NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Guideline scope

Twin and triplet pregnancy (update)

This guideline will update the NICE guideline on <u>Multiple pregnancy: antenatal</u> <u>care for twin and triplet pregnancies</u> (CG129).

The guideline will be developed using the methods and processes outlined in <u>Developing NICE guidelines: the manual</u>.

This guideline will also be used to update the NICE <u>quality standard</u> for <u>Multiple pregnancy: twin and triplet pregnancies</u> (QS46).

1 Why the update is needed

New evidence that could affect recommendations was identified through the surveillance process. Topic experts, including those who helped to develop the existing guideline, advised NICE on whether areas should be updated or new areas added. Full details are set out in the <u>surveillance review decision</u>.

The surveillance process also identified that the topic of intrapartum care related to multiple pregnancy should be added. NICE guideline CG129 does not include recommendations on intrapartum care because this area was not included in the original scope. In current practice a significant proportion of multiple pregnancy losses occur intrapartum and the risk of adverse perinatal outcomes is greater in multiple than in singleton pregnancies.

Why the guideline is needed

Key facts and figures

• Twins or triplets occur in approximately 1 in 60 pregnancies (16 in every 1,000 women giving birth in 2015 had a multiple birth), and 3% of live-born babies are from multiple gestations. The incidence of multiple births has risen in the last 30 years. This is due mainly to increasing use of assisted

reproduction techniques, including in vitro fertilisation (IVF), and also to changing demographics as women defer pregnancy and twinning is more common at later ages (102 in every 1,000 women giving birth aged 45 or over in 2015).

- Multiple pregnancies have higher rates of all antenatal complications compared to singletons. This includes increased risk of chromosomal anomalies and structural malformations. Preterm birth occurs in 50% of twin pregnancies. There are also higher rates of intrapartum and postnatal complications. As a result there are increased rates of maternal and perinatal mortality (including stillbirth) and morbidity.
- Because of the increased risk of complications, women with multiple pregnancies need more monitoring and increased contact with healthcare professionals than women with singleton pregnancies, both during their pregnancy and also at the time of birth; this will impact on NHS resources. Multiple pregnancy may also have a significant psychosocial and economic impact on women and their families; for example, awareness of the increased risks might increase anxiety in women, resulting in an increased need for psychological support.

Current practice

 Since publication of the existing guideline on the antenatal care of twins and triplets, which made recommendations on service organisation, 'multiples antenatal clinics' have been established in larger centres.

Policy, legislation, regulation and commissioning

 There is specialist commissioning (NHS England Clinical Reference group for Specialised Women's Services) for Fetal Medicine services caring for twin pregnancies with complications and triplet and higher-order multiple pregnancies. This includes, for example, invasive diagnostic tests, multifetal pregnancy reduction, and the management of feto-fetal transfusion syndrome (FFTS; also known as twin-to-twin transfusion syndrome).

2 Who the guideline is for

People using services, their families and carers and the public will be able to use the guideline to find out more about what NICE recommends, and help them make decisions.

This guideline is for:

- Obstetricians, midwives, anaesthetists and other healthcare professionals involved in the care of women with multiple pregnancy in maternity services.
- Providers and commissioners of maternity services.
- Pregnant women, their families and carers and the public.

NICE guidelines cover health and care in England. Decisions on how they apply in other UK countries are made by ministers in the <u>Welsh Government</u>, <u>Scottish Government</u> and <u>Northern Ireland Executive</u>.

Equality considerations

NICE has carried out an <u>equality impact assessment</u> during scoping. The assessment:

- lists equality issues identified, and how they have been addressed
- explains why any groups are excluded from the scope.

The guideline will look at inequalities related to women who find it difficult to access or derive full benefit from the care available. These include women with cognitive or physical disabilities.

3 What the updated guideline will cover

3.1 Who is the focus?

Groups that will be covered

 All women confirmed as having a twin or triplet pregnancy by the 11–13week ultrasound scan. No specific subgroups of women have been identified as needing specific consideration.

Groups that will not be covered

• Women with a quadruplet or higher-order pregnancy.

3.2 Settings

Settings that will be covered

• All settings where NHS funded care is delivered.

3.3 Activities, services or aspects of care

Key areas that will be covered in this update

We will look at evidence in the areas below when developing this update. We will consider making new recommendations or updating existing recommendations in these areas only.

Areas from the published guideline that will be updated

- 1 Fetal complications
 - screening to identify feto-fetal transfusion syndrome (FFTS)
 - screening to detect intrauterine growth restriction.
- 2 Preterm birth
 - predicting the risk of preterm birth
 - preventing preterm birth.
- 3 Timing of birth

Areas not in the published guideline that will be included in the update

- 1 Fetal complications
 - screening to detect twin anaemia polycythemia sequence (TAPS).
- 2 Intrapartum care
 - mode of birth
 - fetal monitoring during labour
 - analgesia
 - management of third stage of labour.

Proposed outline for the guideline

The table below outlines all the areas that will be included in the guideline. It sets out what NICE plans to do for each area in this update.

