Costing statement: Intrapartum care: care of healthy women and their babies during childbirth
Implementing the NICE guideline on intrapartum care (CG190)

Published: December 2014

Following a review of the guideline in 2016 and 2017, the costing tools remain valid to support the implementation of the guideline
1 Introduction

1.1 This costing statement considers the cost implications of implementing the recommendations made in the NICE guideline on intrapartum care.

1.2 There is variation in current clinical practice across the country. Therefore, we encourage organisations to evaluate their own practices against the recommendations in the guideline and assess costs and savings locally. Some of the resource effects to be considered locally are discussed in this statement.

1.3 Maternity services are commissioned by clinical commissioning groups (CCGs). Providers include hospital trusts and community services. Healthcare settings include obstetric units, alongside midwifery-led units, freestanding midwifery-led units and women’s homes.

2 Background

2.1 Giving birth is a life-changing event, and the care that a woman receives during labour has the potential to affect her – both physically and emotionally in the short and longer term – and the health of her baby. Good communication, support and compassion from staff, and having her wishes respected, can contribute to making birth a positive experience for the woman and her birth partner(s).

2.2 Around 700,000 women give birth in England every year, most of whom are healthy and have a straightforward pregnancy. Around 40% of these women are having their first baby (‘nulliparous’; women who have given birth previously are ‘multiparous’). The guideline covers healthy women with an uncomplicated pregnancy who go into labour at term (37–42 weeks). Sandall J et al. (2014) found that 45% giving birth in NHS settings are at low risk of complications. Therefore around 315,000 women are likely to be covered by the NICE guideline each year.
2.3 There is current uncertainty and inconsistency of care in a number of areas, such as choosing place of birth, care during the early (latent) phase of labour, fetal assessment and monitoring during labour, and management of the third stage of labour.

2.4 NICE has produced a pathway for intrapartum care that covers the care of healthy women in labour at term. The focus is on the care that every woman and baby should receive, with clear advice provided for any additional care that may be needed.

3 Recommendations with potential resource impact

Choosing planned place of birth

Recommendations

3.1 Explain to both multiparous and nulliparous women that they may choose any birth setting (home, freestanding midwifery unit, alongside midwifery unit or obstetric unit), and support them in their choice of setting wherever they choose to give birth:

- Advise low-risk multiparous women that planning to give birth at home or in a midwifery-led unit (freestanding or alongside) is particularly suitable for them because the rate of interventions is lower and the outcome for the baby is no different compared with an obstetric unit.

- Advise low-risk nulliparous women that planning to give birth in a midwifery-led unit (freestanding or alongside) is particularly suitable for them because the rate of interventions is lower and the outcome for the baby is no different compared with an obstetric unit. Explain that if they plan birth at home there is a small increase in the risk of an adverse outcome for the baby. [recommendation 1.1.2]
3.2 Commissioners and providers\(^1\) should ensure that all 4 birth settings are available to all women (in the local area or in a neighbouring area). [recommendation 1.1.6]

**Background**

3.3 *Maternity matters: choice, access and continuity of care in a safe service*, published by the Department of Health in 2007, set out a national choice guarantee that by the end of 2009 all women should be able to choose where to give birth. However, the audit *Maternity services in England* (published by the National Audit Office in 2013) found that in 2010 around 1 in 6 women in England reported that they did not have a choice of where to have their baby, indicating that the aspirations of the Department of Health had not been met. It remains the case that choice is not available for all women in all locations in England.

3.4 In 2012, most women in England (87\%) gave birth in hospital obstetric units, with 9\% giving birth in alongside midwifery units (situated on the same site as an obstetric unit), 2\% in freestanding midwifery units and 2\% at home (*Maternity services in England*).

3.5 On 6 October 2014 there were 162 obstetric units, 96 alongside midwifery units and 63 freestanding midwifery units in England (*BirthChoiceUK* database; used with permission from Rod Gibson Associates Ltd). Figure 1 shows the change in the numbers of different types of maternity unit since April 2007.

