated: 03 September 2019

This document contains a single flowchart and uses numbering to link the boxes to the associated recommendations.



1 Pregnant woman with an obstetric complication or no antenatal care

No additional information

2 Information and support

Follow the recommendations on communication and birth companion support in NICE's recommendations on intrapartum care for healthy women and babies for women in labour with obstetric complications or no antenatal care.

Recognise that women in labour with obstetric complications or no antenatal care:

- may be more anxious than other women in labour **and**
- are likely to have a better experience of labour and birth if they receive information about the benefits and risks of options for their care and are fully involved in decision making.

Provide information about care in labour and mode of birth, which:

- is personalised to the woman's circumstances and needs
- uses local and national figures where possible
- expresses benefits and risks in a way that the woman can understand
- is presented as recommended in the NICE guidance on patient experience in adult NHS services.

Recognise that individual views about risk vary, and support a woman's decision making and choices.

Clarify with women with obstetric complications or no antenatal care whether and how they would like their birth companion(s) involved in discussions about care during labour and birth. Review this regularly.

Involve the woman in planning her care by asking about her preferences and expectations for labour and birth. Take account of previous discussions, planning, decisions and choices, and keep the woman and her birth companion(s) fully informed.

NICE has written information for the public on intrapartum care for women with existing medical conditions or obstetric complications and their babies.

Rationale and impact

See the NICE guideline to find out why we made these recommendations and how they might affect practice.

3 Risk assessment and monitoring

Take account of symptoms reported and concerns expressed by women in labour with any of the following:

- pyrexia
- sepsis
- intrapartum haemorrhage
- breech presentation
- suspected small-for-gestational-age baby
- suspected large-for-gestational-age baby
- previous caesarean section
- labour after 42 weeks of pregnancy
- no antenatal care.

Ensure that a healthcare professional with skills and experience in managing obstetric complications reviews and assesses the condition of a woman with any of the complications listed above, including any observations recorded, and escalates care as needed.

Take account of the whole clinical picture when discussing options for care with the woman during the intrapartum period.

Carry out and record maternal observations (pulse, blood pressure, temperature and urine output), as recommended in NICE's recommendations on intrapartum care for healthy women and babies and shown in the table on routine maternal observations for women in labour with breech presentation, suspected small- or large-for-gestational-age baby, previous caesarean section, onset of labour after 42 weeks or no antenatal care, and no other reasons for concern [See page 16], for women in labour with any of the following and no other reasons for concern:

- breech presentation
- suspected small-for-gestational-age baby
- suspected large-for-gestational-age baby
- previous caesarean section

- labour after 42 weeks of pregnancy
- no antenatal care.

For women in labour with fever (a temperature of 38°C or above on a single reading or 37.5°C or above on 2 consecutive readings 1 hour apart), carry out maternal observations as shown in the table on routine maternal observations for women in labour with fever, suspected sepsis, sepsis or intrapartum haemorrhage [See page 15].

For women in labour with sepsis or suspected sepsis, carry out maternal observations as shown in the table on routine maternal observations for women in labour with fever, suspected sepsis, sepsis or intrapartum haemorrhage [See page 15].

For women with intrapartum haemorrhage, continuously monitor vaginal blood loss and carry out maternal observations as shown in the table on routine maternal observations for women in labour with fever, suspected sepsis, sepsis or intrapartum haemorrhage [See page 15].

Rationale and impact

See the NICE guideline to find out why we made these recommendations and how they might affect practice.

4 Managing complications

No additional information

5 Baby large for gestational age

Explain to women in labour whose babies are suspected to be large for gestational age that:

- it is sometimes difficult to be certain the suspicion is correct until the baby is born
- when making decisions about mode of birth (for example, vaginal birth or caesarean section), this uncertainty needs to be taken into account.

Discuss with women in labour whose babies are suspected to be large for gestational age the possible benefits and risks of vaginal birth and caesarean section, including:

- a higher chance of maternal medical problems such as infection with emergency caesarean section
- a higher chance of shoulder dystocia and brachial plexus injury with vaginal birth

- a higher chance of instrumental birth and perineal trauma with vaginal birth.

Explain to the woman and her birth companion(s) what it might mean for her and her baby if such problems did occur.

