Preterm labour and birth

Quality standard
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Introduction

This quality standard covers care for pregnant women who are considered to be at risk of, or with symptoms and signs of, preterm labour and birth. It does not cover women with a multiple pregnancy. For more information see the preterm labour and birth topic overview.

Why this quality standard is needed

Preterm birth (that is, before 37 weeks of pregnancy) is the single biggest cause of neonatal mortality and morbidity in the UK. Babies born preterm have high rates of early, late and post neonatal mortality, and the risk of mortality increases as gestational age at birth decreases. Babies who survive have increased rates of disability.

The most important long-term consequence of prematurity is neurodevelopmental disability. This can range from severe motor abnormalities, such as cerebral palsy, to less severe cognitive disabilities. Although the risk for the individual child is greatest for those born at the earliest gestational ages, the global burden of neurodevelopmental disabilities depends on the number of babies born at each of these gestations, and so is very significant for babies born between 32 and 36 weeks, less for those born between 28 and 31 weeks, and least for those born at less than 28 weeks of gestation.

Around 75% of women delivering preterm do so after preterm labour, which may or may not be preceded by preterm prelabour rupture of membranes (P-PROM). The remaining 25% have a planned preterm birth because of medical complications (for example, extreme growth retardation in the baby or maternal conditions such as pre-eclampsia).

The quality standard is expected to contribute to improvements in the following outcomes:

- incidence of preterm births
- fetal morbidity and mortality
Preterm labour and birth (QS135)

- neonatal morbidity and mortality
- maternal morbidity
- neurodevelopmental disabilities
- women's experience of childbirth.

How this quality standard supports delivery of outcome frameworks

NICE quality standards are a concise set of prioritised statements designed to drive measurable improvements in the 3 dimensions of quality – safety, experience and effectiveness of care – for 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 2016–17
- Public health outcomes framework for England, 2016–19

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 2016–17

<table>
<thead>
<tr>
<th>Domain</th>
<th>Overarching indicators and improvement areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Preventing people from dying prematurely</td>
<td>Overarching indicators</td>
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<tr>
<td></td>
<td>1a Potential Years of Life Lost (PYLL) from causes considered amenable to healthcare</td>
</tr>
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<td></td>
<td>i Adults ii Children and young people</td>
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<td>1c Neonatal mortality and stillbirths</td>
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<td></td>
<td>Improvement areas</td>
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<td></td>
<td>Reducing mortality in children</td>
</tr>
<tr>
<td></td>
<td>1.6 i Infant mortality*</td>
</tr>
</tbody>
</table>
4 Ensuring that people have a positive experience of care

**Overarching indicators**

4c Friends and family test
4d Patient experience characterised as poor or worse

i Primary care
ii Hospital care

**Improvement areas**

Improving women and their families’ experience of maternity services
4.5 Women’s experience of maternity services

5 Treating and caring for people in a safe environment and protecting them from avoidable harm

**Overarching indicators**

5a Deaths attributable to problems in healthcare
5b Severe harm attributable to problems in healthcare

**Improvement areas**

Improving the culture of safety reporting
5.6 Patient safety incidents reported

**Alignment with Public health outcomes framework**

* Indicator is shared
Indicators in italics in development

Table 2 **Public health outcomes framework for England, 2016–19**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Objectives and indicators</th>
</tr>
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© NICE 2021. All rights reserved. Subject to Notice of rights (https://www.nice.org.uk/terms-and-conditions#notice-of-rights). Last updated 2 August 2019
Objective
Reduced numbers of people living with preventable ill health and people dying prematurely, whilst reducing the gap between communities

Indicators
4.01 Infant mortality*
4.03 Mortality rate from causes considered preventable**

Alignment with NHS outcomes framework
* Indicator is shared
** Indicator is complementary

Safety and people's experience of care
Ensuring that care is safe and that people have a positive experience of care is vital in a high-quality service. It is important to consider these factors when planning and delivering services relevant to pregnant women who are considered to be at risk of preterm labour and birth.

