

NICE support for commissioners and others using the quality standard for antenatal care

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Introduction

Implementing the recommendations from NICE guidance and other [NICE-accredited guidance](#) is the best way to support improvements in the quality of care or services, in line with the statements and measures that comprise the NICE quality standards. This report:

- considers the resource impact of implementing the changes needed to achieve the quality standard at a local level
- identifies where potential cost savings can be made
- highlights the areas of care in the quality standard that have potential implications for commissioners
- directs commissioners and service providers to a package of support tools that can help them implement NICE guidance and redesign services.

[NICE quality standards](#) are concise sets of statements designed to drive measurable quality improvements within a particular area of health or care. The NICE quality standard for antenatal care was developed by a Topic Expert Group using the best available evidence, and was produced collaboratively with the NHS along with their partners and service users.

Each [quality statement](#) has accompanying quality measures. At present, the number of health outcome measures is limited so the quality measures focus

on improving the processes of care that are considered to be linked to health outcomes.

From 2013/14 the NHS Commissioning Board will draw on the NICE quality standards to translate the national health outcomes into outcomes and indicators that can be applied at a local level. These will be used to hold clinical commissioning groups to account for their contribution to improving outcomes, and will be set out in the NHS commissioning outcomes framework (COF). Trusts and other service providers may refer to the quality standards in their Quality Accounts in order to assess the quality of their healthcare services and demonstrate quality improvement within their organisation.

NHS commissioners can use the quality standards to improve the services commissioned from providers by including quality statements and measures within the service specification element of the standard contract, by establishing key performance indicators as part of a tendering process and incentivising provider performance by using the quality standard measures, where they are provided, in association with incentive payments such as [Commissioning for Quality and Innovation](#) (CQUIN). NICE quality standards can also provide a baseline against which improvements can be measured and rewarded, enabling commissioners to address gaps in service provision, support best practice and encourage evidence-based treatments and care.

The NICE support for commissioners and others for the antenatal care quality standard should be read alongside:

- [Antenatal care \(2012\) NICE quality standard 22](#)
- [Antenatal care: routine care for the healthy pregnant woman](#) (2008) NICE guideline CG62
- [Thrombosis and embolism during pregnancy and the puerperium, reducing the risk](#) (2015) Royal College of Obstetricians and Gynaecologists green-top guideline 37a
- [Diabetes in pregnancy: management of diabetes and its complications from preconception to the postnatal period](#) (2015) NICE guideline NG3

- [Pregnancy and complex social factors: a model for service provision for pregnant women with complex social factors](#) (2010) NICE guideline CG110
- [Hypertension in pregnancy: the management of hypertensive disorders during pregnancy](#) (2010) NICE guideline CG107
- [Dietary interventions and physical activity interventions for weight management before, during and after pregnancy](#) (2010) NICE guideline PH27
- [Quitting smoking in pregnancy and following childbirth](#) (2010) NICE guideline PH26
- [Induction of labour](#) (2008) NICE guideline CG70
- [Maternal and child nutrition](#) (2008) NICE guidance PH11

Commissioners should also be aware that the quality standard for antenatal care forms part of a suite of maternity quality standards, of which antenatal care, intrapartum care and postnatal care will form the core pathway. The full set of quality standards, including all the maternity quality standards that should be considered when commissioning and providing high-quality maternity services are:

- [Ectopic pregnancy and miscarriage](#) (2014) NICE quality standard 69
- [Induction of labour](#) (2014) NICE quality standard 60
- [Multiple pregnancy](#) (2013) NICE quality standard 46
- [Postnatal care](#) (2013) NICE quality standard 37
- [Hypertension in pregnancy](#) (2013) NICE quality standard 35
- [Caesarean section](#) (2013) NICE quality standard 32
- [Patient experience in adult NHS services](#) (2012) NICE quality standard 15
- [Specialist neonatal care](#) (2010) NICE quality standard 4
- [Venous thromboembolism prevention](#) (2010) NICE quality standard 3

Relevant quality standards in development include:

- [Antenatal and postnatal mental health](#). NICE quality standard. Publication expected October 2015
- [Intrapartum care](#). NICE quality standard. Publication expected December 2015

- Diabetes in pregnancy. NICE quality standard. Publication expected January 2016

1 Overview of antenatal care

Most women who are pregnant in the UK will have an uncomplicated pregnancy, giving birth to a healthy baby at full term. However, problems during pregnancy (such as miscarriage, fetal growth restriction and preterm birth) remain common, and stillbirth rates have changed little in recent years. Maternal complications such as depression, thromboembolism, haemorrhage and sepsis are also still encountered, with the most extreme cases contributing to a UK maternal mortality rate of around 11 per 100,000 maternities (2006–2008 data)¹.

Adverse outcomes of pregnancy are sometimes unpredictable events, but can also be associated with risk factors such as obesity, smoking, diabetes, hypertension, substance misuse or domestic abuse. The aims of antenatal care are to optimise maternal and fetal health, to offer women maternal and fetal screening, to make medical or social interventions available to women where indicated, to improve women's experience of pregnancy and birth and to prepare women for motherhood, whatever their risk status.