Offer women in labour whose babies are suspected to be large for gestational age a choice between continuing labour, including augmented labour, and caesarean section.

Rationale and impact

See the NICE guideline to find out why we made these recommendations and how they might affect practice.

6 Baby small for gestational age

Discuss with a woman whose baby is suspected to be small for gestational age:

- the chance of serious medical problems for her baby
- what it might mean for her and her baby if such problems did occur.

When discussing risk, explain that when a baby is suspected to be small for gestational age:

- it is sometimes difficult to be certain the suspicion is correct until the baby is born
- the chance of serious medical problems for the baby is greater with:
    - growth restriction
    - additional risk factors, such as preterm birth
    - complications during labour or birth.

Offer continuous cardiotocography to women whose babies are suspected to be small for gestational age after a full discussion of the benefits and risks (see recommendations above). Respect the woman's decision if she declines continuous cardiotocography.

Rationale and impact

See the NICE guideline to find out why we made these recommendations and how they might affect practice.

7 Breech presentation

Discuss with women in labour with breech presentation the possible benefits and risks of vaginal birth and caesarean section, including:

- an increase in the chance of serious medical problems for the woman with caesarean section
- an increase in the chance of serious medical problems for the baby with vaginal birth
- what it might mean for them and the baby if such problems did occur.

Explain to women in labour with breech presentation that any benefit of caesarean section in reducing the chance of serious medical problems for the baby may be greater in early labour.

Offer women in labour with breech presentation a choice between continuing labour and caesarean section.

Assess progress of labour in line with the NICE recommendations on intrapartum care for healthy women and babies (see care throughout labour).

Rationale and impact

See the NICE guideline to find out why we made these recommendations and how they might affect practice.

8 Intrapartum haemorrhage

If there are signs of shock in a woman with intrapartum haemorrhage, proceed with immediate resuscitation.

The maternity service and ambulance service should have strategies in place to respond quickly and appropriately if a woman has an intrapartum haemorrhage in any setting.

If a woman in labour has any vaginal blood loss other than a 'show', transfer her to obstetric-led care, in line with the NICE recommendations on intrapartum care for healthy women and babies (see general principles for transfer of care).

If a woman in labour has any vaginal blood loss other than a 'show', explain to her and her birth companion(s) what is happening.

If a woman in labour has any vaginal blood loss other than a 'show':

- Take a history of the bleeding, asking about:
  - any associated symptoms, including pain
  - any specific concerns the woman may have
  - any previous uterine surgery.
- Check previous scans for placental position.
- Assess the volume of blood loss and characteristics of the blood, such as colour, and presence of clots or amniotic fluid.
- Carry out a physical examination, including:
  - vital signs
  - abdominal palpation
  - speculum examination
  - vaginal examination if placenta praevia has been excluded
  - fetal heart auscultation.
- Start continuous cardiotocography.
- Take a blood sample to determine full blood count and blood group.

Think about the possible causes of bleeding, for example:

- placental abruption
- placenta praevia
- uterine rupture
- vasa praevia.

Recognise that in many cases, no cause will be identifiable.

If a woman in labour has vaginal blood loss typical of a 'show', follow the NICE guideline on intrapartum care for healthy women and babies.

Care plan

If a woman in labour has any vaginal blood loss other than a 'show', agree a multidisciplinary care plan with the woman and document the plan. Include the following in plans for multidisciplinary care:

- a senior obstetrician
- a senior obstetric anaesthetist

- a senior midwife
- a labour ward coordinator.

If a woman has intrapartum bleeding and her condition is stable, management should include:

- establishing venous access
- maternal monitoring (see risk assessment and monitoring [See page 4] and the table on routine maternal observations for women in labour with fever, suspected sepsis, sepsis or intrapartum haemorrhage [See page 15])
- monitoring the fetal heart rate with continuous cardiotocography.

If a woman with intrapartum bleeding has a large blood loss or her condition causes concern, management should be in line with the previous recommendation and also include:

- giving intravenous fluids urgently
- taking blood for full blood count and cross-matching
- seeking medical advice from a more experienced healthcare professional.

Management may also include:

- triggering the local major haemorrhage protocol
- taking blood for clotting studies and blood gases
- use of amniotomy or oxytocin
- expediting the birth.

Rationale and impact

See the NICE guideline to find out why we made these recommendations and how they might affect practice.