NICE has developed guidance and an associated quality standard on patient experience in adult NHS services (see the NICE Pathway on patient experience in adult NHS services), which should be considered alongside this quality standard. This specifies that people receiving care should be treated with dignity, have opportunities to discuss their preferences, and be supported to understand their options and make fully informed decisions. It also covers the provision of information to patients and service users. Quality statements on these aspects of patient experience are not usually included in topic-specific quality standards. However, recommendations in the development sources for quality standards that affect people’s experience of using services are specific to the topic are considered during quality statement development.

Coordinated services
The quality standard for preterm labour and birth specifies that services should be commissioned from and coordinated across all relevant agencies encompassing the whole preterm labour and birth care pathway. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care to pregnant women who are considered to be at risk of preterm labour and birth.

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 preterm labour and birth service are listed in related quality standards.

Resource impact considerations

NICE quality standards should be achievable by local services. The potential resource impact is considered by the quality standards advisory committee, drawing on resource impact work for the source guidance. Organisations are encouraged to use the costing statement for the NICE guideline on preterm labour and birth to help estimate local costs.

Training and competencies

The quality standard should be read in the context of national and local guidelines on training and competencies. All healthcare professionals involved in assessing, caring for and treating pregnant women who are considered to be at risk of preterm labour and birth should have sufficient and appropriate training and competencies to deliver the actions and interventions described in the quality standard. Quality statements on staff training and competency are not usually included in quality standards. However, recommendations in the development source on specific types of training for the topic that exceed standard professional training are considered during quality statement development.

Role of families and carers

Quality standards recognise the important role families and carers have in supporting pregnant women who are considered to be at risk of preterm labour and birth. If appropriate, healthcare professionals should ensure that family members and carers are involved in the decision-making process about investigations, treatment and care.
List of quality statements

Statement 1 Pregnant women at increased risk of preterm labour are given information about the potential signs and symptoms.

Statement 2 Women who have had a previous preterm birth or mid-trimester loss and have a cervical length of 25 mm or less measured between 16\(^{+0}\) and 24\(^{+0}\) weeks of pregnancy are offered a choice of either prophylactic vaginal progesterone\(^1\) or prophylactic cervical cerclage.

Statement 3 Women having a planned preterm birth are given information about the risks and potential outcomes.

Statement 4 Women between 26\(^{+0}\) and 33\(^{+6}\) weeks of pregnancy who have intact membranes and are in suspected or diagnosed preterm labour are offered tocolysis.

Statement 5 Women between 24\(^{+0}\) and 33\(^{+6}\) weeks of pregnancy who are in suspected, diagnosed or established preterm labour, are having a planned preterm birth or have preterm prelabour rupture of membranes (P-PROM) are offered maternal corticosteroids.

Statement 6 Women between 24\(^{+0}\) and 29\(^{+6}\) weeks of pregnancy who are in established preterm labour or having a planned preterm birth within 24 hours are offered magnesium sulfate\(^2\).

\(^1\)Although this use is common in UK clinical practice, at the time of publication (August 2019), vaginal progesterone did not have a UK marketing authorisation for this indication. The prescriber should see the summary of product characteristics for the manufacturer's advice on use in pregnancy. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

\(^2\)Although this use is common in UK clinical practice, at the time of publication (August 2019), magnesium sulfate did not have a UK marketing authorisation for this indication. The prescriber should see the summary of product characteristics for the manufacturer's advice on use in pregnancy. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.
Quality statement 1: Providing information about potential signs and symptoms of preterm labour

Quality statement

Pregnant women at increased risk of preterm labour are given information about the potential signs and symptoms.

Rationale

Not all pregnant women at increased risk of preterm labour know what symptoms and signs to look out for. At such a vulnerable time in their lives, women and their families need information about the potential signs and symptoms of preterm labour and the care available that meets their needs and supports shared decision-making, without causing unnecessary anxiety.

Quality measures

Structure

Evidence of local arrangements and clinical protocols to ensure that pregnant women at increased risk of preterm labour are given information about the potential signs and symptoms.

Data source: Local data collection.

Process

Proportion of pregnant women at increased risk of preterm labour who are given information about the potential signs and symptoms.

Numerator – the number in the denominator who are given information about the potential signs and symptoms.

Denominator – the number of pregnant women at increased risk of preterm labour.
Outcome

Pregnant women's satisfaction with the information provided.

