NICE National Institute for Health and Care Excellence

NICE Pathways

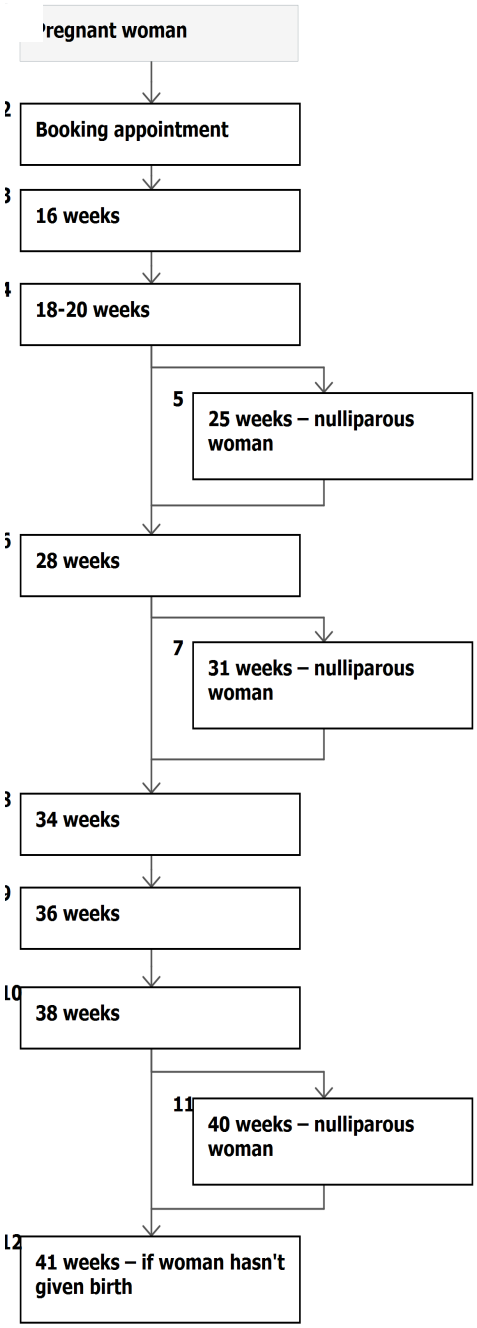
Antenatal care for uncomplicated pregnancies: schedule of appointments

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/antenatal-care-for-uncomplicated-pregnancies
NICE Pathway last updated: 30 October 2018

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



1 Pregnant woman

No additional information

2 Booking appointment (ideally by 10 weeks)

At this appointment:

- identify women who may need additional care [See page 9] and plan pattern of care for the pregnancy
- check blood group and rhesus D status (see also anaemia and blood group)
- offer screening for haemoglobinopathies, anaemia, red-cell alloantibodies, hepatitis B virus, HIV, rubella susceptibility and syphilis (see also anaemia and blood group and haemoglobinopathies)
- offer screening for asymptomatic bacteriuria (see also infections)
- inform pregnant women younger than 25 years about the high prevalence of chlamydia infection in their age group, and give details of their local National Chlamydia Screening Programme (see also infections)
- offering screening for Down's syndrome (see also Down's syndrome)
- offer early ultrasound scan for gestational age assessment
- offer ultrasound screening for structural anomalies (see also structural fetal anomalies)
- measure height, weight and calculate BMI
- measure blood pressure and test urine for proteinuria
- offer screening for gestational diabetes and pre-eclampsia using risk factors (see also pre-eclampsia)
- identify women who have had genital mutilation
- ask about any past or present severe mental illness or psychiatric treatment
- ask about mood to identify possible depression
- ask about the woman's occupation to identify potential risks.

See information and support for information that should be given at the booking appointment.

