Multiple pregnancy: twin and triplet pregnancies

Quality standard
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This standard is based on CG129.

This standard should be read in conjunction with QS22, QS32, QS35, QS37, QS3, QS4, QS15, QS60, QS69, QS75, QS105, QS115, QS162 and QS169.

Introduction

This quality standard covers the management of twin and triplet pregnancies in the antenatal period. For more information, see the multiple pregnancy scope.

Why this quality standard is needed

The incidence of multiple births has risen in the last 30 years. In 1980, 10 women per 1000 had multiple births in England and Wales compared with 16 per 1000 in 2011. This increase in multiple births is due mainly to the use of assisted reproduction techniques, including in vitro fertilisation (IVF). Older women are more likely to have a multiple pregnancy and, because the average age at which women give birth is rising, this is also a contributory factor. Multiple births currently account for 3% of live births.

Multiple pregnancy is associated with higher risks for the mother and babies. Maternal mortality associated with multiple births is 2.5 times that for singleton births. The risk of preterm birth is also considerably higher in multiple pregnancies than in singleton pregnancies, occurring in at least 50% of twin pregnancies. The significantly higher preterm delivery rates in twin and triplet pregnancies result in increased demand for specialist neonatal resources.

Risks to fetuses depend partly on the chorionicity (number of chorionic [outer] membranes) and amnionicity (number of amnion [inner] membranes) of the pregnancy. Feto-fetal transfusion syndrome, a condition associated with a shared placenta, can occur in monochorionic pregnancies and accounts for about 20% of stillbirths in multiple pregnancies. Additional risks to the fetuses include intrauterine growth restriction and congenital abnormalities.

How this quality standard supports delivery of outcome frameworks

NICE quality standards are a concise set of prioritised statements designed to drive measureable quality improvements within a particular area of health or care. They are derived from high-quality guidance, such as that from NICE or other sources accredited by NICE. This quality standard, in
conjunction with the guidance on which it is based, should contribute to the improvements outlined in the following 2 outcomes frameworks published by the Department of Health:

- **NHS Outcomes Framework 2013/14**

Tables 1 and 2 show the outcomes, overarching indicators and improvement areas from the frameworks that the quality standard could contribute to achieving.

### Table 1  **NHS Outcomes Framework 2013/14**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Overarching indicators and improvement areas</th>
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<tr>
<td>1 Preventing people from dying prematurely</td>
<td><strong>Improvement areas</strong>&lt;br&gt;Reducing deaths in babies and young children&lt;br&gt;1.6i Infant mortality*&lt;br&gt;1.6ii Neonatal mortality and stillbirths</td>
</tr>
<tr>
<td>4 Ensuring that people have a positive experience of care</td>
<td><strong>Improvement areas</strong>&lt;br&gt;Improving women and their families' experience of maternity services&lt;br&gt;4.5 Women's experience of maternity services</td>
</tr>
<tr>
<td>5 Treating and caring for people in a safe environment and protecting them from avoidable harm</td>
<td><strong>Improvement areas</strong>&lt;br&gt;Improving the safety of maternity services&lt;br&gt;5.5 Admission of full-term babies to neonatal care</td>
</tr>
</tbody>
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* Indicator shared with Public Health Outcomes Framework (PHOF)
Table 2  **Public health outcomes framework for England, 2013–2016**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Objectives and indicators</th>
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</thead>
<tbody>
<tr>
<td>4 Healthcare, public health and preventing premature mortality</td>
<td>Objective</td>
</tr>
<tr>
<td></td>
<td>Reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities</td>
</tr>
<tr>
<td></td>
<td><strong>Indicators</strong></td>
</tr>
<tr>
<td></td>
<td>4.1 Infant mortality*</td>
</tr>
</tbody>
</table>

**Alignment across the health and social care system**

* Indicator shared with NHS Outcomes Framework (NHSOF)

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**Coordinated services**

The quality standard for multiple pregnancy specifies that services should be commissioned from and coordinated across all relevant agencies encompassing the whole multiple pregnancy care pathway. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care to women with a multiple pregnancy.

The Health and Social Care Act 2012 sets out a clear expectation that the care system should consider NICE quality standards in planning and delivering services, as part of a general duty to secure continuous improvement in quality. Commissioners and providers of health and social care should refer to the library of NICE quality standards when designing high-quality services. Other quality standards that should also be considered when choosing, commissioning or providing a high-quality multiple pregnancy service are listed in **Related quality standards**.

**Training and competencies**

The quality standard should be read in the context of national and local guidelines on training and competencies. All healthcare practitioners involved in assessing, caring for and treating women with a multiple pregnancy should have sufficient and appropriate training and competencies to deliver the actions and interventions described in the quality standard.
List of quality statements

**Statement 1.** Women with a multiple pregnancy have the chorionicity and amnionicity of their pregnancy determined using ultrasound and recorded between 11 weeks 0 days and 13 weeks 6 days.

**Statement 2.** Women with a multiple pregnancy have their fetuses labelled using ultrasound and recorded between 11 weeks 0 days and 13 weeks 6 days.

**Statement 3.** Women with a multiple pregnancy are cared for by a multidisciplinary core team.

**Statement 4.** Women with a multiple pregnancy have a care plan that specifies the timing of appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.