What the quality statement means for different audiences

**Service providers** (secondary care services) ensure that pregnant women at increased risk of preterm labour are given written information about the potential signs and symptoms by healthcare professionals, who also discuss this with them.

**Healthcare professionals** (such as midwives and obstetricians) give written information to pregnant women at increased risk of preterm labour about the potential signs and symptoms, and discuss this with them.

**Commissioners** (clinical commissioning groups) commission services that ensure that pregnant women at increased risk of preterm labour are given written information about the potential signs and symptoms by healthcare professionals, who also discuss this with them.

Pregnant women at increased risk of preterm labour (that is, going into labour before the 37th week of pregnancy) are given written information about the signs and symptoms that might suggest preterm labour. A healthcare professional also talks to them about this and the care available.

Source guidance

Preterm labour and birth (2015, updated 2019) NICE guideline NG25, recommendation 1.1.1

Definitions of terms used in this quality statement

**Pregnant women at increased risk of preterm labour**

Pregnant women who:
• have a history of:
  
  – spontaneous preterm birth
  
  – preterm prelabour rupture of membranes
  
  – mid-trimester loss
  
  – cervical trauma (including surgery – for example, previous cone biopsy [cold knife or laser], large loop excision of the transformation zone [LLETZ – any number] and radical diathermy)

• are considered to be at risk of preterm labour and birth because they have a short cervix (25 mm or less) that has been identified on a transvaginal ultrasound scan and/or bulging membranes in the current pregnancy

• have preterm prelabour rupture of membranes (P-PROM).

[Adapted from NICE’s full guideline on preterm labour and birth]

Information

Pregnant women should be given oral and written information, and be directed to organisations that can provide further support.

[Adapted from NICE’s full guideline on preterm labour and birth]

Potential signs of preterm labour

Potential signs could include:

• watery, mucosal or bloody vaginal discharge

• regular or frequent (often painless) contractions or uterine tightening

• P-PROM.

[Expert opinion]

Potential symptoms of preterm labour

Potential symptoms could include:
• pelvic or lower abdominal pressure
• constant low, dull backache
• mild abdominal cramps, with or without diarrhoea.

[Expert opinion]

Equality and diversity considerations

Pregnant women at increased risk of preterm labour should have access to information that is understandable if they:

• have additional needs, such as physical, sensory or learning disabilities
• do not speak or read English
• have religious, ethnic or cultural needs.

Interpreters and advocates should be provided if needed.
Quality statement 2: Prophylactic vaginal progesterone and prophylactic cervical cerclage

Quality statement

Women who have had a previous preterm birth or mid-trimester loss and have a cervical length of 25 mm or less measured between 16+0 and 24+0 weeks of pregnancy are offered a choice of either prophylactic vaginal progesterone\[3\] or prophylactic cervical cerclage.

Rationale

Preterm birth causes significant neonatal morbidity and mortality, as well as long-term disability. Therefore strategies for preventing preterm birth are important. Both prophylactic cervical cerclage and prophylactic vaginal progesterone\[3\] are effective in preventing or delaying preterm birth in women with a short cervix and a history of spontaneous preterm birth (up to 34+0 weeks of pregnancy) or mid-trimester loss (from 16+0 weeks of pregnancy onwards). Which treatment is best for each woman will depend on her individual preferences and circumstances, and women should be given information as part of shared decision making.

Quality measures

Structure

Evidence of local arrangements and written clinical protocols to ensure that women who have had a previous preterm birth or mid-trimester loss and have a cervical length of 25 mm or less measured between 16+0 and 24+0 weeks of pregnancy are offered a choice of either prophylactic vaginal progesterone\[3\] or prophylactic cervical cerclage.

Data source: Local data collection.

Process

Proportion of women who have had a previous preterm birth or mid-trimester loss and have a cervical length of 25 mm or less measured between 16+0 and 24+0 weeks of pregnancy who are offered a choice of either prophylactic vaginal progesterone\[3\] or prophylactic cervical cerclage.
Numerator – the number in the denominator who are offered a choice of either prophylactic vaginal progesterone\(^1\) or prophylactic cervical cerclage.

Denominator – the number of women who have had a previous preterm birth or mid-trimester loss and have a cervical length of 25 mm or less measured between 16\(^{+0}\) and 24\(^{+0}\) weeks of pregnancy.