The NICE quality standard for antenatal care requires that services should be commissioned from and coordinated across all relevant agencies encompassing the antenatal care part of the maternity pathway. An integrated approach to provision of services is fundamental to the delivery of high-quality care to pregnant women. Clinical commissioning groups will be responsible for commissioning much of the maternity pathway, including antenatal care, while Health and Wellbeing Boards will lead on public health initiatives such as teenage pregnancy, breastfeeding, weight management and smoking cessation². [The NHS Commissioning Board](#) will be responsible for

¹ Centre for Maternal and Child Enquiries (CMACE) (2011) Saving mothers' lives: reviewing maternal deaths to make motherhood safer: 2006–08. The eighth report on confidential enquiries into maternal deaths in the United Kingdom. *British Journal of Gynaecology* 118 (suppl. 1): 1–203.

² NHS Commissioning Board (2012) [Commissioning maternity services. A resource pack for clinical commissioning groups](#).

commissioning public health services for children from pregnancy to age 5 (Healthy Child Programme 0–5), including health visiting and family nurse partnership and have responsibility for Child Health Information Systems. Responsibility for public health for children under 5 will transfer to local authorities in 2015³. Commissioners will therefore need to be mindful of these interdependencies and may consider collaborative commissioning arrangements.

1.1 *Epidemiology*

Maternity services are used by over 700,000 women a year. In England the total number of live births in 2010 was 687,007 and there were 3506 stillbirths⁴. The number of live births has been increasing steadily since 2001 (with the exception of a small decrease in 2009 compared with 2008 figures). Most pregnancies (around 99%) are singleton pregnancies.

The age profile of pregnant women is getting older. Between 2001 and 2010 the number of births in women aged 40 or over rose by 71%. This can place greater demands on maternity services because pregnancies in older women are more likely to involve complications⁵.

2 Resource implications

The cost of meeting the quality standard for antenatal care is dependent on current local practice and the progress that organisations have made in implementing NICE clinical guidelines [3](#), [62](#), [70](#), [107](#) and [110](#), NICE public health guidance [11](#), [26](#), [27](#) and the [Royal College of Obstetricians and Gynaecologists green-top guideline 37\(a\)](#).

Table 1 below summarises the resource implications by area of care for commissioners and service providers working towards achieving this quality standard. The detail of how the resource implications have been estimated is provided in section 3 of this report.

³ NHS Commissioning Board (2012) [Commissioning fact sheet for clinical commissioning groups](#).

⁴ [Office for National Statistics \(2010\)](#).

⁵ The Royal College of Midwives (2011) [State of maternity services report 2011](#).

Under the new [maternity services pathway payment system](#) that came into effect in April 2013, the payment system is split into 3 modules, each of which is paid separately. These are antenatal care, the delivery, and postnatal care.

The antenatal pathway payment system begins when the pregnant woman has her first antenatal appointment or attendance with her maternity provider. The antenatal pathway payment (standard, intermediate or intensive) is based on information collected at the antenatal assessment appointment (usually undertaken at around 10 weeks' gestation) when the health and social care risk assessment is carried out.

There are 2 delivery pathway prices, split by whether there were complications and comorbidities or not. The price includes all postpartum care of the mother and well/healthy baby/babies until transfer to community postnatal care.

When commissioning services to achieve the NICE quality standard for antenatal care, commissioners should therefore be aware of the potential impact of the pathway funding system from April 2013.

Table 1 Potential resource implications of achieving the quality standard for antenatal care

| Area of care | Estimated resource impact |
|---|---|
| <p>Services</p> <p>Access to antenatal care</p> <p>Continuity of care</p> <p>Record keeping</p> | <p>There may be increased costs associated with providing improved access to antenatal care dependent on current service provision and activity in the local area. These costs are likely to be offset at a national level by savings associated with providing improved access to antenatal care services because of a reduction in adverse events associated with birth.</p> |
| <p>Risk assessment</p> <p>Body mass index</p> <p>Smoking cessation</p> <p>Gestational diabetes</p> <p>Pre-eclampsia</p> <p>Venous thromboembolism</p> | <p>Additional costs are anticipated because of increased provision of personalised advice on healthy eating and how to be physically active, increased referrals to evidence-based stop smoking services, an increase in the number of women being offered testing for gestational diabetes, increased prescribing costs, increased provision of specialist advice and increased referrals to a specialist service.</p> <p>However, increasing the number of interventions through improved risk assessment is likely to lead to fewer caesarean sections and savings from a reduction in complications during pregnancy and labour and associated costs.</p> |
| <p>Screening</p> <p>National fetal anomaly screening programmes</p> | <p>Variation in current practice is likely to lead to a cost impact in some localities. Increased costs may be incurred because of an increase in the number of women receiving screening and the type of screening tests performed.</p> <p>An increase in the number of cases of Down's syndrome detected correctly and a decrease in the numbers falsely detected may have resource implications in terms of counselling and subsequent pregnancy outcomes.</p> |
| <p>Fetal wellbeing</p> <p>External cephalic version (ECV)</p> <p>Membrane sweeping for prolonged pregnancy</p> | <p>No significant overall cost impact anticipated at a national level. Additional costs because of increased numbers of ECVs are likely to be offset by savings from fewer caesarean sections.</p> |

3 Commissioning implications and cost impact

This section considers the commissioning implications and potential resource impact of implementing the recommendations to achieve the NICE quality standard for antenatal care. This quality standard is made up of 12 quality statements, which are grouped into areas of care as shown in table 1 above.

3.1 Services

Quality statement 1: Services – access to antenatal care

Pregnant women are supported to access antenatal care, ideally by 10 weeks 0 days.

Quality statement 2: Services – continuity of care

Pregnant women are cared for by a named midwife throughout their pregnancy.

