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Routine postnatal care of women and their babies

NICE clinical guideline 37

Developed by the National Collaborating Centre for Primary Care

NICE clinical guideline 37 Routine postnatal care of women and their babies

Ordering information

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- The NICE guideline (this document) – all the recommendations.
- A quick reference guide – a summary of the recommendations for healthcare professionals.
- ‘Understanding NICE guidance’ – information for patients and carers.
- The full guideline – all the recommendations, details of how they were developed, and summaries of the evidence they were based on.

For printed copies of the quick reference guide or ‘Understanding NICE guidance’, phone the NHS Response Line on 0870 1555 455 and quote:

- N1074 (quick reference guide)
- N1075 (‘Understanding NICE guidance’).

This guidance is written in the following context

This guidance represents the view of the Institute, which was arrived at after careful consideration of the evidence available. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

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Introduction

This guideline aims to identify the essential core (routine) care that every woman and her baby should receive in the first 6–8 weeks after birth, based on the best evidence available.

Although for most women and babies the postnatal period is uncomplicated, care during this period needs to address any deviation from expected recovery after birth. This guideline gives advice on when additional care may be needed and these recommendations have been given a status level (indicating the degree of urgency needed in dealing with the problem (see table 1).

Table 1 Status levels

Status	Classification
Emergency	Life-threatening or potential life-threatening situation
Urgent	Potentially serious situation, which needs appropriate action
Non-urgent	Continue to monitor and assess

Woman and baby centred care

This guideline offers best practice advice on the core care of women and their babies during the postnatal period.

Women and their families should always be treated with kindness, respect and dignity. The views, beliefs and values of the woman, her partner and her family in relation to her care and that of her baby should be sought and respected at all times. The woman should be fully involved in planning the timing and content of each postnatal care contact so that care is flexible and tailored to meet her and her baby's needs.

Women should have the opportunity to make informed decisions about their care and any treatment needed. Where a woman does not have the capacity to make decisions, healthcare professionals should follow the Department of Health guidelines – 'Reference guide to consent for examination or treatment' (2001) (available from www.dh.gov.uk).

Good communication between healthcare professionals and the woman and her family is essential. It should be supported by provision of evidence-based information offered in a form that is tailored to the needs of the individual woman.

Care and information should be appropriate and the woman's cultural practices should be taken into account. All information should be provided in a form that is accessible to women, their partners and families, taking into account any additional needs, such as physical, cognitive or sensory disabilities, and people who do not speak or read English.

Every opportunity should be taken to provide the woman and her partner or other relevant family members with the information and support they need.

Key priorities for implementation

- A documented, individualised postnatal care plan should be developed with the woman ideally in the antenatal period or as soon as possible after birth. This should include:
 - relevant factors from the antenatal, intrapartum and immediate postnatal period
 - details of the healthcare professionals involved in her care and that of her baby, including roles and contact details
 - plans for the postnatal period.

This should be reviewed at each postnatal contact.

- There should be local protocols about written communication, in particular about the transfer of care between clinical sectors and healthcare professionals. These protocols should be audited.
- Women should be offered relevant and timely information to enable them to promote their own and their babies' health and well-being and to recognise and respond to problems.
- At the first postnatal contact, women should be advised of the signs and symptoms of potentially life-threatening conditions (given in table 2) and to contact their healthcare professional immediately or call for emergency help if any signs and symptoms occur.
- All maternity care providers (whether working in hospital or in primary care) should implement an externally evaluated, structured programme that encourages breastfeeding, using the Baby Friendly Initiative (www.babyfriendly.org.uk) as a minimum standard.
- At each postnatal contact, women should be asked about their emotional well-being, what family and social support they have and their usual coping strategies for dealing with day-to-day matters. Women and their families/partners should be encouraged to tell their healthcare professional about any changes in mood, emotional state and behaviour that are outside of the woman's normal pattern.
- At each postnatal contact, parents should be offered information and advice to enable them to:

- assess their baby's general condition
- identify signs and symptoms of common health problems seen in babies
- contact a healthcare professional or emergency service if required.

1 Guidance

The following guidance is based on the best available evidence. The full guideline ('Postnatal care: routine postnatal care of women and their babies') gives details of the methods and the evidence used to develop the guidance (see section 5 for details).

1.1 Planning the content and delivery of care

Principles of care

- 1.1.1 Each postnatal contact should be provided in accordance with the principles of individualised care. In order to deliver the core care recommended in this guideline, postnatal services should be planned locally to achieve the most efficient and effective service for women and their babies.
- 1.1.2 A coordinating healthcare professional should be identified for each woman. Based on the changing needs of the woman and baby, this professional is likely to change over time.
- 1.1.3 A documented, individualised postnatal care plan should be developed with the woman, ideally in the antenatal period or as soon as possible after birth. This should include:
- relevant factors from the antenatal, intrapartum and immediate postnatal period
 - details of the healthcare professionals involved in her care and that of her baby, including roles and contact details
 - plans for the postnatal period.
- This should be reviewed at each postnatal contact.
- 1.1.4 Women should be offered an opportunity to talk about their birth experiences and to ask questions about the care they received during labour.