Data source: Local data collection.

Outcome

Timing of labour and birth.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers (secondary care services) ensure that women who have had a previous preterm birth or mid-trimester loss and have a cervical length of 25 mm or less measured between 16\(^{+0}\) and 24\(^{+0}\) weeks of pregnancy are offered a choice of either prophylactic vaginal progesterone\(^1\) or prophylactic cervical cerclage, with the choice of treatment depending on the woman's preferences and circumstances.

Healthcare professionals (such as obstetricians caring for women with high-risk pregnancies) offer women who have had a previous preterm birth or mid-trimester loss and have a cervical length of 25 mm or less measured between 16\(^{+0}\) and 24\(^{+0}\) weeks of pregnancy a choice of either prophylactic vaginal progesterone\(^1\) or prophylactic cervical cerclage, with the choice of treatment depending on the woman's preferences and circumstances.

Commissioners (clinical commissioning groups) commission services that ensure that women who have had a previous preterm birth or mid-trimester loss and have a cervical length of 25 mm or less measured between 16\(^{+0}\) and 24\(^{+0}\) weeks of pregnancy are offered a choice of either prophylactic vaginal progesterone\(^1\) or prophylactic cervical cerclage, with the choice of treatment depending on the woman's preferences and circumstances.

Women at increased risk of preterm labour in whom an ultrasound scan has shown that they have a short cervix are offered a treatment to stop the cervix (neck of the womb) opening early and so delay labour and birth. This could be either progesterone (a natural female sex hormone) inserted...
into the vagina or a stitch in the cervix, with the choice of treatment depending on the woman's preferences and circumstances.

Source guidance

Preterm labour and birth (2015, updated 2019) NICE guideline NG25, recommendation 1.2.1

Definitions of terms used in this quality statement

Prophylactic vaginal progesterone

Progesterone by vaginal suppository to reduce the incidence of spontaneous preterm birth.

[Adapted from NICE's full guideline on preterm labour and birth. glossary]

Prophylactic cervical cerclage

A treatment for cervical weakness (also termed cervical incompetence or insufficiency) to prevent preterm birth and miscarriage.

[Adapted from NICE's full guideline on preterm labour and birth]

Although this use is common in UK clinical practice, at the time of publication (August 2019), vaginal progesterone did not have a UK marketing authorisation for this indication. The prescriber should see the summary of product characteristics for the manufacturer's advice on use in pregnancy. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.
Quality statement 3: Information for women having a planned preterm birth

Quality statement

Women having a planned preterm birth are given information about the risks and potential outcomes.

Rationale

Women who are having a planned preterm birth need information about the level and nature of the risks, including how likely it is that their baby will survive. This should be given as early as possible in the antenatal period. It can help the woman and her family to understand what neonatal care their baby might need and inform their discussions with their neonatologist or paediatrician. The woman and her family should also be offered a tour of the neonatal unit.

Quality measures

Structure

Evidence of local arrangements and clinical protocols to ensure that women having a planned preterm birth are given information about the risks and potential outcomes.

*Data source:* Local data collection.

Process

Proportion of women having a planned preterm birth who are given information about the risks and potential outcomes.

Numerator – the number in the denominator who are given information about the risks and potential outcomes.

Denominator – the number of women having a planned preterm birth.

*Data source:* Local data collection.
Outcome

Women's awareness of the risks and potential outcomes of having a planned preterm birth.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers (secondary care services) ensure that women having a planned preterm birth are given information about the risks and potential outcomes and the care available.

Healthcare professionals (such as obstetricians, neonatologists and paediatricians) give information to women having a planned preterm birth about the risks and potential outcomes and the care available.

Commissioners (clinical commissioning groups) commission services that ensure that women having a planned preterm birth are given information about the risks and potential outcomes and the care available.

Women who are having a planned preterm birth (before the 37th week of pregnancy) for medical reasons are told about what may happen. This should include:

- information about the care that the woman and her baby might need, and whether this might include being transferred to another hospital for specialist care
- information about the types of problems that a preterm baby might have, both at birth and as they grow up, including how likely these are
- offering to show the woman round the neonatal unit, and an opportunity for her to talk with a neonatologist or paediatrician.