At the booking appointment, for women who choose to have screening, the following tests should be arranged:

- blood tests (for checking blood group and rhesus D status and screening for haemoglobinopathies, anaemia, red-cell alloantibodies, hepatitis B virus, HIV, rubella susceptibility and syphilis), ideally before 10 weeks

- urine tests (to check for proteinuria and screen for asymptomatic bacteriuria)
- ultrasound scan to determine gestational age using:
  - crown–rump measurement between 10 weeks and 13 weeks 6 days
  - head circumference if crown–rump length is above 84 millimetres
- Down's syndrome screening using:
  - 'combined test' at 11 weeks to 13 weeks 6 days
  - serum screening test (triple or quadruple) at 15 weeks to 20 weeks.
- ultrasound screening for structural anomalies, normally between 18 weeks and 20 weeks 6 days.

3 16 weeks

The next appointment should be scheduled at 16 weeks to:

- review, discuss and record the results of all screening tests undertaken; reassess planned pattern of care for the pregnancy and identify women who need additional care
- investigate a haemoglobin level below 11 g/100 ml and consider iron supplementation if indicated
- measure blood pressure and test urine for proteinuria
- give information, with an opportunity to discuss issues and ask questions, including discussion of the routine anomaly scan; offer verbal information supported by antenatal classes and written information.

See also structural fetal anomalies.

4 18–20 weeks

At 18 to 20 weeks, if the woman chooses, an ultrasound scan should be performed for the detection of structural anomalies. For a woman whose placenta is found to extend across the internal cervical os at this time, another scan at 32 weeks should be offered.

See also structural fetal anomalies.

5 25 weeks – nulliparous woman

At 25 weeks, another appointment should be scheduled for nulliparous women. At this appointment:

- measure and plot symphysis–fundal height
- measure blood pressure and test urine for proteinuria
- give information, with an opportunity to discuss issues and ask questions; offer verbal information supported by antenatal classes and written information.

6 28 weeks

The next appointment for all pregnant women should occur at 28 weeks. At this appointment:

- offer a second screening for anaemia and atypical red-cell alloantibodies (see also anaemia and blood group)
- investigate a haemoglobin level below 10.5 g/100 ml and consider iron supplementation, if indicated
- offer anti-D prophylaxis to rhesus-negative women
- measure blood pressure and test urine for proteinuria
- measure and plot symphysis–fundal height
- give information, with an opportunity to discuss issues and ask questions; offer verbal information supported by antenatal classes and written information.

7 31 weeks – nulliparous woman

Nulliparous women should have an appointment scheduled at 31 weeks to:

- measure blood pressure and test urine for proteinuria
- measure and plot symphysis–fundal height
- give information, with an opportunity to discuss issues and ask questions; offer verbal information supported by antenatal classes and written information
- review, discuss and record the results of screening tests undertaken at 28 weeks; reassess planned pattern of care for the pregnancy and identify women who need additional care.

8 34 weeks

At this appointment:

- offer a second dose of anti-D to rhesus-negative women
- measure blood pressure and test urine for proteinuria
- measure and plot symphysis–fundal height
- give information, with an opportunity to discuss issues and ask questions; offer verbal

- information supported by antenatal classes and written information
- review, discuss and record the results of screening tests undertaken at 28 weeks; reassess planned pattern of care for the pregnancy and identify women who need additional care.

9 36 weeks

At this appointment:

- measure blood pressure and test urine for proteinuria
- measure and plot symphysis–fundal height
- check position of baby
- for women whose babies are in the breech presentation, offer ECV.

See information and support for information that should be given before or at 36 weeks.

10 38 weeks

Another appointment at 38 weeks will allow for:

- measurement of blood pressure and urine testing for proteinuria
- measurement and plotting of symphysis–fundal height.

See information and support for information that should be given at this appointment.

11 40 weeks – nulliparous woman

For nulliparous women, an appointment at 40 weeks should be scheduled to:

- measure blood pressure and test urine for proteinuria
- measure and plot symphysis–fundal height.

12 41 weeks

For women who have not given birth by 41 weeks:

- a membrane sweep should be offered
- induction of labour should be offered
- blood pressure should be measured and urine tested for proteinuria

- symphysis–fundal height should be measured and plotted
- information should be given, with an opportunity to discuss issues and ask questions; verbal information supported by written information.