Quality statement 3: Services – record keeping

Pregnant women have a complete record of the minimum set of antenatal test results in their hand-held maternity notes.

In 2006, it was reported that around 16% of all pregnant women, including many of those aged under 18, delay seeking maternity care until they are 5 months pregnant or more. These women and their babies have worse outcomes than those who access maternity care at an earlier stage of their pregnancy. Commissioners need to understand what, in their current services, prevents these women from seeking care early or maintaining contact with maternity services and to overcome these barriers by providing more flexible services at times and places that meet the needs of these women⁶.

When reviewing antenatal care services, particular consideration therefore needs to be given to early access to services (ideally by 10 weeks 0 days), continuity of care throughout antenatal care and record keeping for all pregnant women throughout their pregnancy. Commissioners and providers

⁶ Department of Health (2007) [Maternity matters: choice, access and continuity of care in a safe service](#).

should note the recommendations in Antenatal care (NICE guideline CG62) and [Pregnancy and complex social factors](#) (NICE guideline CG110) to help them to achieve these statements in the NICE quality standard.

[Antenatal care](#) (recommendation 1.2.3.1) recommends that antenatal care should be readily and easily accessible to all pregnant women and should be sensitive to the needs of individual women and the local community. Pregnant women should be encouraged to see a health professional about their pregnancy as early as possible and have regular check-ups from their midwife or doctor throughout their pregnancy (antenatal care). This may include being contacted by their midwife or doctor if they miss a check-up. Commissioners are reminded that women with complex social needs may be less likely to access or maintain contact with antenatal care services. Additionally, late initial contact and late booking are more prevalent among women from some minority ethnic groups, particularly women from black African and Bangladeshi ethnic groups⁷.

Commissioners should therefore ensure that local arrangements include services that are appropriate for the locality and that all pregnant women, including those with complex social needs, are encouraged to access services early (ideally by 10 weeks 0 days) in their pregnancy and maintain contact with antenatal care services throughout. Commissioners and providers should also involve women from a range of backgrounds when designing services to ensure that services are able to meet their needs.

In line with [Pregnancy and complex social factors](#) (recommendations 1.1.1 and 1.1.2 [*KPI*]), commissioners should undertake mapping of their local population to guide service provision. Commissioners should ensure that the following are recorded:

- the number of women presenting for antenatal care with any complex social factor⁸

⁷ NICE (2012) Antenatal care quality standard in development: briefing paper.

⁸ Examples of complex social factors in pregnancy include: poverty; homelessness; substance misuse; recent arrival as a migrant; asylum seeker or refugee status; difficulty

- the number of women within each complex social factor grouping identified locally.

[Pregnancy and complex social factors](#) recommends that commissioners should ensure that the following are recorded separately for each complex social factor grouping (recommendation 1.1.2):

- the number of women who attend for booking by 10 weeks 0 days, 12 weeks and 6 days and 20 weeks
- the number of women who attend the recommended number of antenatal appointments, in line with national guidance⁹
- the number of women who experience, or have babies who experience, mortality or significant morbidity¹⁰
- the number of appointments each woman attends
- the number of scheduled appointments each woman does not attend¹¹.

In order to achieve the statement within the quality standard, commissioners may also wish to request local audits that show the numbers of pregnant women, broken down by different populations, who did not book for antenatal care by 10 weeks 0 days, 12 weeks 6 days and 20 weeks 0 days and those that did not attend at least the recommended number of antenatal appointments.

Commissioners should ask providers to demonstrate that a variety of methods, for example text messages, are used to remind women of upcoming and missed appointments.

Continuity of care is a national priority in the NHS and it is vital that mothers and their families should feel supported and experience well-coordinated and

speaking or understanding English; age under 20; domestic abuse. Complex social factors may vary, both in type and prevalence, across different local populations.

⁹ [Antenatal care: routine care for the healthy pregnant woman](#) (2008) NICE guideline CG62. Recommendation 1.2.5.1: A schedule of antenatal appointments should be determined by the function of the appointments. For a woman who is nulliparous with an uncomplicated pregnancy, a schedule of 10 appointments should be adequate. For a woman who is parous with an uncomplicated pregnancy, a schedule of 7 appointments should be adequate.

¹⁰ Significant morbidity is morbidity that has a lasting impact on either the woman or the child.

¹¹ The [Maternity Services Secondary Uses Dataset](#) will collect such data.

integrated care¹². In order to drive high-quality care and to achieve these statements within this quality standard, commissioners can also refer to sections 2.12–2.14 in [Maternity matters: choice, access and continuity of care in a safe service](#) and ensure that providers are able to deliver continuity of care throughout the antenatal period, which includes provision for pregnant women to be cared for by a named midwife¹³ throughout their antenatal care. Local arrangements should also include systems to ensure coordination of a pregnant woman's care when the named midwife is not available. Commissioners may also wish to request local audits of the number of healthcare professionals that pregnant women see for their routine antenatal appointments.

Commissioners also need to ensure that providers are adhering to the NICE guidance relating to documentation of care and that maternity services have a system in place whereby pregnant women carry their own case notes and that they contain a complete record of the minimum set of antenatal test results as listed in the [quality statement](#). Commissioners may wish to refer to Antenatal care (recommendation 1.2.4.2 and [Appendix D: Antenatal appointments \(new schedule and contents\)](#)¹⁴) and [Pregnancy and complex social factors](#) (recommendation 1.1.10) for further information and are reminded that hand-held maternity notes and the information within them should be accessible to all women, including women who do not speak or read English and those with additional needs such as physical, sensory or learning disabilities. Providers should have alternative arrangements in place where women choose not to have results of tests within the hand-held notes (for example where information is sensitive and relates to positive screening results).