**Statement 5.** Women with a multiple pregnancy are monitored for fetal complications according to the chorionicity and amnionicity of their pregnancy.

**Statement 6.** Women with a higher-risk or complicated multiple pregnancy have a consultant from a tertiary level fetal medicine centre involved in their care.

**Statement 7.** Women with a multiple pregnancy have a discussion by 24 weeks with one or more members of the multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

**Statement 8.** Women with a multiple pregnancy have a discussion by 32 weeks with one or more members of the multidisciplinary core team about the timing of birth and possible modes of delivery so that a birth plan can be agreed.
Quality statement 1: Determining chorionicity and amnionicity

Quality statement

Women with a multiple pregnancy have the chorionicity and amnionicity of their pregnancy determined using ultrasound and recorded between 11 weeks 0 days and 13 weeks 6 days.

Rationale

If fetuses share a placenta, there is a greater risk of complications. Determining chorionicity and amnionicity allows women to be assigned the correct plan of care for their pregnancy.

Pregnancy risks, clinical management and subsequent outcomes are different for monochorionic and dichorionic twin pregnancies (and for monochorionic, dichorionic and trichorionic triplet pregnancies). Therefore, accurate determination of chorionicity is important.

Quality measures

Structure

Evidence of local arrangements to ensure that women with a multiple pregnancy have an ultrasound scan between 11 weeks 0 days and 13 weeks 6 days to determine and record the chorionicity and amnionicity of their pregnancy.

Data source: Local data collection.

Process

The proportion of women with a multiple pregnancy who receive an ultrasound scan between 11 weeks 0 days and 13 weeks 6 days to determine and record the chorionicity and amnionicity of their pregnancy.

Numerator – the number of women in the denominator who received an ultrasound scan between 11 weeks 0 days and 13 weeks 6 days to determine and record the chorionicity and amnionicity of their pregnancy.

Denominator – the number of women with a multiple pregnancy of greater than 14 weeks' gestation.
Data source: Local data collection. The Maternity Services Secondary Uses Data Set, once implemented, will collect data on:

- Offer status – dating ultrasound scan (global number 17201960).
- Gestation – dating ultrasound scan (global number 17202010).
- Number of fetuses – dating ultrasound scan (global number 17202020).

Outcome

Determination of chorionicity and amnionicity.

Data source: Local data collection.

What the quality statement means for service providers, healthcare practitioners and commissioners

Service providers ensure that systems are in place for women with a multiple pregnancy to have an ultrasound scan between 11 weeks 0 days and 13 weeks 6 days to determine and record the chorionicity and amnionicity of their pregnancy.

Healthcare practitioners ensure that women with a multiple pregnancy have an ultrasound scan between 11 weeks 0 days and 13 weeks 6 days to determine and record the chorionicity and amnionicity of their pregnancy.

Commissioners ensure that they commission specialist services that provide ultrasound scanning between 11 weeks 0 days and 13 weeks 6 days for women with a multiple pregnancy to determine and record the chorionicity and amnionicity of their pregnancy.

What the quality statement means for patients, service users and carers

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) have an ultrasound scan between 11 weeks and 13 weeks 6 days of their pregnancy. This is to see whether the babies share the same placenta (chorionicity) and amniotic sac (amnionicity). This information is recorded in the woman's notes.
Source guidance

- Multiple pregnancy (NICE clinical guideline 129) recommendations 1.1.1 (key priority for implementation) and 1.1.2.1 (key priority for implementation).

Definitions of terms used in this quality statement

Multiple pregnancy

A multiple pregnancy is defined as a twin or triplet pregnancy.

Chorionicity

The number of chorionic (outer) membranes that surround the fetuses in a multiple pregnancy. If there is only 1 membrane, the pregnancy is described as monochorionic; if there are 2, the pregnancy is described as dichorionic; and if it is a triplet pregnancy with 3 membranes, the pregnancy is described as trichorionic. Monochorionic twin pregnancies and dichorionic and monochorionic triplet pregnancies carry higher risks because fetuses share a placenta.

Amnionicity

The number of amnions (inner membranes) that surround fetuses in a multiple pregnancy. Pregnanacies with 1 amnion (so that all fetuses share 1 amniotic sac) are described as monoamniotic; twin or triplet pregnancies with 2 amnions are diamniotic; and triplet pregnancies with 3 amnions are triamniotic.

Ultrasound scan

An ultrasound scan is used to determine chorionicity based on the number of placental masses, the Lambda or T-sign and membrane thickness.

Note: Antenatal care (NICE clinical guideline 62) recommends determination of gestational age from 10 weeks 0 days. However, the aim in Multiple pregnancy (NICE clinical guideline 129) is to minimise the number of scan appointments that women need to attend within a short time, especially if it is already known that a woman has a twin or triplet pregnancy (for example, as a result of IVF treatment).
Recording the chorionicity and amnionicity

The chorionicity and amnionicity of the pregnancy should be documented in the ultrasound report. An electronic copy of the ultrasound report and an ultrasound image (of Lambda or T sign) should be stored on the radiology reporting and picture archiving system. Hard copies of the report should be printed out and placed in the woman's hand-held maternity notes and their hospital notes.