Source guidance

Preterm labour and birth (2015, updated 2019) NICE guideline NG25, recommendation 1.1.2
Definitions of terms used in this quality statement

Planned preterm birth

A planned birth before 37\(^0\) weeks of pregnancy because of medical complications.

[NICE's full guideline on preterm labour and birth, glossary]

Information

Women should be given oral and written information, and directed to organisations that can provide further support.

[Adapted from NICE's full guideline on preterm labour and birth]

Potential outcomes

These include the likelihood of the baby surviving and long-term neurodevelopmental outcomes.

[Adapted from NICE's full guideline on preterm labour and birth]

Equality and diversity considerations

Women having a planned preterm labour should have access to information that is understandable if they:

- have additional needs, such as physical, sensory or learning disabilities
- do not speak or read English
- have religious, ethnic or cultural needs.

Interpreters and advocates should be provided if needed.
Quality statement 4: Tocolysis for women between 26\textsuperscript{+0} and 33\textsuperscript{+6} weeks of pregnancy

**Quality statement**

Women between 26\textsuperscript{+0} and 33\textsuperscript{+6} weeks of pregnancy who have intact membranes and are in suspected or diagnosed preterm labour are offered tocolysis.

**Rationale**

For women in suspected preterm labour, tocolysis may delay the birth and reduce the risk of problems such as cerebral palsy and of neonatal death. Not all women between 26\textsuperscript{+0} and 33\textsuperscript{+6} weeks of pregnancy who have intact membranes and are in suspected or diagnosed preterm labour are currently offered this treatment. It is important that the potential benefits and risks of this treatment are discussed with the woman and her family members. Tocolysis is appropriate only under particular circumstances, and a range of factors need to be taken into account.

**Quality measures**

**Structure**

Evidence of local arrangements and written clinical protocols to ensure that women between 26\textsuperscript{+0} and 33\textsuperscript{+6} weeks of pregnancy who have intact membranes and are in suspected or diagnosed preterm labour are offered tocolysis.

*Data source:* Local data collection.

**Process**

a) Proportion of women between 26\textsuperscript{+0} and 33\textsuperscript{+6} weeks of pregnancy who have intact membranes and are in suspected or diagnosed preterm labour who receive tocolysis.

Numerator – the number in the denominator who receive tocolysis.

Denominator – the number of women between 26\textsuperscript{+0} and 33\textsuperscript{+6} weeks of pregnancy who have intact membranes and are in suspected or diagnosed preterm labour.
**Data source:** Local data collection.

**Outcome**

a) Neonatal death.

**Data source:** Local data collection.

b) Intraventricular haemorrhage.

**Data source:** Local data collection.

c) Incidence of neonatal sepsis.

**Data source:** Local data collection.

d) Use of antibiotics.

**Data source:** Local data collection.

e) Ventilation.

**Data source:** Local data collection.

**What the quality statement means for different audiences**

**Service providers** (such as secondary or tertiary care services) ensure that women between 26$^{+0}$ and 33$^{+6}$ weeks of pregnancy who have intact membranes and are in suspected or diagnosed preterm labour are offered tocolysis as appropriate.

**Healthcare professionals** (such as midwives and obstetricians) offer tocolysis as appropriate to women between 26$^{+0}$ and 33$^{+6}$ weeks of pregnancy who have intact membranes and are in suspected or diagnosed preterm labour.

**Commissioners** (clinical commissioning groups) commission services that ensure that women between 26$^{+0}$ and 33$^{+6}$ weeks of pregnancy who have intact membranes and are in suspected or diagnosed preterm labour are offered tocolysis as appropriate.
Women who are more than 26 weeks but less than 34 weeks pregnant and in suspected or diagnosed preterm labour are offered tocolytics (medicines that slow down or stop labour) if these medicines are likely to help their baby. The benefits and risks of this treatment are explained to them.

Source guidance

Preterm labour and birth (2015, updated 2019) NICE guideline NG25, recommendation 1.8.3

Definitions of terms used in this quality statement

Suspected preterm labour

A woman is in suspected preterm labour if she has reported symptoms of preterm labour and has had a clinical assessment (including a speculum or digital vaginal examination) that confirms the possibility of preterm labour but rules out established labour.