There may be increased costs associated with providing antenatal care in different ways dependent on current service provision and activity in the local

¹² Department of Health (2011) [The Operating Framework for the NHS in England 2012/13](#).

¹³ A named midwife is defined as a named registered midwife who is responsible for providing all or most of a woman's antenatal or postnatal care and coordinating care should they not be available. Definition adapted from [Maternity matters: choice, access and continuity of care in a safe service](#) (2007).

¹⁴ The minimum set of tests for routine scheduled antenatal care has been developed from the appointment schedule in Appendix D of [Antenatal care: routine care for the healthy pregnant woman](#) (2008) NICE guideline CG62.

area. For example, the cost of employing an additional full-time midwife is estimated to be £36,000–£43,000 a year¹⁵, while the annual staff cost of providing a ‘one-stop shop’ (where a range of services can be accessed at the same time) for one afternoon a week is estimated to be £5500¹⁶. There are also likely to be savings associated with providing improved access to antenatal care services for women because of a reduction in adverse events associated with birth and longer term child and maternal health. It is likely that receiving timely antenatal care will have other benefits, for instance uptake of screening, identification of HIV and effective treatment of gestational diabetes¹⁷.

On balance, the [costing report](#) for the NICE guideline on antenatal care and the [costing statement](#) for the NICE guideline on pregnancy and complex social factors did not anticipate a significant overall cost impact at a national level for the recommendations relating to access to antenatal care and continuity of care.

There is currently no national format for hand-held maternity notes, although areas are likely to have their own format for hand-held maternity notes. Ensuring inclusion of a complete record of the minimum set of antenatal test results in pregnant women’s hand-held notes may lead to increased use of staff time where this is not current practice, but costs associated with this are not expected to be significant.

Commissioners and providers can refer to the [NICE shared learning database](#)¹⁸, which provides an example of implementation of the NICE guideline on pregnancy and complex social factors. The [Doncaster family nurse partnership, making a real difference for young pregnant women and their baby](#) describes an initiative for first-time pregnant teenagers, which benefits children and families with a likelihood of poorer outcomes. The

¹⁵ Agenda for Change pay bands 6 and 7, mid-point plus on-costs.

¹⁶ NICE (2010) [Costing statement for NICE clinical guideline 110](#).

¹⁷ National Collaborating Centre for Women’s and Children’s Health (2010) Pregnant women with complex social factors: a model for service provision. Section 6.7: Health economics considerations.

¹⁸ The [NICE shared learning database](#) offers examples of how commissioners and service providers have used NICE guidance to create innovative and effective local implementation programmes for service improvements.

service engages with pregnant women under the age of 20 to improve antenatal health, child development and parents' self-sufficiency¹⁹.

Implementation tools and resources

Commissioners and others may wish to refer to the NICE implementation tools and resources for the NICE guidelines on [antenatal care](#) and [pregnancy and complex social factors](#).

Commissioners and others may consider local data collection activities as well as the NICE antenatal care [audit support tool](#), the NICE pregnancy and complex social factors [baseline assessment tool](#) and the NICE weight management before, during and after pregnancy [audit support](#) (criterion 3) to measure current practice against the NICE recommendations and to monitor providers and steps taken to achieve these statements in the quality standard.

Commissioners and others can use the [Maternity Services Secondary Uses Dataset](#) once implemented in April 2013, the Care Quality Commission [Maternity Services Survey 2010](#) and the [Integrated Performance Measures Monitoring – Maternity, access to midwifery](#) data collection tools to support them in the measurement of current practice against these statements in this quality standard.

Commissioners and others may find the [NICE pregnancy and complex social factors: service descriptions](#) useful. This includes examples of services for pregnant women with complex social factors.

The [NICE 'do not do' recommendations database](#) may also be useful for identifying NHS clinical practices that should be discontinued completely or should not be used routinely in accordance with [Antenatal care](#) (NICE guideline CG62). The 'do not do' recommendations may be because there is evidence that the practice is not on balance beneficial or there is a lack of evidence to support its continued use.

¹⁹ Please note: this example is offered to share good practice and NICE makes no judgement on the compliance of this service with its guidance.

3.2 *Risk assessment*

Quality statement 4: Risk assessment – body mass index

Pregnant women with a body mass index of 30 kg/m² or more at the booking appointment are offered personalised advice from an appropriately trained person on healthy eating and physical activity.

Quality statement 5: Risk assessment – smoking cessation

Pregnant women who smoke are referred to an evidence-based stop smoking service at the booking appointment.

Quality statement 6: Risk assessment – gestational diabetes

Pregnant women are offered testing for gestational diabetes if they are identified as at risk of gestational diabetes at the booking appointment.

Quality statement 7: Risk assessment – pre-eclampsia

Pregnant women at high risk of pre-eclampsia at the booking appointment are offered a prescription of 75 mg of aspirin to take daily from 12 weeks until at least 36 weeks.

Quality statement 8: Risk assessment – venous thromboembolism

Pregnant women at intermediate risk of venous thromboembolism at the booking appointment have specialist advice provided about their care.

Quality statement 9: Risk assessment – venous thromboembolism

Pregnant women at high risk of venous thromboembolism at the booking appointment are referred to a specialist service.