Equality and diversity considerations

Some pregnant women have complex social needs and may be less likely to access or maintain contact with antenatal care services. Examples of women with complex social needs include, but are not limited to, women who:

- have a history of substance misuse (alcohol or drugs)
- have recently arrived in the UK as a migrant, asylum seeker or refugee
- have difficulty speaking or understanding English
- are aged under 20 years
- have experienced domestic abuse
- are living in poverty
- are homeless.

It is therefore appropriate that professionals give special consideration to women with complex social needs. Pregnancy and complex social factors (NICE clinical guideline 110) includes recommendations on how to make antenatal care accessible to pregnant women with complex social needs and how to encourage women to maintain ongoing contact with maternity services.
Quality statement 2: Labelling the fetuses

**Quality statement**

Women with a multiple pregnancy have their fetuses labelled using ultrasound and recorded between 11 weeks 0 days and 13 weeks 6 days.

**Rationale**

Labelling the fetuses and recording this in the notes at the dating scan, using left and right, or upper and lower, allows the fetuses to be consistently identified throughout the pregnancy. It also takes into account that the 'leading' fetus may change as pregnancy progresses and labelling by number can cause confusion, particularly with left and right fetuses.

**Quality measures**

**Structure**

Evidence of local arrangements to ensure that women with a multiple pregnancy have their fetuses labelled using an ultrasound scan and recorded between 11 weeks 0 days and 13 weeks 6 days.

*Data source:* Local data collection.

**Process**

The proportion of women with a multiple pregnancy who have their fetuses labelled using an ultrasound scan and recorded between 11 weeks 0 days and 13 weeks 6 days.

Numerator – the number of women in the denominator who have had their fetuses labelled using an ultrasound scan and recorded between 11 weeks 0 days and 13 weeks 6 days.

Denominator – the number of women with a multiple pregnancy of greater than 14 weeks' gestation.

*Data source:* Local data collection.

**Outcome**

Consistent identification of fetuses in multiple pregnancies.
Data source: Local data collection.

What the quality statement means for service providers, healthcare practitioners and commissioners

Service providers ensure that systems are in place for women with a multiple pregnancy to have their fetuses labelled using an ultrasound scan and recorded between 11 weeks 0 days and 13 weeks 6 days.

Healthcare practitioners ensure that women with a multiple pregnancy have their fetuses labelled using an ultrasound scan and recorded between 11 weeks 0 days and 13 weeks 6 days.

Commissioners ensure that they commission specialist services for women with a multiple pregnancy to have their fetuses labelled using an ultrasound scan and recorded between 11 weeks 0 days and 13 weeks 6 days.

What the quality statement means for patients, service users and carers

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) have an ultrasound scan between 11 weeks and 13 weeks 6 days of their pregnancy to record the positions of their babies.

Source guidance

- Multiple pregnancy (NICE clinical guideline 129) recommendation 1.1.2.2 (key priority for implementation).

Definitions of terms used in this quality statement

Ultrasound scan

An ultrasound scan is used to determine chorionicity based on the number of placental masses, the Lambda or T-sign and membrane thickness.

Note: Antenatal care (NICE clinical guideline 62) recommends determination of gestational age from 10 weeks 0 days. However, the aim in Multiple pregnancy (NICE clinical guideline 129) is to minimise the number of scan appointments that women need to attend within a short time, especially if it is already known that a woman has a twin or triplet pregnancy (for example, as a result of IVF treatment).
Labelling the fetuses

Labelling of the fetuses should be documented in the ultrasound report. An electronic copy of the ultrasound report and an ultrasound image should also be stored on the radiology reporting and picture archiving system. Hard copies of the report should be printed out and placed in the women’s hand-held maternity notes and their hospital notes.

The fetuses should be labelled using either the lateral orientation (left and right) or the vertical orientation (upper and lower). Labelling of fetuses should be carried out at all ultrasound scans to ensure consistent identification throughout the pregnancy.

Equality and diversity considerations

Some pregnant women have complex social needs and may be less likely to access or maintain contact with antenatal care services. Examples of women with complex social needs include, but are not limited to, women who:

- have a history of substance misuse (alcohol or drugs)
- have recently arrived in the UK as a migrant, asylum seeker or refugee
- have difficulty speaking or understanding English
- are aged under 20 years
- have experienced domestic abuse
- are living in poverty
- are homeless.

It is therefore appropriate that professionals give special consideration to women with complex social needs. Pregnancy and complex social factors (NICE clinical guideline 110) includes recommendations on how to make antenatal care accessible to pregnant women with complex social needs and how to encourage women to maintain ongoing contact with maternity services.
Quality statement 3: Composition of the multidisciplinary core team

Quality statement

Women with a multiple pregnancy are cared for by a multidisciplinary core team.

Rationale

Women with a multiple pregnancy should have their clinical care provided by a multidisciplinary core team because of the increased risks and complications associated with multiple births. Members of this team will have the expertise needed to provide high-quality care for women with a multiple pregnancy. It may be appropriate for the multidisciplinary core team to refer women to the community midwifery team for some of their additional antenatal appointments.

Quality measures

Structure

Evidence of local arrangements to ensure that women with a multiple pregnancy are cared for by a multidisciplinary core team.

Data source: Local data collection.