[NICE's guideline on preterm labour and birth, terms used in this guideline]

Diagnosed preterm labour

A woman is in diagnosed preterm labour if she is in suspected preterm labour and has had a positive diagnostic test for preterm labour.

[NICE’s guideline on preterm labour and birth, terms used in this guideline]

Tocolysis

Drugs used to stop or delay the progress of labour. The NICE guideline recommends nifedipine as the first choice, or oxytocin receptor antagonists if nifedipine is contraindicated.

[Adapted from NICE’s full guideline on preterm labour and birth]

[1] Although this is common in UK clinical practice, at the time of publication (August 2019), nifedipine did not have a UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council’s Prescribing Guidance: prescribing unlicensed medicines for further information. The suggested dose of nifedipine is a
loading dose of 20 mg nifedipine orally, followed by 10 mg to 20 mg 3 to 4 times daily, adjusted according to uterine activity. At the time of publication, some brands of nifedipine were specifically contraindicated in pregnancy by the manufacturer in their summary of product characteristics. Refer to individual summaries of product characteristics for each preparation of nifedipine for further details.
Quality statement 5: Corticosteroids for women between 24+0 and 33+6 weeks of pregnancy

Quality statement

Women between 24+0 and 33+6 weeks of pregnancy who are in suspected, diagnosed or established preterm labour, are having a planned preterm birth or have preterm prelabour rupture of membranes (P-PROM) are offered maternal corticosteroids.

Rationale

Giving corticosteroids to a woman before a preterm birth reduces the severity of lung disease of prematurity and of other associated complications for her baby. Maternal corticosteroids also have the potential to reduce the number of days that the baby needs to be on a ventilator.

Quality measures

Structure

Evidence of local arrangements and written clinical protocols to ensure that women between 24+0 and 33+6 weeks of pregnancy who are in suspected, diagnosed or established preterm labour, are having a planned preterm birth or have P-PROM are offered maternal corticosteroids.

*Data source:* Local data collection.

Process

a) Proportion of women between 24+0 and 33+6 weeks of pregnancy in suspected, diagnosed or established preterm labour who receive maternal corticosteroids.

Numerator – the number in the denominator who receive maternal corticosteroids.

Denominator – the number of women between 24+0 and 33+6 weeks of pregnancy in suspected, diagnosed or established preterm labour.

*Data source:* Local data collection.
b) Proportion of women between 24\textsuperscript{+0} and 33\textsuperscript{+6} weeks of pregnancy having a planned preterm birth who receive maternal corticosteroids.

Numerator – the number in the denominator who receive maternal corticosteroids.

Denominator – the number of women between 24\textsuperscript{+0} and 33\textsuperscript{+6} weeks of pregnancy who are having a planned preterm birth.

\textit{Data source:} Local data collection.

c) Proportion of women between 24\textsuperscript{+0} and 33\textsuperscript{+6} weeks of pregnancy with P-PROM who receive maternal corticosteroids.

Numerator – the number in the denominator who receive maternal corticosteroids.

Denominator – the number of women between 24\textsuperscript{+0} and 33\textsuperscript{+6} weeks of pregnancy with P-PROM.

\textit{Data source:} Local data collection.

\textbf{Outcome}

a) Ventilation.

\textit{Data source:} Local data collection.

b) Incidence of neonatal sepsis.

\textit{Data source:} Local data collection.

c) Use of antibiotics.

\textit{Data source:} Local data collection.

\textbf{What the quality statement means for different audiences}

\textbf{Service providers} (secondary care services) ensure that women between 24\textsuperscript{+0} and 33\textsuperscript{+6} weeks of pregnancy who are in suspected, diagnosed or established preterm labour, are having a planned...
preterm birth or have P-PROM are offered maternal corticosteroids by healthcare professionals.

**Healthcare professionals** (such as obstetricians and midwives) offer maternal corticosteroids to women between 24"0" and 33"6" weeks of pregnancy who are in suspected, diagnosed or established preterm labour, are having a planned preterm birth or have P-PROM.