The complexity of pregnancy is increasing. Higher numbers of older women, women who are overweight or obese and women with pre-existing medical conditions means that the number of women who do not experience pregnancy as 'normal' is increasing²⁰. Commissioners should ensure that providers are adhering to NICE guidance relating to risk assessment for obesity, smoking status, gestational diabetes, pre-eclampsia and venous thromboembolism and should ensure that clear referral pathways have been

²⁰ NHS Commissioning Board (July 2012) [Commissioning maternity services. A resource pack to support clinical commissioning groups.](#)

established so that pregnant women who require specialist care are managed and treated by the appropriate teams.

[Weight management before, during and after pregnancy](#) (NICE guideline PH27) states that women who are obese when they become pregnant face an increased risk of complications during pregnancy and childbirth. These include the risk of impaired glucose tolerance and gestational diabetes, miscarriage, pre-eclampsia, thromboembolism and maternal death²¹. About half of women of childbearing age are either overweight (BMI 25–29.9 kg/m²) or obese (BMI of 30 kg/m² or greater)²². Based on a measurement taken at the booking appointment just after the first trimester, 15.6% of pregnant women in England are obese²³.

Providers should be able to demonstrate that local arrangements are in place for maternal weight and height to be measured at the booking appointment, and the woman's body mass index calculated (weight [kg]/height[m]²) and recorded in notes, the woman's hand-held record and the patient information system. Commissioners and providers should also note recommendation 2 in [Weight management before, during and after pregnancy](#) and recommendation 6 in [Maternal and child nutrition](#) (NICE guideline PH11), and be able to demonstrate that local arrangements include pathways for pregnant women with a body mass index of 30 kg/m² or more at the booking appointment to be offered personalised advice from an appropriately trained person²⁴ on healthy eating and physical activity.

Commissioners and providers can refer to the [NICE shared learning database](#), which provides an example of implementation of the NICE guideline on weight management before, during and after pregnancy. [The](#)

²¹ Centre for Maternal and Child Enquiries and the Royal College of Obstetricians and Gynaecologists (2010) [The management of women with obesity in pregnancy](#).

²² The NHS Information Centre (2008).

²³ Heslehurst N, Rankin J, Wilkinson JR et al. (2010) A nationally representative study of maternal obesity in England, UK: trends in incidence and demographic inequalities in 619,323 births, 1989–2007. *International Journal of Obesity* 34: 420–8.

²⁴ An appropriately trained person is someone who can demonstrate expertise and competencies in weight management in pregnancy, including providing advice about nutrition, and/or physical activity. This may include obstetricians, GPs, midwives, health visitors, nurses, dietitians, midwifery assistants, support workers and those working in weight management programmes (commercial or voluntary).

[Monday clinic; implementing a maternal obesity service](#) describes a midwifery-led service that encourages obese, pregnant women to make positive healthy lifestyle changes in the antenatal period that would be sustainable after the birth²⁵.

Providers should be able to demonstrate that local arrangements are in place for pregnant women to have their smoking status recorded at the booking appointment. Local arrangements should also include pathways for pregnant women who smoke to be referred to evidence-based stop smoking services²⁶ and arrangements for pregnant women who smoke and who fail to attend an appointment with evidence-based stop smoking services to be followed up.

Commissioners and providers can refer to the [NICE shared learning database](#), which provides an example of implementation of the NICE guideline on quitting smoking in pregnancy and following childbirth. [Smoking cessation in routine antenatal care](#) describes how smoking cessation advice was brought into routine antenatal care and improved outcomes without additional investment²⁷.

Risk assessment for pregnant women should also consider gestational diabetes and pregnancy-induced hypertension and pre-eclampsia, which are common complications of pregnancy. It is estimated that gestational hypertension complicates 12–15% of pregnancies²⁸, and that approximately 2–5% of pregnancies involve women with diabetes²⁹.

Commissioners and providers should adhere to the recommendation in the NICE guideline on [antenatal care](#) (recommendation 1.9.1.1) for screening for gestational diabetes using risk factors. Commissioners need to ensure that providers can demonstrate that risk factors for gestational diabetes are

²⁵ Please note: this example is offered to share good practice and NICE makes no judgement on the compliance of this service with its guidance.

²⁶ [Quitting smoking in pregnancy and following childbirth](#) (2010) NICE guidance PH26 (recommendation 1).

²⁷ Please note: this example is offered to share good practice and NICE makes no judgement on the compliance of this service with its guidance.

²⁸ Anumba DOC, Lincoln K, Robson SC (2010) Predictive value of clinical and laboratory indices at first assessment in women referred with suspected gestational hypertension. *Hypertension in Pregnancy* 29: 163–79.

²⁹ NICE (2015) [Diabetes in pregnancy: costing statement](#).

identified and recorded at the booking appointment and that those with at least one risk factor are offered testing for gestational diabetes. Testing for gestational diabetes should be carried out in accordance with [Diabetes in pregnancy \(NICE guideline NG3\)](#) recommendations 1.2.5–1.2.7.

Commissioners should also note recommendation 1.1.2.1 [*KPI*] in the NICE guideline on [hypertension in pregnancy](#) and may wish to assess whether providers are ensuring that pregnant women have their risk factors for pre-eclampsia identified and recorded at the booking appointment and that pregnant women who are at high risk³⁰ of pre-eclampsia are offered a prescription of 75 mg aspirin to take daily from 12 weeks until at least 36 weeks.