What the quality statement means for service providers, healthcare practitioners and commissioners

Service providers ensure that systems are in place for women with a multiple pregnancy to be cared for by a multidisciplinary core team.

Healthcare practitioners ensure that women with a multiple pregnancy are cared for by a multidisciplinary core team.

Commissioners ensure that they commission services for women with a multiple pregnancy to be cared for by a multidisciplinary core team.
What the quality statement means for patients, service users and carers

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) are cared for by a team of healthcare professionals with different skills and roles (for example, specialist doctors, specialist midwives and ultrasound operators).

Source guidance

- Multiple pregnancy (NICE clinical guideline 129) recommendations 1.2.3.1 (key priority for implementation), 1.2.3.3 (key priority for implementation) and 1.2.3.4 (key priority for implementation).

Definitions of terms used in this quality statement

Multidisciplinary core team

A multidisciplinary core team of named specialists consists of specialist obstetricians, specialist midwives and ultrasonographers, all of whom have experience and knowledge of managing twin and triplet pregnancies.

A specialist obstetrician is an obstetrician with a special interest, experience and knowledge of managing multiple pregnancies, and who works regularly with women with multiple pregnancies.

A specialist midwife is a midwife with a special interest, experience and knowledge of managing multiple pregnancies, and who works regularly with women with multiple pregnancies.

An ultrasonographer is a healthcare professional with a postgraduate certificate in the performance and interpretation of obstetric ultrasound examinations.

The multidisciplinary core team should coordinate clinical care for women with twin and triplet pregnancies to:

- minimise the number of hospital visits
- provide care as close to the woman's home as possible
- provide continuity of care within and between hospitals and the community; the community includes GPs in primary care, and community midwives and health visitors.
The multidisciplinary core team should offer information and emotional support specific to twin and triplet pregnancies at their first contact with the woman and provide ongoing opportunities for further discussion and advice including:

- antenatal and postnatal mental health and wellbeing
- antenatal nutrition
- the risks, symptoms and signs of preterm labour and the potential need for corticosteroids for fetal lung maturation
- likely timing and possible modes of delivery
- breastfeeding
- parenting.
Quality statement 4: Care planning

Quality statement

Women with a multiple pregnancy have a care plan that specifies the timing of appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.

Rationale

Women with a multiple pregnancy should have most of their antenatal appointments with a member of the multidisciplinary core team. The number of appointments and ultrasound scans a woman should have depends on the chorionicity and amnionicity of her pregnancy and any associated risk factors or complications.

Women should have a record of the expected number of antenatal appointments they should attend, who they should have them with and where they will take place.

Quality measures

Structure

a) Evidence of local arrangements to ensure that women with a multiple pregnancy have a care plan that specifies the timing of antenatal care appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.

Data source: Local data collection.

b) Evidence of local audit to monitor the completeness and accuracy of the antenatal care plan for women with a multiple pregnancy.

Data source: Local data collection.

Process

The proportion of women with a multiple pregnancy who have a care plan that specifies the timing of antenatal care appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.
Numerator – the number of women in the denominator who have a care plan that specifies the timing of antenatal care appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.

Denominator – the number of women with a multiple pregnancy.

**Data source:** Local data collection.

**Outcome**

Women feel informed about their care and know which healthcare professionals they should see and when.

**Data source:** Local data collection. Data will also be collected against NHS outcomes framework 2013/14 indicator 4.5 ‘Women’s experience of maternity services’.

The Care Quality Commission’s Maternity services survey 2010 collected data on singleton and multiple births and asked the questions ‘Roughly how many antenatal check-ups did you have in total?’ and ‘Roughly how many ultrasound scans did you have in total during this pregnancy?’ The total number of respondents is also stated, although results are not broken down by singleton or multiple pregnancies.

**What the quality statement means for service providers, healthcare practitioners and commissioners**

**Service providers** ensure that systems are in place for women with a multiple pregnancy to have a care plan that specifies the timing of antenatal care appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.

**Healthcare practitioners** provide women who have a multiple pregnancy with a care plan that specifies the timing of antenatal care appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.

**Commissioners** ensure that they commission services that provide women who have a multiple pregnancy with a care plan that specifies the timing of antenatal care appointments with the multidisciplinary core team appropriate for the chorionicity and amnionicity of their pregnancy.
What the quality statement means for patients, service users and carers

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) have a care plan that has the dates and times of all their antenatal care appointments and details of who the appointments are with.

Source guidance

- Multiple pregnancy (NICE clinical guideline 129) recommendation 1.1.2.11 (key priority for implementation) and recommendations 1.2.3.5, 1.2.3.6, 1.2.3.7 and 1.2.3.8.

Definitions of terms used in this quality statement

Multidisciplinary core team

A multidisciplinary core team of named specialists consists of specialist obstetricians, specialist midwives and ultrasonographers, all of whom have experience and knowledge of managing twin and triplet pregnancies.

A specialist obstetrician is an obstetrician with a special interest, experience and knowledge of managing multiple pregnancies, and who works regularly with women with multiple pregnancies.

A specialist midwife is a midwife with a special interest, experience and knowledge of managing multiple pregnancies, and who works regularly with women with multiple pregnancies.