\(^1\) This can also include networks of providers.
3.6 The availability of choice of type of unit has improved in recent years because of an increase in the number of midwifery-led units. In 2013, 79% of women in England were reported to live within a 30-minute drive of both an obstetric unit and a midwifery-led unit (compared with 59% in 2007) (Maternity services in England). In addition, 99% of women were reported to live within a 60-minute drive of both an obstetric unit and a midwifery-led unit (compared with 97% in 2007). There is no existing guidance that states what a reasonable distance or travel time is.

3.7 Despite the improvements, there are still some areas where women lack the choice recommended in the NICE guideline. Figure 2 shows the areas (shaded in dark red) where women have over a 60-minute drive to reach both an obstetric unit and a midwifery-led unit.
3.8 Almost all trusts offer women the option of giving birth at home, but the rate of uptake by women for this is generally low and varies considerably across England.

3.9 Implementing the recommendations in the NICE guideline is expected to lead to more women giving birth outside obstetric units than is currently the case.

**Resource impact for commissioners of maternity services**

3.10 Where new midwifery units need to be set up, there may be costs of capital associated with the investment needed for refurbishment of...
existing estate or, if required, identification of buildings and land. Initial and recurrent costs of capital and service costs, for example maintenance, will depend on local circumstances and requirements such as size, capacity and location. These factors must be considered and included within the business case that hospital trusts submit to apply for funding. See the shared learning example from Ashford and St Peters NHS Foundation Trust ‘Providing a choice of a midwifery led unit (Birth centre) for women with low risk pregnancies’. Costs will be lower if new birth units can be based at or alongside existing community midwifery bases or in other NHS properties being taken out of use. The cost of setting up a new midwifery unit may be lower than the costs of extending hospital maternity units.

3.11 The Maternity services in England audit reports that there is more scope for commissioners and providers to work together in networks to meet local needs. Maternity networks can support the effective planning and delivery of a full range of services. The coverage of networks has increased since 2007 although around one-quarter of trusts are not part of one. In addition, fewer than 40% of trusts belong to a network with a paid coordinator, which may limit networks’ effectiveness.

3.12 Planning changes to maternity services requires commissioners to consider the resource use and related cost implications for the maternity service as a whole. This involves forecasting of staffing needs, occupancy rates, overheads, patient safety and transfer, with consideration of fixed and variable costs, and disinvestment from 1 form of maternity service in preference of another. Staff resources may be relocated from existing maternity units or funding for additional staff may be needed. See the shared learning example from Birmingham Women’s Hospital NHS Foundation Trust ‘Birmingham’s dedicated homebirth service’.

3.13 Women who plan to give birth at home or in a freestanding midwifery unit need an ambulance if they have to be transferred to an obstetric unit during labour or after the birth. Tables 1 and 3 in the NICE Intrapartum care guideline show that the average rates of transfer from these settings
are around 10% for multiparous women and 40% for nulliparous women. An increase in the number of women planning to give birth outside a hospital setting may place an increased demand on ambulance services. Commissioners, providers and ambulance services should work together to review future requirements and to assess whether the number of ambulances and paramedics would need to increase. The resource impact will depend on local circumstances and existing transfer services.

**Resource impact for providers of maternity services**

3.14 The health economics that informed the guideline (see appendix A of the full guideline) found that planned birth at home, in a freestanding midwifery unit or in an alongside midwifery unit is more cost effective than planned birth in an obstetric unit, in that order.

3.15 There are anticipated to be costs associated with promoting new midwifery units and educating women about making a properly informed choice. This may result in a reduction in the number of births in obstetric units and an increase in occupancy rates in midwifery units. See the shared learning example from Portsmouth Hospitals NHS Trust ‘My Birthplace®: A computerised place of birth decision support tool for women and midwives’ which aims to increase the number of women choosing to give birth in a freestanding midwifery unit or at home by providing personalised birthplace information. Also refer to the ‘choosing place of birth: resource for midwives’ tool published alongside the guidance.