In line with the [Royal College of Obstetricians and Gynaecologists \(RCOG\) green top guideline 37a](#) (2009) recommendations 1, 2, 4, 6 and 8, commissioners should ensure that providers are also able to demonstrate that pregnant women are also having their risk of venous thromboembolism assessed and recorded at the booking appointment. Commissioners also need to ensure that onward referral pathways are in place for those pregnant women identified as being at high risk³¹ of venous thromboembolism to be referred to a specialist service. This could be a trust-nominated thrombosis in pregnancy expert or team. Those pregnant women who are at intermediate risk³² should have specialist advice provided about their care. Commissioners

³⁰ Pregnant women at high risk of pre-eclampsia are defined in [Hypertension in pregnancy: The management of hypertensive disorders during pregnancy](#) (NICE guideline CG107) as those with any of the following: hypertensive disease during a previous pregnancy, chronic kidney disease, autoimmune disease such as systemic lupus erythematosus or antiphospholipid syndrome, type 1 or type 2 diabetes, chronic hypertension.

³¹ High risk of venous thromboembolism is defined by the [Royal College of Obstetricians and Gynaecologists \(RCOG\) green top guideline 37a](#) (2009) as any of the following: single previous venous thromboembolism and thrombophilia (inherited or acquired) or family history, single previous unprovoked/oestrogen-related venous thromboembolism, previous recurrent venous thromboembolism (more than one).

³² Intermediate risk of venous thromboembolism is defined by the [Royal College of Obstetricians and Gynaecologists \(RCOG\) green top guideline 37a](#) (2009) as any of the following: single previous venous thromboembolism with no family history or thrombophilia (inherited or acquired); thrombophilia (inherited or acquired) and no venous thromboembolism; medical comorbidities such as heart or lung disease, systemic lupus erythematosus, cancer, inflammatory conditions, nephritic syndrome, sickle cell disease, intravenous drug use; surgical procedures such as appendectomy; **or** three or more risk factors from the following list or two or more risk factors from the following list if admitted: age over 35 years; body mass index more than 30 kg/m²; parity 3 or more; smoker; gross varicose

may wish to note that this would involve the healthcare professional responsible for the pregnant woman's care discussing the circumstances with a specialist service and acting on this advice.

Expert opinion suggests that current practice around offering personalised advice from an appropriately trained person on healthy eating and physical activity to pregnant women with a body mass index of 30 kg/m² or more at the booking appointment varies. Where it is not current practice and additional support is required, the estimated cost of providing personalised advice from an appropriately trained person varies. An appropriately trained person may include obstetricians, GPs, midwives, health visitors, nurses, dietitians, midwifery assistants, support workers and those working in weight management programmes (commercial or voluntary). Where the appropriately trained person is a dietitian the estimated cost of providing personalised advice varies between £45 (group sessions) and £75 (one-to-one sessions)³³.

Encouraging healthcare professionals to refer all pregnant women who smoke – even those who are currently unwilling to consider quitting – to an evidence-based stop smoking service at the booking appointment may create a need for additional stop smoking resources. However, commissioning maternity and stop smoking services in line with [Quitting smoking in pregnancy and following childbirth](#) (NICE guideline PH26) will help lower smoking prevalence. This in turn will generate health benefits resulting in both short- and longer term reduced healthcare costs.

Current practice around offering pregnant women testing for gestational diabetes if they are identified as at risk of gestational diabetes at the booking appointment is thought to vary. Where this quality statement leads to an increase in the number of women being offered testing for gestational diabetes, both additional costs and savings may be incurred. Annual costs for screening and testing for gestational diabetes are estimated at around

veins; current systemic infection; immobility (e.g. paraplegia, symphysis pubis dysfunction with reduced mobility); long-distance travel (greater than 4 hours); pre-eclampsia; dehydration/hyperemesis/ovarian hyperstimulation syndrome; multiple pregnancy or assisted reproductive therapy.

³³ NICE (2010) [Weight management before, during and after pregnancy: costing report](#).

£36,000 per 100,000 women aged 15–44³⁴. Increasing the number of women tested for gestational diabetes will increase the number of women diagnosed with, and treated for, gestational diabetes. Costs associated with treating gestational diabetes, where required, over the course of a pregnancy are estimated at around £115 for 12 weeks blood glucose monitoring (assuming an average of 4 tests per day) and £60 for 90 days of insulin or insulin analogue³³. Costs will vary depending on the type of testing strips, lancets, blood glucose meters and insulin/insulin analogues used.

Conversely, increased detection and treatment of gestational diabetes is likely to lead to improved care for the mother, fewer complications during pregnancy and labour, and a reduction in associated costs. It may also lead to a reduction in caesarean section rates and fewer unnecessary admissions to neonatal care for babies of women with diabetes. The [costing template](#) for the NICE guideline on caesarean section calculated that the average cost to the NHS for delivery by caesarean section is around £700 more than a vaginal delivery, while costs for neonatal care vary from around £410 to £1,120 per day (NHS reference costs 2013-14).

Offering pregnant women at high risk of pre-eclampsia at the booking appointment 75 mg of aspirin daily from 12 weeks until at least 36 weeks is likely to lead to incremental costs and savings. The [costing report](#) for the NICE guideline on hypertension in pregnancy suggests that savings are expected to outweigh any increased costs. The unit cost of aspirin in these circumstances is estimated at around £6 per woman (although there may also be costs associated with prescribing aspirin), while savings from reducing some of the adverse events associated with pre-eclampsia are estimated at around £3100 (avoiding pre-eclampsia), £1500 (avoiding delivery <34 weeks) and £700 (avoiding baby born small for gestational age). Savings realised from a reduction in adverse events include savings from reduced antenatal care, reduced length of hospital stay for both mother and baby, and a reduction in resource use during hospital stay.