9 Labour after 42 weeks of pregnancy

Offer continuous cardiotocography to women in labour after 42 weeks of pregnancy after a full discussion of the benefits and risks to the woman and her baby. Respect the woman's decision if she declines continuous cardiotocography.

See the NICE guideline to find out why we made this recommendation and how it might affect practice.

10 Twin and triplet pregnancy

See twin and triplet pregnancy

11 No antenatal care

For women who have had no antenatal care, be aware of the particular importance of following the recommendations on establishing rapport and treating with respect in the NICE guideline on intrapartum care for healthy women and babies (see communication and birth companion support).

Provide obstetric-led intrapartum care for women who have had no antenatal care, and alert the neonatal team and, if relevant, the anaesthetic team. If the woman presents to a midwifery unit, arrange urgent transfer to an obstetric-led unit if appropriate.

For a woman with no antenatal care who has difficulty understanding, speaking and reading English, provide an interpreter (who may be a link worker or advocate and should not be a member of her family, her legal guardian or her partner), who can communicate with her in her preferred language.

If possible, take a full medical, psychological and social history from women who have had no antenatal care.

- Try to find out why there has been no care during pregnancy.
- Ask the woman who, if anyone, she would like to support her as her birth companion(s) during labour.
- Explore sensitively any possible vulnerability or safeguarding concerns, including:
    - young maternal age
    - maternal mental health
    - maternal learning disability
    - maternal substance misuse
    - domestic or sexual abuse
    - homelessness
    - human trafficking
    - undocumented migrant status
    - female genital mutilation

- the woman or family members being known to children's services or social services.

Carry out an obstetric and general medical examination of a woman with no antenatal care as soon as possible. This should include the initial assessment described in the NICE recommendations on intrapartum care for healthy women and babies.

Carry out an assessment of the unborn baby, including ultrasound if possible, to determine:

- viability
- the presentation
- an estimate of gestational age
- the possibility of multiple pregnancy
- the placental site.

Offer women who have had no antenatal care, tests for:

- anaemia (full blood count)
- haemoglobinopathies
- blood group and rhesus D status
- atypical red cell alloantibodies
- random blood glucose
- asymptomatic bacteriuria
- HIV, hepatitis B and syphilis.

Offer rapid HIV testing to women thought to be at high risk of infection, which might include:

- recent migrants from countries with high rates of HIV infection
- women who misuse substances intravenously
- suspected sexual abuse.

Explain to a woman who has had no antenatal care why and when information about her pregnancy may need to be shared with other agencies.

Contact the woman's GP and, if appropriate, other health or social care professionals for more information about the woman's history and to plan ongoing care.

If there are safeguarding concerns, refer the woman to safeguarding services, document the referral and inform healthcare professionals such as the GP, health visitor and paediatric teams, and social care professionals (see what NICE says on pregnancy and complex social factors:

service provision and child abuse and neglect).

Follow the recommendations in the NICE guideline on intrapartum care for healthy women and babies when no medical conditions or obstetric complications are identified in women who present in labour with no antenatal care.

Rationale and impact

See the NICE guideline to find out why we made these recommendations and how they might affect practice.

12 Previous caesarean section

Do not routinely insert an intravenous cannula for women in labour who have had a previous caesarean section.

Explain to women in labour who have had a previous caesarean section that:

- a vaginal birth is associated with a small chance of uterine rupture
- an emergency caesarean section may mean a higher chance of:
  - heavy bleeding needing a blood transfusion
  - infection, for example, intrauterine infection
  - a longer hospital stay
  - complications in a future pregnancy, for example, placenta praevia and placenta accreta (see what NICE says on caesarean section).

Explain to women in labour who have had a previous caesarean section that there is little evidence of a difference in outcomes for the baby between a vaginal birth or another caesarean section.

Explain to women who have had a previous caesarean section that they are likely to have a lower chance of complications in labour if they have also had a previous vaginal birth.

When discussing oxytocin for delay in the first or second stage of labour, explain to women that this:

- increases the chance of uterine rupture
- reduces the chance of another caesarean section
- increases the chance of an instrumental birth.

For guidance on continuous cardiotocography in labour for women with a previous caesarean section, see NICE's recommendations on caesarean section.