**Commissioners** (clinical commissioning groups) commission services that ensure that women between 24"0" and 33"6" weeks of pregnancy who are in suspected, diagnosed or established preterm labour, are having a planned preterm birth or have P-PROM are offered maternal corticosteroids.

**Women over 24 weeks and under 34 weeks of pregnancy** are offered corticosteroid injections to help their baby's lungs develop if:

- they are in suspected preterm labour or
- they are in diagnosed preterm labour (they have had a test that shows they are in labour) or
- they are in established preterm labour or
- they are having a planned preterm birth or
- they have preterm prelabour rupture of membranes (also called P-PROM) – this is when a woman's waters break early but labour hasn't started.

**Source guidance**

Preterm labour and birth (2015, updated 2019) NICE guideline NG25, recommendation 1.9.2

**Definitions of terms used in this quality statement**

**Suspected preterm labour**

A woman is in suspected preterm labour if she has reported symptoms of preterm labour and has had a clinical assessment (including a speculum or digital vaginal examination) that confirms the possibility of preterm labour but rules out established labour.

[NICE's guideline on preterm labour and birth, terms used in this guideline]
Diagnosed preterm labour

A woman is in diagnosed preterm labour if she is in suspected preterm labour and has had a positive diagnostic test for preterm labour.

[NICE's guideline on preterm labour and birth, terms used in this guideline]

Established preterm labour

A woman is in established preterm labour if she has progressive cervical dilation from 4 cm with regular contractions.

[NICE's guideline on preterm labour and birth, terms used in this guideline]

Planned preterm birth

A planned birth before 37\(^{\circ}\) weeks of pregnancy because of medical complications.

[NICE's full guideline on preterm labour and birth, glossary]

Preterm prelabour rupture of membranes (P-PROM)

A woman is described as having P-PROM if she has ruptured membranes before 37\(^{\circ}\) weeks of pregnancy but is not in established labour.

[NICE's full guideline on preterm labour and birth, terms used in this guideline]

Maternal corticosteroids

Corticosteroids (glucocorticosteroids) are anti-inflammatory medicines given to the woman (usually by intramuscular injection) which cross the placenta and accelerate fetal lung maturation.

[Adapted from NICE's full guideline on preterm labour and birth]
Quality statement 6: Magnesium sulfate for women between $24^{+0}$ and $29^{+6}$ weeks of pregnancy

Quality statement

Women between $24^{+0}$ and $29^{+6}$ weeks of pregnancy who are in established preterm labour or having a planned preterm birth within 24 hours are offered magnesium sulfate\(^5\).

Rationale

With advances in neonatal care in recent years, more babies born preterm are surviving. These children frequently have long-term complications associated with preterm birth. Neurological effects are common and may cause severe disability. Magnesium sulfate\(^5\) can protect the developing fetal brain and so has significant potential to reduce disability.

Quality measures

Structure

Evidence of local arrangements and written clinical protocols to ensure that women between $24^{+0}$ and $29^{+6}$ weeks of pregnancy who are in established preterm labour or having a planned preterm birth within 24 hours are offered magnesium sulfate\(^5\).

Data source: Local data collection.

Process

a) Proportion of women between $24^{+0}$ and $29^{+6}$ weeks of pregnancy in established preterm labour who receive magnesium sulfate\(^5\).

Numerator – the number in the denominator who receive magnesium sulfate\(^5\).

Denominator – the number of women between $24^{+0}$ and $29^{+6}$ weeks of pregnancy in established preterm labour.
Data source: Local data collection.

b) Proportion of women between 24<sup>0</sup> and 29<sup>6</sup> weeks of pregnancy who are having a planned preterm birth within 24 hours who receive magnesium sulfate<sup>[i]</sup>.

Numerator – the number in the denominator who receive magnesium sulfate<sup>[i]</sup> in the 24 hours before the birth.

Denominator – the number of women between 24<sup>0</sup> and 29<sup>6</sup> weeks of pregnancy who have a planned preterm birth.

Data source: Local data collection.

Outcome

Incidence of cerebral palsy.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers (such as secondary or tertiary care services) ensure that women between 24<sup>0</sup> and 29<sup>6</sup> weeks of pregnancy who are in established preterm labour or having a planned preterm birth within 24 hours are offered magnesium sulfate<sup>[i]</sup>.