³⁴ NICE (2008) [Antenatal care and diabetes in pregnancy: costing report](#).

Expert opinion suggests that current practice around providing specialist advice about their care to women at intermediate risk of venous thromboembolism at the booking appointment is likely to vary widely and that there will be a cost impact when this statement is implemented. Referring pregnant women at high risk of venous thromboembolism at the booking appointment to a specialist service is more likely to be implemented but practice still varies locally. Each additional first and follow-up outpatient appointment for pregnant women referred to a specialist service will cost commissioners £210 and £105 respectively³⁵.

Further information as to which women need thromboprophylaxis during and after pregnancy can be found in the [Royal College of Obstetricians and Gynaecologists \(RCOG\) green top guideline 37a](#) (2009). Costs and savings associated with providing thromboprophylaxis are considered to be outside the scope of the NICE support for commissioners and others using the quality standard for antenatal care.

³⁵ Outpatient mandatory tariff 2012/13, treatment function code 300 (general medicine), single professional appointments.

Implementation tools and resources

Commissioners and others may wish to refer to the NICE implementation tools and resources for the NICE guidelines on [antenatal care](#), [maternal and child nutrition](#), [weight management before, during and after pregnancy](#), [quitting smoking in pregnancy and following childbirth](#), [diabetes in pregnancy](#) and [hypertension in pregnancy](#).

Commissioners and others may consider local data collection activities as well as the NICE antenatal care [audit support](#) tool, criterion 8 and 9, the NICE maternal and child nutrition [audit support](#) tool, the NICE weight management before, during and after pregnancy [audit support](#) (criteria 1 and 3), [self-assessment tool](#) and [financial planning tool](#), the NICE public health guidance 26 [self-assessment tool](#), the NICE diabetes in pregnancy [baseline assessment tool](#) and the NICE hypertension in pregnancy [audit support tool](#) and [baseline assessment tool](#) to measure current practice against the NICE recommendations and to monitor providers and steps taken to achieve these statements in the quality standard.

Commissioners and others can use the Maternity Services Secondary [Uses](#) Dataset once implemented in April 2013 and [PHQ30](#) data collection tools to support them in the measurement of current practice against these statements in this quality standard.

The [NICE 'do not do' recommendations database](#) may also be useful for identifying NHS clinical practices that should be discontinued completely or should not be used routinely in accordance with [hypertension in pregnancy](#) (NICE guideline CG107).

3.3 Screening

Quality statement 10: Screening – national fetal anomaly screening programmes

Pregnant women are offered fetal screening in accordance with current UK National Screening Committee programmes.

Providers should be able to provide evidence that local NHS-commissioned services are offering fetal screening in accordance with current UK National Screening Committee programmes³⁶.

Commissioners should ensure that pregnant women who access antenatal care before 20 weeks are offered screening for Down's syndrome in their unborn baby. In order to achieve the quality statement, providers should be offering the combined screening test for pregnant women who are booking between 10 weeks 0 day and before 14 weeks 1 day. When pregnant women book between 14 weeks 2 days and 20 weeks 0 day, providers should be offering the quadruple screening test for Down's syndrome. Commissioners should also note recommendation 1.7.1.1 in [Antenatal care](#) (NICE guideline CG62) and ensure that providers are routinely offering ultrasound screening for fetal anomalies, normally between 18 weeks 0 days and 20 weeks 6 days.

Providers should try to ensure that women understand that it is their choice to embark on screening for Down's syndrome in line with the NICE guideline on antenatal care (recommendation 1.7.2.1). The offer and implications of screening should be understood by all women to enable them to make informed decisions. Commissioners should therefore ensure that accessible information is provided for all pregnant women. Commissioners should refer to the UK National Screening Committee policy recommendations and supporting information [Screening for Down's syndrome: UK NSC policy recommendations 2011–2014 model of best practice](#) and [18+0 to 20+6 weeks fetal anomaly scan – national standards and guidance for England](#) standard 1.

³⁶ Current UK National Screening Committee Programmes for fetal screening are defined here as the National Screening Committee's policy on fetal anomaly screening in pregnancy, which includes both fetal anomaly ultrasound and Down's syndrome screening.

It was the opinion of the Topic Expert Group that there is variation in practice across the country for women being offered fetal screening in accordance with current UK National Screening Committee programmes. Increasing the number of women offered screening is therefore likely to lead to a national cost impact. In addition, the quality statement may lead to a change in the type of tests carried out by healthcare professionals, which may lead to a cost impact for the NHS.

The [costing report](#) for the NICE guideline on antenatal care estimates that the cost of a four-chamber and outflow tracts view to screen for fetal anomalies is approximately £35 more than the cost of a four-chamber view alone. The costing report also estimates the cost of the combined test to screen for Down's syndrome to be around £40 if performed at the same time as a dating scan and £111 if performed separately. The cost of a triple or quadruple blood test alone is estimated to be around £7. Increasing the number of women who receive the combined test and screening with a four-chamber and outflow tracts view will therefore increase associated costs. However, increased use of the combined test should increase the number of cases of Down's syndrome detected correctly, and decrease the numbers falsely detected. This may have consequent resource implications in counselling and subsequent pregnancy outcomes.