An ultrasonographer is a healthcare professional with a postgraduate certificate in the performance and interpretation of obstetric ultrasound examinations.

Care plan

A care plan should be provided at determination of chorionicity, which specifies the frequency and timing of antenatal care appointments. The care plan should contain the recommended schedule of specialist antenatal appointments according to the chorionicity and amnionicity of a pregnancy, as detailed in NICE clinical guideline 129: schedule of specialist antenatal appointments.

Women may be seen for additional antenatal appointments in the community with healthcare professionals outside the multidisciplinary core team, such as neonatal unit staff, community midwives and GPs. The scheduling of these appointments will be coordinated by the multidisciplinary core team.
Quality statement 5: Monitoring for fetal complications

Quality statement

Women with a multiple pregnancy are monitored for fetal complications according to the chorionicity and amnionicity of their pregnancy.

Rationale

Multiple pregnancies are associated with increased risk of fetal complications. Fetal growth restriction is more likely to occur in monochorionic and dichorionic multiple pregnancies. There is a risk of feto-fetal transfusion syndrome with monochorionic multiple pregnancies. Therefore, it is important to monitor monochorionic and dichorionic multiple pregnancies closely for fetal complications in order to manage them effectively should they arise.

Quality measures

Structure

Evidence of local arrangements to ensure that women with a multiple pregnancy are monitored for fetal complications according to the chorionicity and amnionicity of their pregnancy.

Data source: Local data collection.

Process

a) The proportion of women with a monochorionic multiple pregnancy who are monitored for feto-fetal transfusion syndrome using ultrasound from 16 weeks and fortnightly until 24 weeks.

Numerator – the number of women in the denominator who were monitored for feto-fetal transfusion syndrome using ultrasound from 16 weeks and fortnightly until 24 weeks.

Denominator – the number of women with a monochorionic multiple pregnancy and a gestational age greater than 24 weeks.

Data source: Local data collection.

b) The proportion of women with a multiple pregnancy who receive an estimate of fetal weight discordance using 2 or more biometric parameters at each ultrasound scan from 20 weeks.
Numerator – the number of women in the denominator who received an estimate of fetal weight discordance using 2 or more biometric parameters at each ultrasound scan from 20 weeks.

Denominator – the number of women with a multiple pregnancy and a gestational age greater than 20 weeks.

Data source: Local data collection.

What the quality statement means for service providers, healthcare practitioners and commissioners

Service providers ensure that systems are in place to ensure that women with a multiple pregnancy can be monitored for fetal complications according to the chorionicity and amnionicity of their pregnancy.

Healthcare practitioners ensure that women with a multiple pregnancy are monitored for fetal complications according to the chorionicity and amnionicity of their pregnancy.

Commissioners ensure that they commission services that monitor women with a multiple pregnancy for fetal complications according to the chorionicity and amnionicity of their pregnancy.

What the quality statement means for patients, service users and carers

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) are monitored to check the babies for any complications (for example, to check the babies’ growth and blood flow) in a way that is appropriate for their pregnancy.

Source guidance

- Multiple pregnancy (NICE clinical guideline 129) recommendations 1.3.4.2, 1.3.4.3 and 1.3.5.2.

Definitions of terms used in this quality statement

Fetal growth restriction

A difference in size of 25% or more between twins or triplets, known as fetal weight discordance, is a clinically significant indicator of fetal growth restriction. The number of scans women receive to monitor for fetal growth restriction is determined by the amnionicity and chorionicity of the
pregnancy and should follow the recommended schedule of specialist antenatal appointments, as detailed in NICE clinical guideline 129: schedule of specialist antenatal appointments.

Fetal biometric parameters

Standard antenatal ultrasound measures to assess the growth and wellbeing of the fetus and monitor for fetal weight discordance, they include:

- head circumference
- abdominal circumference
- femoral length.

Feto-fetal transfusion syndrome

Feto-fetal transfusion syndrome is a complication of monochorionic multiple pregnancies, in which shared blood vessels in the placenta cause an imbalance in the flow of blood from one fetus to another. The fetus with less blood is referred to as the donor, whereas the fetus with too much blood is called the recipient. There are significant risks to both fetuses. Feto-fetal transfusion syndrome is also referred to as twin-to-twin transfusion syndrome in twin pregnancies.
Quality statement 6: Involving a consultant from a tertiary level fetal medicine centre

Quality statement

Women with a higher-risk or complicated multiple pregnancy have a consultant from a tertiary level fetal medicine centre involved in their care.

Rationale

Collaborative care between local services and tertiary level fetal medicine centres allows access to appropriate knowledge and expertise, and tertiary level neonatal and paediatric services when needed, while maintaining the focus on delivery of care locally.

A consultant from a tertiary level fetal medicine centre needs to be involved in some of the decisions about the care provided for women with a higher-risk multiple pregnancy, or if there are complications. It may be more suitable to involve the consultant in planning and managing care rather than referring a woman directly.

Quality measures

Structure

Evidence of local arrangements to ensure that women with a higher-risk or complicated multiple pregnancy have a consultant from a tertiary level fetal medicine centre involved in their care.

Data source: Local data collection.

Process

a) The proportion of women with a higher-risk multiple pregnancy who have a consultant from a tertiary level fetal medicine centre involved in their care.