Support informed choice of a full range of options for pain relief for women who have had a previous caesarean section, including labour and birth in water.

Explain to women in labour who have had a previous caesarean section that regional analgesia is associated with:

- a reduced chance of another caesarean section
- an increased chance of an instrumental birth.

Do not routinely offer amniotomy to women in labour who have had a previous caesarean section.

For women who have had a previous caesarean section, be aware of the particular importance of following the recommendations from the NICE guideline on intrapartum care for healthy women and babies on:

- food and drink in labour (see provide supportive care and information)
- controlling gastric acidity (see avoid routine interventions)
- position in labour, including the latent first stage, and birth (see woman's position and pushing).

Rationale and impact

See the NICE guideline to find out why we made these recommendations and how they might affect practice.

13 Pyrexia

Use of antipyretics

Consider paracetamol for women in labour with a fever, a temperature of 38°C or above on a single reading or 37.5°C or above on 2 consecutive readings (1 hour apart).

Be aware that paracetamol is not a treatment for sepsis and should not delay investigation if sepsis is suspected.

See the NICE guideline to find out why we made these recommendations and how they might

affect practice.

Fetal blood sampling

For women in labour with a fever, a temperature of 38°C or above on a single reading, or 37.5°C or above on 2 consecutive readings (1 hour apart), follow the recommendations on fetal blood sampling for women with suspected sepsis (see fetal monitoring).

See the NICE guideline to find out why we made this recommendation and how it might affect practice.

14 Sepsis

See Intrapartum care for women with obstetric complications / Intrapartum care for women with sepsis

15 See what NICE says on intrapartum care for women without obstetric complications

See Intrapartum care

Routine maternal observations for women in labour with fever, suspected sepsis, sepsis or intrapartum haemorrhage

Complication	Frequency of maternal observations[1]					
	Pulse	**Blood pressure**	**Respiratory rate**	**Temperature**	**Level of consciousness** (AVPU)	**Oxygen saturation**
Fever	Hourly	4-hourly, and hourly in the second stage	4-hourly	Hourly	Hourly	4-hourly
Suspected sepsis – concern insufficient for antibiotic treatment	Hourly	4-hourly, and hourly in the second stage	4-hourly	Hourly	Hourly	4-hourly
Sepsis or suspected sepsis – on antibiotic treatment	Continuous, or at least every 30 minutes	Continuous, or at least every 30 minutes	Continuous, or at least every 30 minutes	Hourly	Every 30 minutes	Continuous or at least every 30 minutes
Intrapartum haemorrhage	At least hourly	At least 4-hourly, and at least hourly in the second	At least 4-hourly	At least 4-hourly	Hourly	At least 4-hourly

		stage				

[1] The frequency of observations should be adjusted if necessary based on the level of clinical concern.

Routine maternal observations for women in labour with breech presentation, suspected small- or large-for-gestational-age baby, previous caesarean section, onset of labour after 42 weeks or no antenatal care, and no other reasons for concern

Frequency of maternal observations[1]						
Pulse	**Blood pressure**	**Respiratory rate**	**Temperature**	**Level of consciousness** (AVPU)	**Oxygen saturation**	**Urine**
Hourly	4-hourly, and hourly in the second stage	Not required routinely	4-hourly	Not required routinely	Not required routinely	Record output

[1] The frequency of observations should be adjusted if necessary based on the level of clinical concern.

Glossary

AVPU

alert, voice, pain, unresponsive

intrapartum period

from the onset of labour (spontaneous or induced) to 24 hours after birth

regional anaesthesia

includes spinal, epidural and combined spinal–epidural techniques

regional analgesia

includes spinal, epidural and combined spinal–epidural techniques

Sources

Intrapartum care for women with existing medical conditions or obstetric complications and their babies (2019) NICE guideline NG121

Your responsibility

Guidelines

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Technology appraisals

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take these recommendations fully into account, alongside the individual needs, preferences and values of their patients. The application of the recommendations in this interactive flowchart is at the discretion of health professionals and their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Commissioners and/or providers have a responsibility to provide the funding required to enable the recommendations to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Medical technologies guidance, diagnostics guidance and interventional procedures guidance

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take these recommendations fully into account. However, the interactive flowchart does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the recommendations, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this interactive flowchart should be interpreted in a way that would be inconsistent with compliance with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.