Implementation tools and resources

Commissioners and others may wish to refer to the NICE implementation tools and resources for the NICE guideline on [antenatal care](#).

Commissioners and others can use local data collection activities as well as the [Maternity Services Secondary Uses Dataset](#) once implemented in April 2013, the Care Quality Commission [Maternity Services Survey 2010](#), and QOF indicator [MAT1](#) to support them in measuring current practice against these statements in the quality standard.

3.4 *Fetal wellbeing*

Quality statement 11: Fetal wellbeing – external cephalic version

Pregnant women with an uncomplicated singleton breech presentation at 36 weeks or later (until labour begins) are offered external cephalic version.

Quality statement 12: Fetal wellbeing – membrane sweeping for prolonged pregnancy

Nulliparous pregnant women are offered a vaginal examination for membrane sweeping at their 40- and 41-week antenatal appointments, and parous pregnant women are offered this at their 41-week appointment.

Commissioners should note recommendations in [Antenatal care](#) (NICE guideline CG62) in relation to fetal wellbeing and ensure that providers are acting in accordance with NICE recommendations. Evidence suggests that performing external cephalic version (ECV) at term (defined differently across randomised controlled trials, from 33–40 weeks to 37 weeks or more) reduces the number of noncephalic births by 60% when compared with no ECV and has resulted in a significant reduction in caesarean section numbers.

Commissioners need to ensure that commissioned services offer pregnant women with an uncomplicated singleton breech presentation at 36 weeks or later (until labour begins) external cephalic version. Local arrangements need to be in place so that these pregnant women are offered referral for confirmatory ultrasound assessment in line with the NICE guideline on [antenatal care](#) (recommendation 1.10.5).

Commissioners should also note recommendation 1.11.1.1 in the NICE guideline on [antenatal care](#) and recommendations 1.3.1.2 and 1.3.1.3 in the NICE guideline on [induction of labour](#) (NICE guideline CG70) and ensure that providers are able to demonstrate local arrangements for nulliparous pregnant women³⁷ to be offered a vaginal examination for membrane sweeping at their

³⁷ Nulliparous is defined as having never given birth to a viable infant ([NICE full clinical guideline 62](#)).

40- and 41-week antenatal appointments and parous pregnant women³⁸ to be offered this at their 41-week appointment.

The opinion of the Topic Expert Group was that current practice regarding the offer of ECV for pregnant women with an uncomplicated singleton breech pregnancy at 36 weeks or later is variable. Where quality statement 11 is not fully implemented at a local level, additional costs may be incurred for performing the ECV. The unit cost to a commissioner for an ECV is estimated to be £60³⁹. These costs are likely to be offset by savings from fewer caesarean sections for breech babies, which, as previously discussed, are estimated to cost a commissioner, on average, around £700 more than a vaginal delivery.

It is possible that quality statement 12 may result in some additional costs if more women choose to have membrane sweeping as a result. However, if more women go into labour spontaneously as a result of membrane sweeping some savings could also be achieved. Therefore, this is not expected to have a significant resource impact.

³⁸ Parous is defined as having borne at least one viable offspring (usually more than 24 weeks of gestation) ([NICE full clinical guideline 62](#)).

³⁹ 2012/13 National tariff for outpatient consultant-led follow-up attendance, treatment function code 501 (obstetrics).

Implementation tools and resources

Commissioners and others may wish to refer to the NICE implementation tools and resources for the NICE guidelines on [antenatal care](#) and [induction of labour](#).

Commissioners and others can use local data collection activities as well as the [Maternity Services Secondary Uses Dataset](#) once implemented in April 2013 to support them in the measurement of current practice against these statements in the quality standard.

The [NICE 'do not do' recommendations database](#) may also be useful for identifying NHS clinical practices that should be discontinued completely or should not be used routinely in accordance with [Induction of labour](#) (NICE guideline CG70). The 'do not do' recommendations may be because there is evidence that the practice is not on balance beneficial or a lack of evidence to support its continued use.

4 Links to national drivers and other useful resources

Policy documents

- NHS Commissioning Board (2012) [Commissioning maternity services. A resource pack to support clinical commissioning groups](#)
- Department of Health (2010) [Maternity and early years: making a good start to family life](#)
- Department of Health (2009) [Healthy child programme: pregnancy and the first five years of life](#)
- Department of Health (2009) [Delivering high quality midwifery care: the priorities, opportunities and challenges for midwives](#)
- Department of Health (2007) [Maternity matters: choice, access and continuity of care in a safe service](#)
- UK National Screening Committee (2006) [The UK NSC policy on fetal anomaly screening in pregnancy](#)

- UK National Screening Committee (2006) [The UK NSC policy on Down's syndrome screening in pregnancy](#)

NHS Pathways

- [Antenatal care](#)
- [Antenatal and postnatal mental health](#)
- [Antibiotics for early-onset neonatal infection](#)
- [Feverish illness in children](#)
- [Neonatal jaundice](#)
- [Multiple pregnancy](#)
- [Maternal and child nutrition](#)
- [Physical activity](#)
- [Antibiotics for early-onset neonatal infection.](#)
- [Postnatal care](#)
- [Diet](#)
- [Social and emotional wellbeing for children and young people](#)
- [Diabetes in pregnancy](#)
- [Pregnancy and complex social factors](#)
- [Induction of labour](#)
- [Smoking prevention and cessation](#)