Types and frequencies of serious medical problems that can affect babies

Numbers and proportions of the individual components of the composite adverse outcomes measure recorded in the Birthplace UK (2011) study

Outcome	Actual number of babies affected out of [63,955 to 64,535]* (number per 1000)	Percentage of all adverse outcomes measured
Stillbirth after start of care in labour	14 out of 64,535 (0.22 per 1000)	5%
Death of the baby in the first week after birth	18 out of 64,292 (0.28 per 1000)	7%
Neonatal encephalopathy (disordered brain function caused by oxygen deprivation before or during birth) (clinical diagnosis)	102 out of 63,955 (1.6 per 1000)	40%
Meconium aspiration syndrome (the baby breathes meconium into their lungs)	86 out of 63,955 (1.3 per 1000)	34%
Brachial plexus injury	24 out of 63,955 (0.38 per 1000)	9%
Bone fractures	11 out of 63,955 (0.17 per 1000)	4%
TOTAL (of all outcomes included in the 'adverse outcome' composite measure)	255 out of 63,955 to 64,535) (approx. 4 per 1000)	99%**
Note: Each of the categories above are mutually exclusive and outcomes listed higher in the		

table take precedence over outcomes listed lower down. For example, if a baby with neonatal encephalopathy died within 7 days the outcome is classified as an early neonatal death.
* Denominator varies because of missing values.
** Does not equal 100% because of rounding.

Adverse outcome: in order to be able to count enough adverse events to be able to say that the results recorded are not just a result of chance, the Birthplace UK (2011) study used a composite definition of 'adverse outcome'. The definition includes the following outcomes: stillbirth during labour, death of the baby in the first week after birth, neonatal encephalopathy (disordered brain function caused by oxygen deprivation before or during birth), meconium aspiration syndrome, and physical birth injuries (brachial plexus injury and bone fractures). The term 'serious medical problems' has been used to describe this composite outcome in the recommendations.

The interactive flowchart covers recommendations on baseline clinical care for all pregnant women. It does not offer information on the additional care that some women will require. Pregnant women with the following conditions usually require care that is additional to that detailed in this flowchart:

- cardiac disease, including hypertension
- renal disease
- endocrine disorders or diabetes requiring insulin
- psychiatric disorders (being treated with medication)
- haematological disorders
- autoimmune disorders
- epilepsy requiring anticonvulsant drugs
- malignant disease
- severe asthma
- use of recreational drugs such as heroin, cocaine (including crack cocaine) and ecstasy
- HIV or HBV infection
- obesity (body mass index 30 kg/m^2 or above at first contact) or underweight (body mass index below 18 kg/m^2 at first contact)

- higher risk of developing complications, for example, women aged 40 and older, women who smoke
- women who are particularly vulnerable (such as teenagers) or who lack social support.

Women who have experienced any of the following in previous pregnancies:

- recurrent miscarriage (three or more consecutive pregnancy losses or a mid-trimester loss)
- preterm birth
- severe pre-eclampsia, (H) hemolytic anaemia, (EL) elevated liver enzymes, and (LP) low platelet count (HELLP syndrome) or eclampsia
- rhesus isoimmunisation or other significant blood group antibodies
- uterine surgery including caesarean section, myomectomy or cone biopsy
- antenatal or postpartum haemorrhage on two occasions
- puerperal psychosis
- grand multiparity (more than six pregnancies)
- a stillbirth or neonatal death
- a small-for-gestational-age infant (below 5th centile)
- a large-for-gestational-age infant (above 95th centile)
- a baby weighing below 2.5 kg or above 4.5 kg
- a baby with a congenital abnormality (structural or chromosomal).

Glossary

ECV

external cephalic version

MIDIRS

Midwives Information and Resource Service

RAADP

routine antenatal anti-D prophylaxis

RhD

rhesus D

Sources

Antenatal care for uncomplicated pregnancies (2008 updated 2017) NICE guideline CG62

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.