3.16 If staff are relocated from obstetric units to midwifery units or home births, they may need training to recognise, and be confident about managing, when transfer of care from midwife-led to obstetric-led care is indicated because of increased risk to the woman or her baby resulting from complications that have developed during labour. The costs of this training will depend on current services provided and should be considered locally.
3.17 Providers that offer high-quality services and can meet local needs are encouraged to increase capacity so that they can provide maternity services to women from outside their area. If these services are available, a woman may choose to access maternity services outside her area. Expert opinion indicates that this is already happening in some areas.

3.18 Providers should work with commissioners and ambulance services to assess potential resource impact as set out in section 3.13 above.

**Savings and benefits**

3.19 The Maternity care services pathway payment system gives providers a payment per woman receiving care for each of the antenatal, intrapartum and postnatal periods. Payment for the delivery is calculated using the specific codes for the intrapartum period, and is applied for after the woman has given birth. There is no difference in payment for different levels of delivery – normal, assisted or caesarean section – and therefore the tariff delivers freedom to providers to develop services that allow women to make choices that may result in a normal birth rather than an intervention.

3.20 Overgaard et al. (2011) found that there is a significantly lower rate of postpartum haemorrhage in women who plan to give birth at a freestanding maternity unit compared with those who plan birth in an obstetric unit. The Birthplace in England Research Programme (2011) found the same effect for blood transfusions. Both of these obstetric outcomes are classed as a complication and would lead to the CCG making a higher payment for the intrapartum period. They could also result in the woman and her baby staying in hospital for longer than the length of stay trim point (above which a further payment is made by the CCG) after the birth. Hence an increase in the number of women planning a birth in a freestanding maternity unit may lead to savings for CCGs. Table 1 shows the 2014–15 maternity pathway tariff payment for the intrapartum (delivery) phase.
Table 1 Maternity pathway tariff for the delivery phase

<table>
<thead>
<tr>
<th></th>
<th>Tariff</th>
<th>Trim point (days)</th>
<th>Cost per day for days exceeding trim point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery phase with complications or comorbidities</td>
<td>£2188</td>
<td>7</td>
<td>£371</td>
</tr>
<tr>
<td>Delivery phase without complications or comorbidities</td>
<td>£1496</td>
<td>5</td>
<td>£371</td>
</tr>
</tbody>
</table>

3.21 In areas with small populations, the provision of both types of midwifery unit within 1 region or trust might not be economically viable because the number of places available in midwifery units might exceed the demand. By offering women the choice of place of birth, it is possible for all areas to provide the option of both types of midwifery-led units, either within 1 region or by working in networks or in collaboration with neighbouring healthcare providers.

3.22 By reorganising services to move some midwives out of obstetric units into freestanding or alongside midwifery units to care for low-risk women, midwife skills in obstetric units would be focused on caring for women at high risk of developing complications who require this medical expertise, and low-risk women who need transfer from other settings. There may be efficiency savings for providers from this more appropriate use of resources, in addition to ensuring that women are cared for in the setting that best meets their needs.

**One-to-one care in all birth settings**

**Recommendation**

3.23 Maternity services should:

- provide a model of care that supports one-to-one care in labour for all women **and**
benchmark services and identify overstaffing or understaffing by using workforce planning models and/or woman-to-midwife ratios.

[recommendation 1.1.14]

**Background**

3.24 A key factor in providing continuity and one-to-one care for women throughout labour and birth is the availability of midwives. The exact number of midwives needed by any individual maternity service will depend on a variety of factors, including the type of cases and maternal characteristics, the flexibility with which midwives are deployed and the availability of other healthcare staff, such as maternity support workers ([Maternity services in England](#)).