Numerator – the number of women in the denominator who have a consultant from a tertiary level fetal medicine centre involved in their care.

Denominator – the number of women with a higher-risk multiple pregnancy.
b) The proportion of women with a complicated multiple pregnancy who have a consultant from a tertiary level fetal medicine centre involved in their care.

Numerator – the number of women in the denominator who have a consultant from a tertiary level fetal medicine centre involved in their care.

Denominator – the number of women with a complicated multiple pregnancy.

**Data source:** Local data collection.

**Outcome**

Infant and maternal mortality and morbidity.

**Data source:** Local data collection. The Maternity Services Secondary Uses Data Set, once implemented, will collect data on neonatal death (global number 17209680). Mothers and babies: reducing risk through audits and confidential enquiries across the UK (MBRRACE-UK) collects data on: 'all deaths of pregnant women and women up to one year following the end of the pregnancy' and 'neonatal deaths'.

**What the quality statement means for service providers, healthcare practitioners and commissioners**

**Service providers** ensure that systems are in place to ensure women with a higher-risk or complicated multiple pregnancy have a consultant from a tertiary level fetal medicine centre involved in their care.

**Healthcare practitioners** ensure that women with a higher-risk or complicated multiple pregnancy have a consultant from a tertiary level fetal medicine centre involved in their care.

**Commissioners** ensure that they commission services for women with a higher-risk or complicated multiple pregnancy have a consultant from a tertiary level fetal medicine centre involved in their care.
What the quality statement means for patients, service users and carers

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) have an expert in fetal medicine involved in their care if their pregnancy is higher risk or if there are complications.

Source guidance

- Multiple pregnancy (NICE clinical guideline 129) recommendations 1.6.1.1 and 1.3.2.6.

Definitions of terms used in this quality statement

Tertiary level fetal medicine centre

A regionally commissioned tertiary level centre with the experience and expertise for managing complicated twin and triplet pregnancies.

Involving a consultant from a tertiary level fetal medicine centre

Involving a consultant from a tertiary level fetal medicine centre can either be through seeking an opinion and then recording the discussion in the woman's notes, or referring a woman with a higher-risk or complicated multiple pregnancy to a tertiary level fetal medicine centre.

NICE clinical guideline 129 recommendation 1.6.1.1 advises the seeking of a consultant opinion from a tertiary level fetal medicine centre for higher-risk multiple pregnancies or complicated multiple pregnancies.

Higher-risk multiple pregnancies are defined as:

- monochorionic monoamniotic twin pregnancies
- monochorionic monoamniotic triplet pregnancies
- monochorionic diamniotic triplet pregnancies
- dichorionic diamniotic triplet pregnancies.

Complicated multiple pregnancies are defined as those with:

- discordant fetal growth
- fetal anomaly
- discordant fetal death
- feto-fetal transfusion syndrome.

In addition, NICE clinical guideline 129 recommendation 1.3.2.6 advises women with twin and triplet pregnancies who have a high risk of Down's syndrome to be offered referral to a fetal medicine specialist in a tertiary level fetal medicine centre.

**Equality and diversity considerations**

The woman's preferences should be taken into account when referring them for a consultant opinion at a tertiary level fetal medicine centre. An opinion may be sought from a consultant at a tertiary level fetal medicine centre if the centre is a long distance from the woman's home and it is clinically appropriate to do so.

Care should be delivered locally where possible to minimise inconvenience and anxiety for women and their partners. But anxiety caused by travelling further for an appointment needs to be weighed against the anxiety of an unclear diagnosis or prognosis.

Women from some cultural backgrounds may prefer to have their antenatal examinations undertaken by female members of staff. NHS maternity services are organised so that such preferences can be accounted for and have arrangements in place for female chaperones if needed.
Quality statement 7: Advice and preparation for preterm birth

Quality statement

Women with a multiple pregnancy have a discussion by 24 weeks with one or more members of the multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

Rationale

The multidisciplinary core team have expert knowledge in managing multiple pregnancies. Women with a multiple pregnancy are at increased risk of maternal and fetal complications in pregnancy and preterm birth. It is important that they are given advice on the possible risks, signs and symptoms of preterm labour so that they know what to expect and who to contact quickly if such symptoms arise. Women should also be informed that a preterm birth is associated with an increased risk of admission to a neonatal unit.

Quality measures

Structure

Evidence of local arrangements to ensure that women with a multiple pregnancy have a discussion by 24 weeks with one or more members of the multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

Data source: Local data collection.

Process

The proportion of women with a multiple pregnancy who have a discussion by 24 weeks with one or more members of the multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

Numerator – the number of women in the denominator who have had a discussion by 24 weeks with one or more members of the multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

Denominator – the number of women with a multiple pregnancy that is greater than 24 weeks' gestation.
**Data source:** Local data collection. **NHS Maternity Statistics – 2010/2011:**

- 'Complications during non-delivery obstetric episodes, 2010/11 (Table 24).
- Singleton, twin and higher order multiple deliveries by gestation and birth status, 2010/11 (Table 26).'

**Outcome**

Levels of satisfaction with support and confidence to recognise the signs and symptoms of preterm labour.