Area in the guideline	What NICE plans to do
Determining gestational age and chorionicity	No evidence review: retain recommendations from existing guideline
General care	No evidence review: retain recommendations from existing guideline
Fetal complications	
 screening to identify chromosomal abnormalities 	Refer to the <u>National Screening</u> <u>Committee (NSC)</u> <u>recommendations on cfDNA</u> <u>screening</u>
 screening to identify feto-fetal transfusion syndrome 	 Review evidence: update existing recommendations as needed
screening to detect twin anaemia polycythemia sequence	 Review evidence: new area in the guideline
(TAPS).screening to detect intrauterine growth restriction	 Review evidence: update existing recommendations as needed
Maternal complications	No evidence review: retain recommendations from existing guideline
Preterm birth	Review evidence: update existing
predicting the risk of preterm birthpreventing preterm birth	recommendations as needed
Indications for referral to a tertiary level fetal monitoring service	No evidence review: retain recommendations from existing guideline
Timing of birth	Review evidence: update existing recommendations as needed
Intrapartum care mode of birth fetal monitoring analgesia management of third stage of labour 	Review evidence: new area in the guideline

Recommendations in areas that are being retained from the existing guideline may be edited to ensure that they meet current editorial standards, and reflect the current policy and practice context.

Areas not covered by the guideline

These areas will not be covered by the guideline.

1 Management of fetal complications.

Related NICE guidance

- Intrapartum care for healthy women and babies (2017) NICE guideline CG190
- <u>Antenatal care for uncomplicated pregnancies</u> (2017) NICE guideline CG62
 <u>Preterm labour and birth</u> (2015) NICE guideline NG25
- Antenatal and postnatal mental health (2015) NICE guideline CG192
- <u>Caesarean section</u> (2011) NICE guideline CG132
- Induction of labour (2008) NICE guideline CG70
- Intrauterine laser ablation of placental vessels for the treatment of twin-totwin transfusion syndrome (2006) NICE interventional procedures guidance IPG198
- Septostomy with or without amnioreduction for the treatment of twin-to-twin transfusion syndrome (2006) NICE interventional procedures guidance IPG199

NICE guidance in development that is closely related to this guideline

NICE is currently developing the following guidance that is closely related to this guideline:

• Intrapartum care for high risk women (Publication expected March 2019)

NICE guidance that will be updated by this guideline

<u>Multiple pregnancy: antenatal care for twin and triplet pregnancies</u> (2011)
 NICE guideline CG129

NICE guidance about the experience of people using NHS services

NICE has produced the following guidance on the experience of people using the NHS. This guideline will not include additional recommendations on these topics unless there are specific issues related to multiple pregnancy:

- Medicines optimisation (2015) NICE guideline NG5
- Patient experience in adult NHS services (2012) NICE guideline CG138

3.4 Economic aspects

We will take economic aspects into account when making recommendations. For each review question (or key area in the scope) for which the evidence is being reviewed, we will develop an economic plan that states whether economic considerations are relevant, and if so whether this is an area that should be prioritised for economic modelling and analysis. We will review the economic evidence and carry out economic analyses, using an NHS and Personal, Social Services (PSS) perspective, as appropriate.

3.5 Key issues and questions

While writing the scope for this updated guideline, we have identified the following key issues and review questions related to them:

1 Fetal complications

1.1 What is the optimal screening programme to identify feto-fetal transfusion syndrome (FFTS) in twin and triplet pregnancy?1.2 What is the optimal screening programme to detect intrauterine growth restriction in twin and triplet pregnancy?1.3 What is the optimal screening programme to detect twin anaemia polycythemia sequences (TAPS)?

2 Preterm birth

2.1 What is the optimal screening programme to predict the risk of spontaneous preterm birth?

2.2 What interventions are effective in preventing spontaneous preterm birth in twin and triplet pregnancy, including bed rest, progesterone and cervical cerclage?

3 Timing of birth

3.1 What is the incidence of stillbirth, neonatal death and morbidity by gestational age in twin and triplet pregnancies according to chorionicity and amnionicity?

4 Intrapartum care

3.1 What is the optimal mode of birth to improve outcomes for mothers and babies?

3.2 What is the most effective method of fetal monitoring during labour in improving outcomes for babies and mothers?

3.3 What is the optimal method of analgesia during labour and birth?3.4 What is the optimal method of managing the third stage of labour to reduce the risk of postpartum haemorrhage (PPH)?

3.6 *Main outcomes*

The main outcomes that will be considered when searching for and assessing the evidence are:

- 1 For the woman
 - mortality
 - major morbidities (such as genital tract trauma and blood loss)
 - mode of birth
 - women's experience of labour and birth (including psychological wellbeing)
 - length of hospital stay, and admission to a high-dependency or intensive care unit
 - type of anaesthesia and/or analgesia
 - other major morbidity specific to the topic.
- 2 For the baby
 - mortality
 - major neonatal morbidity (such as hypoxic ischaemic encephalopathy, birth injuries and respiratory complications)
 - neonatal infection
 - admission to a neonatal unit
 - long-term developmental outcomes (such as cerebral palsy)

- other major morbidity specific to the topic.

4 NICE quality standards and NICE Pathways

4.1 NICE quality standards

NICE quality standards that may need to be revised or updated when this guideline is published

• <u>Multiple pregnancy: twin and triplet pregnancies</u> (2013) NICE quality standard QS46.

4.2 NICE Pathways

When this guideline is published, the recommendations will be added to NICE Pathways. NICE Pathways bring together all related NICE guidance and associated products on a topic in an interactive flowchart. The existing multiple pregnancy flowchart will be reviewed and amended to integrate the updated recommendations.

5 Further information

This is the final scope, incorporating comments from registered stakeholders during consultation.

The guideline is expected to be published in November 2019.

You can follow progress of the guideline.

Our website has information about how <u>NICE guidelines</u> are developed.