3.25 The [Maternity services in England](#) audit reports that 22% of women stated that they had been left alone during or shortly after birth, at a time when it worried them. In 2013, 78% of maternity units reported that they provided one-to-one care for at least 90% of women.

**Costs**

3.26 There may be a cost to providers of maternity care if additional staff resource is needed to provide one-to-one care in labour. Table 2 shows the annual costs associated with the different types of maternity staff that may be needed.

<table>
<thead>
<tr>
<th>Staff title</th>
<th>Annual cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwife (band 7)</td>
<td>£43,337</td>
</tr>
<tr>
<td>Midwife (band 6)</td>
<td>£36,151</td>
</tr>
<tr>
<td>Midwife (band 5)</td>
<td>£29,375</td>
</tr>
<tr>
<td>Healthcare assistant (band 2)</td>
<td>£18,589</td>
</tr>
</tbody>
</table>

Data from Agenda for change pay plus on-costs 2013–14. Midpoint of bands used.

3.27 When designing services, commissioners should consider that one-to-one care can be provided by midwives supported by auxiliary staff in obstetric
and midwifery units. However, for a home birth 1 midwife is needed throughout labour and 2 midwives need to be present for the birth.

3.28 A flexible model of care is required where community midwives may need to be on-call to ensure that staffing levels are adequate for the estimated number of births in each birth setting.

3.29 NICE is producing guidelines on safe midwife staffing for maternity settings in the NHS that is expected to be published early in 2015. Please see the NICE website for further information.

Savings and benefits

3.30 One of the most common reasons for maternity claims is for mistakes in the management of labour (Maternity services in England). Therefore providing a model of care that supports one-to-one care in labour may help reduce the number of claims.

3.31 Litigation in maternity care is rising – the number of claims increased by 80% in the 5 years to 2012–13 and now equates to one-fifth of spending on maternity services. The cost to the NHS for litigation cover against maternity claims totalled £482 million in 2012–13 (around £700 per birth). Therefore the level of savings for claims and insurance premiums could be significant (Maternity services in England audit 2013).

3.32 There may be longer term benefits associated with increased take-up and duration of breastfeeding if women feel more supported immediately after the birth.

4 Other Considerations

4.1 Some freestanding midwifery units may be operated on a model whereby they could be closed when no women are in labour and opened when needed, thus minimising running costs and ensuring that staffing always matches demand.
5 Conclusion

5.1 NHS organisations are advised to assess the resource implications of this guidance locally. Potential areas for additional costs locally are:

- training for staff who may move from 1 type of birth unit to another if services are reorganised
- promoting midwifery units and education for women about their choice of place of birth
- additional staff resource requirements in order to provide one-to-one care for women in labour
- capital cost of refurbishment of existing estate or, if required, identification of buildings or land for new midwifery units
- resource requirements for ambulance transfer services.

Potential areas for savings locally are:

- efficiency savings because of more appropriate use of maternity staff resources and increased occupancy rates in midwifery units
- reduction in maternity pathway payments for the delivery phase at the payment level that includes complications or comorbidities
- reduction in insurance premiums for litigation and maternity claims.

5.2 Implementing the recommendations in the guideline is expected to lead to more women giving birth in settings other than obstetric units than is currently the case. CCGs and hospital trusts should work together to consider the impact this would have on planning service provision.
About this costing statement

This costing statement accompanies the NICE guideline Intrapartum care: care of healthy women and their babies during childbirth.

Issue date: December 2014

This statement is written in the following context

This statement represents the view of NICE, which was arrived at after careful consideration of the available data and through consulting healthcare professionals. It should be read in conjunction with the NICE guideline. The statement is an implementation tool and focuses on those areas that were considered to have potential impact on resource utilisation.

The cost and activity assessments in the statement are estimates based on a number of assumptions. They provide an indication of the potential impact of the principal recommendations and are not absolute figures.

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