**Data source:** Local data collection. Data will also be collected against **NHS Outcomes Framework 2013/14:** indicator 4.5 ‘Women's experience of maternity services’.

The Care Quality Commission's Maternity services survey 2010 collected data on singleton and multiple births and asked the questions 'Thinking about your antenatal care, were you spoken to in a way that you could understand?' and 'Thinking about your antenatal care, were you involved enough in decisions about your care?'. The total number of respondents is also stated, although results are not broken down by singleton or multiple pregnancies.

**What the quality statement means for service providers, healthcare practitioners and commissioners**

**Service providers** ensure that systems are in place for women with a multiple pregnancy to have a discussion by 24 weeks with one or more members of multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

**Healthcare practitioners** ensure that women with a multiple pregnancy have a discussion by 24 weeks with one or more members of multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.

**Commissioners** ensure that they commission services in which women with a multiple pregnancy have a discussion by 24 weeks with one or more members of multidisciplinary core team about the risks, signs and symptoms of preterm labour and possible outcomes of preterm birth.
What the quality statement means for patients, service users and carers

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) discuss the risks and signs of an early (preterm) labour with one or more members of their healthcare team. The discussion should take place by 24 weeks of their pregnancy and also cover the possible problems associated with an early birth.

Source guidance

- Multiple pregnancy (NICE clinical guideline 129) recommendations 1.2.3.4 (key priority for implementation) and 1.7.1.4.

Definitions of terms used in this quality statement

The timeframe of 'by 24 weeks' is included based on expert consensus.

Preterm labour

The risk of preterm birth is higher in multiple pregnancies. About 60% of twins are delivered by 37 weeks and 10% before 32 weeks, and 75% of triplets are delivered by 35 weeks.

The benefits and risks of targeted corticosteroids for fetal lung maturation should be discussed when providing information about preterm labour.

The signs and symptoms of preterm labour include more frequent and regular contractions, ruptured membranes, unusual or severe backache or other pain.

The potential need for neonatal management and the role of neonatal networks, including the possibility of admission of babies to a neonatal unit after birth, should also be discussed. Where possible, staff from the neonatal unit should be involved in the discussion and women should be provided with appropriate information about the neonatal services.

Equality and diversity considerations

Information on the risks, signs and symptoms of preterm labour should be understood by all women so that they can feel fully informed. Information should be provided in an accessible format (particularly for women with physical, sensory or learning disabilities and women who do not speak or read English).
Quality statement 8: Preparation for birth

Quality statement

Women with a multiple pregnancy have a discussion by 32 weeks with one or more members of the multidisciplinary core team about the timing of birth and possible modes of delivery so that a birth plan can be agreed.

Rationale

Most women with multiple pregnancies deliver by 37 weeks either spontaneously or electively. This discussion should include the risks and benefits of different modes of birth and how they are managed to enable women to make an informed decision about their birth preference. Women should also be informed that a preterm birth is associated with an increased risk of admission to a neonatal unit.

Quality measures

Structure

Evidence of local arrangements to ensure that women with a multiple pregnancy have a discussion with one or more members of the multidisciplinary core team by 32 weeks about the timing of birth and possible modes of delivery so that a birth plan can be agreed.

Data source: Local data collection.

Process

The proportion of women with a multiple pregnancy who have a discussion with one or more members of the multidisciplinary core team by 32 weeks about the timing of birth and possible modes of delivery.

Numerator – the number of women in the denominator who have had a discussion with one or more members of the multidisciplinary core team by 32 weeks about the timing of birth and possible modes of delivery.

Denominator – the number of women with a multiple pregnancy of 32 weeks or more.
Data source: Local data collection. The Clinical Negligence Scheme for Trusts (CNST) Maternity Standards 2013/14 includes requirements for services to have discussion on the timing and mode of birth:

'Standard 3: high-risk conditions – criterion 4: multiple pregnancy and birth:

Level 1: the maternity service has approved documentation for the management of multiple pregnancy and birth, which as a minimum must include the:

- requirement for providing information on the risks and benefits of different modes of delivery to support women in planning for birth.
- requirement to discuss the planned and agreed place and timing of birth.'

Outcome

Women feel well informed and able to make decisions that reflect what is important to them about the options for delivery.

Data source: Local data collection. The Maternity Services Secondary Uses Data Set, once implemented, will collect data on delivery method (global number 2016160) and gestational age at birth (global number 17206120). Data will also be collected NHS Outcomes Framework 2013/14: indicator 4.5 'Women's experience of maternity services'.

What the quality statement means for service providers, healthcare practitioners and commissioners

Service providers ensure that systems are in place for women with a multiple pregnancy to have a discussion with one or more members of the multidisciplinary core team by 32 weeks about the timing of birth and possible modes of delivery so that a birth plan can be agreed.

Healthcare practitioners from the multidisciplinary core team ensure that the timing of birth and possible modes of delivery are discussed with women with a multiple pregnancy by 32 weeks so that a birth plan can be agreed.

Commissioners ensure that they commission services so that women with a multiple pregnancy have a discussion with one or more members of the multidisciplinary core team by 32 weeks about the timing of birth and possible modes of delivery so that a birth plan can be agreed.
What the quality statement means for patients, service users and carers

Women who are pregnant with twins or triplets (referred to as a multiple pregnancy) have a discussion with one or more members of their healthcare team about the timing of the birth and how they want their babies to be delivered. This discussion needs to take place by 32 weeks of their pregnancy and include agreement of their birth plan.