Healthcare professionals (such as midwives, obstetricians and neonatologists) offer magnesium sulfate<sup>[i]</sup> to women between 24<sup>0</sup> and 29<sup>6</sup> weeks of pregnancy who are in established preterm labour or having a planned preterm birth within 24 hours.

Commissioners (clinical commissioning groups) commission services that ensure that women between 24<sup>0</sup> and 29<sup>6</sup> weeks of pregnancy who are in established preterm labour or having a planned preterm birth within 24 hours are offered magnesium sulfate<sup>[i]</sup>.

Women who are more than 24 weeks but less than 30 weeks pregnant and in established preterm labour, or having a planned preterm birth within 24 hours, are offered magnesium sulfate<sup>[i]</sup>, as this medicine is likely to help their baby. The benefits and risks of this treatment are explained to them.
Source guidance

Preterm labour and birth (2015, updated 2019) NICE guideline NG25, recommendation 1.10.2

Definitions of terms used in this quality statement

Established preterm labour

A woman is in established preterm labour if she has progressive cervical dilatation from 4 cm with regular contractions.

[Source: NICE's guideline on preterm labour and birth, terms used in this guideline]

Planned preterm birth

A planned birth before 37\(^0\) weeks of pregnancy because of medical complications.

[Source: NICE's full guideline on preterm labour and birth, glossary]

Although this use is common in UK clinical practice, at the time of publication (August 2019), magnesium sulfate did not have a UK marketing authorisation for this indication. The prescriber should see the summary of product characteristics for the manufacturer's advice on use in pregnancy. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.
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.

See how to use quality standards 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.

NICE has produced a quality standard service improvement template to help providers make an initial assessment of their service compared with a selection of quality statements. This tool is updated monthly to include new quality standards.
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 professionals, social care practitioners and public health practitioners and pregnant women who are considered to be at risk of preterm labour and birth 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. Pregnant women who are considered to be at risk of preterm labour and birth 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

Evidence sources

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

- Preterm labour and birth (2015, updated 2019) NICE guideline NG25

Policy context

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

- Department of Health (2013) Maternity care facilities: planning and design (HBN 09-02)
Related NICE quality standards

Published

- Developmental follow-up of children and young people born preterm (2018) NICE quality standard 169
- Cerebral palsy in children and young people (2017) NICE quality standard 162
- Antimicrobial stewardship (2016) NICE quality standard 121
- Medicines optimisation (2016) NICE quality standard 120
- Diabetes in pregnancy (2016) NICE quality standard 109
- Neonatal infection (2014) NICE quality standard 75
- Inducing labour (2014) NICE quality standard 60
- Caesarean section (2013) NICE quality standard 32
- Patient experience in adult NHS services (2012) NICE quality standard 15
- Neonatal specialist care (2010) NICE quality standard 4

This quality standard has been developed in the context of all quality standards referred to NICE.

The full list of quality standard topics referred to NICE is available from the quality standards topic library on the NICE website.
Quality standards advisory committee and NICE project team

Quality standards advisory committee

This quality standard has been developed by quality standards advisory committee. Membership of this committee is as follows:

Dr Ivan Benett
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Dr Gita Bhutani
Associate director for psychological professions, Lancashire Care NHS Foundation Trust

Mrs Jennifer Bostock
Lay member

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Update information

August 2019: Changes have been made to align this quality standard with the updated NICE guideline on preterm labour and birth. Statements 2, 4 and 5 have been updated to reflect changes to the guidance on prophylactic vaginal progesterone and prophylactic cervical cerclage, and the timing for corticosteroids for women with preterm labour. Licensing information, references and source guidance sections have also been updated throughout.
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 Pathway on preterm labour and birth.

NICE produces guidance, standards and information on commissioning and providing high-quality healthcare, social care and public health services. We have agreements to provide certain NICE services to Wales, Scotland and Northern Ireland. Decisions on how NICE guidance and other products apply in those countries are made by ministers in the Welsh government, Scottish government, and Northern Ireland Executive. NICE guidance or other products may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.

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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.
• Royal College of General Practitioners (RCGP)
• Bliss
• Royal College of Midwives
• Royal College of Obstetricians and Gynaecologists