Source guidance

- Multiple pregnancy (NICE clinical guideline 129) recommendations 1.7.1.1 to 1.7.1.7 and recommendation 1.7.1.8 (key priority for implementation).

Definitions of terms used in this quality statement

The timeframe of 'by 32 weeks' is included based on expert consensus and adaption of NICE clinical guideline 129 recommendation 1.7.1.1.

Based on their expert consensus, where possible, staff from the neonatal unit should be involved in the discussion and women should be provided with appropriate information about the neonatal services.

Equality and diversity considerations

Information on the timing of birth and possible modes of delivery should be understood by all women to enable them to make informed decisions. Information should be provided in an accessible format (particularly for women with physical, sensory or learning disabilities, and women who do not speak or read English).
Using the quality standard

Quality measures

The quality measures accompanying the quality statements aim to improve the structure, process and outcomes of care in areas identified as needing quality improvement. They are not a new set of targets or mandatory indicators for performance management.

We have indicated if current national indicators exist that could be used to measure the quality statements. These include indicators developed by the Health and Social Care Information Centre through its Indicators for Quality Improvement Programme. If there is no national indicator that could be used to measure a quality statement, the quality measure should form the basis for audit criteria developed and used locally.

See NICE's What makes up a NICE quality standard? for further information, including advice on using quality measures.

Levels of achievement

Expected levels of achievement for quality measures are not specified. Quality standards are intended to drive up the quality of care, and so achievement levels of 100% should be aspired to (or 0% if the quality statement states that something should not be done). However, NICE recognises that this may not always be appropriate in practice, taking account of safety, choice and professional judgement, and therefore desired levels of achievement should be defined locally.

Using other national guidance and policy documents

Other national guidance and current policy documents have been referenced during the development of this quality standard. It is important that the quality standard is considered by commissioners, providers, health and social care practitioners, patients, service users and carers alongside the documents listed in Development sources.

Information for commissioners

NICE has produced support for commissioning that considers the commissioning implications and potential resource impact of this quality standard. This is available on the NICE website.
Information for the public

NICE has produced information for the public this quality standard. Patients, service users and carers can use it to find out about the quality of care they should expect to receive; as a basis for asking questions about their care, and to help make choices between providers of social care services.
Diversity, equality and language

During the development of this quality standard, equality issues have been considered and equality assessments are available.

Good communication between healthcare practitioners and women with a multiple pregnancy is essential. Treatment, care and support, and the information given about it, should be culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English. Women with a multiple pregnancy should have access to an interpreter or advocate if needed.

Commissioners and providers should aim to achieve the quality standard 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 quality standard should be interpreted in a way that would be inconsistent with compliance with those duties.
Development sources

Further explanation of the methodology used can be found in the quality standards process guide on the NICE website.

Evidence sources

The documents below contain recommendations from NICE guidance or other NICE-accredited recommendations that were used by the Topic Expert Group to develop the quality standard statements and measures.

- **Multiple pregnancy.** NICE clinical guideline 129 (2011).
- **Antenatal care.** NICE clinical guideline 62 (2008).

Policy context

It is important that the quality standard is considered alongside current policy documents, including:

- Department of Health (2011) *Parents' views on the maternity journey and early parenthood*.
- Twins and Multiple Births Association (TAMBA; 2009) *Multiple failings: parents of twins and triplets experience of pre and postnatal NHS care (TAMBA Health and Lifestyle Survey 2008)*.

Definitions and data sources for the quality measures

Multiple pregnancy: twin and triplet pregnancies (QS46)

- The Health & Social Care Information Centre Maternity Services Secondary Uses Data Set [accessed September 2013].
Related NICE quality standards

*Published*

- [Caesarean section](https://www.nice.org.uk/guidance/qs32), NICE quality standard 32 (2013).
- [Specialist neonatal care](https://www.nice.org.uk/guidance/qs04), NICE quality standard 4 (2010).
- [VTE prevention](https://www.nice.org.uk/guidance/qs03), NICE quality standard 3 (2010).

*Future quality standards*

This quality standard has been developed in the context of all quality standards referred to NICE, including the following topic scheduled for future development:

- Premature labour.
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About this quality standard

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. NICE quality standards draw on existing NICE or NICE-accredited guidance that provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement.

The methods and processes for developing NICE quality standards are described in the quality standards process guide.

This quality standard has been incorporated into the NICE pathways for multiple pregnancy and antenatal care.

Changes after publication

April 2015: minor maintenance

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Endorsing organisation

This quality standard has been endorsed by NHS England, as required by the Health and Social Care Act (2012)

Supporting organisations

Many organisations share NICE's commitment to quality improvement using evidence-based guidance. The following supporting organisations have recognised the benefit of the quality standard in improving care for patients, carers, service users and members of the public. They have
agreed to work with NICE to ensure that those commissioning or providing services are made aware of and encouraged to use the quality standard.

- Multiple Births Foundation
- Royal College of General Practitioners
- Royal College of Nursing
- Royal College of Obstetricians and Gynaecologists
- TAMBA