- 1.1.5 Women should be offered relevant and timely information to enable them to promote their own and their babies' health and well-being and to recognise and respond to problems.
- 1.1.6 At each postnatal contact the healthcare professional should:
- ask the woman about her health and well-being and that of her baby. This should include asking women about their experience of common physical health problems. Any symptoms reported by the woman or identified through clinical observations should be assessed.
 - offer consistent information and clear explanations to empower the woman to take care of her own health and that of her baby, and to recognise symptoms that may require discussion
 - encourage the woman and her family to report any concerns in relation to their physical, social, mental or emotional health, discuss issues and ask questions
 - document in the care plan any specific problems and follow-up.
- 1.1.7 Length of stay in a maternity unit should be discussed between the individual woman and her healthcare professional, taking into account the health and well-being of the woman and her baby and the level of support available following discharge.

Professional communication

- 1.1.8 There should be local protocols about written communication, in particular about the transfer of care between clinical sectors and healthcare professionals. These protocols should be audited.
- 1.1.9 Healthcare professionals should use hand-held maternity records, the postnatal care plans and personal child health records, to promote communication with women.

Competencies

- 1.1.10 All healthcare professionals who care for mothers and babies should work within the relevant competencies developed by Skills for Health (www.skillsforhealth.org.uk). Relevant healthcare professionals should also have demonstrated competency and sufficient ongoing clinical experience in:
- undertaking maternal and newborn physical examinations and recognising abnormalities
 - supporting breastfeeding women including a sound understanding of the physiology of lactation and neonatal metabolic adaptation and the ability to communicate this to parents
 - recognising the risks, signs and symptoms of domestic abuse and whom to contact for advice and management, as recommended by Department of Health guidance^{1,2}
 - recognising the risks, signs and symptoms of child abuse and whom to contact for advice and management, as recommended by Department of Health guidance.

1.2 Maternal health

Information giving

- 1.2.1 At the first postnatal contact, women should be advised of the signs and symptoms of potentially life-threatening conditions (given in table 2) and to contact their healthcare professional immediately or call for emergency help if any signs and symptoms occur.

¹ National Service Framework for Children, Young People and Maternity Services. Available from: www.dh.gov.uk

² Department of Health (2005) *Responding to domestic abuse: a handbook for health professionals*. London: Department of Health. Available from: www.dh.gov.uk

Table 2 Signs and symptoms of potentially life-threatening conditions

Signs and symptoms	Condition
Sudden and profuse blood loss or persistent increased blood loss Faintness, dizziness or palpitations/tachycardia	Postpartum haemorrhage
Fever, shivering, abdominal pain and/or offensive vaginal loss	Infection
Headaches accompanied by one or more of the following symptoms within the first 72 hours after birth: • visual disturbances • nausea, vomiting	Pre-eclampsia/eclampsia
Unilateral calf pain, redness or swelling Shortness of breath or chest pain	Thromboembolism

1.2.2 The Department of Health booklet ‘Birth to five’³, which is a guide to parenthood and the first 5 years of a child’s life, should be given to all women within 3 days of birth (if it has not been received antenatally).

1.2.3 The personal child health record should be given to all women as soon as possible (if it has not been received antenatally) and its use explained.

1.2.4 Women should be offered information and reassurance on:

- the physiological process of recovery after birth (within the first 24 hours)

³ Available from: www.dh.gov.uk

- normal patterns of emotional changes in the postnatal period and that these usually resolve within 10–14 days of giving birth (within 3 days)
- common health concerns as appropriate (weeks 2–8).

Life-threatening conditions: core care and raised concern

Postpartum haemorrhage

- 1.2.5 In the absence of abnormal vaginal loss, assessment of the uterus by abdominal palpation or measurement as a routine observation is unnecessary.
- 1.2.6 Assessment of vaginal loss and uterine involution and position should be undertaken in women with excessive or offensive vaginal loss, abdominal tenderness or fever. Any abnormalities in the size, tone and position of the uterus should be evaluated. If no uterine abnormality is found, consider other causes of symptoms (urgent action).
- 1.2.7 Sudden or profuse blood loss, or blood loss accompanied by any of the signs and symptoms of shock, including tachycardia, hypotension, hypoperfusion and change in consciousness, should be evaluated (emergency action).

Genital tract sepsis

- 1.2.8 In the absence of any signs and symptoms of infection, routine assessment of temperature is unnecessary.
- 1.2.9 Temperature should be taken and documented if infection is suspected. If the temperature is above 38°C, repeat measurement in 4–6 hours.
- 1.2.10 If the temperature remains above 38°C on the second reading or there are other observable symptoms and measurable signs of sepsis, evaluate further (emergency action).

Pre-eclampsia/eclampsia

- 1.2.11 A minimum of one blood pressure measurement should be carried out and documented within 6 hours of the birth.
- 1.2.12 Routine assessment of proteinuria is not recommended.
- 1.2.13 Women with severe or persistent headache should be evaluated and pre-eclampsia considered (emergency action).
- 1.2.14 If diastolic blood pressure is greater than 90 mm Hg, and there are no other signs and symptoms of pre-eclampsia, measurement of blood pressure should be repeated within 4 hours.
- 1.2.15 If diastolic blood pressure is greater than 90 mm Hg and accompanied by another sign or symptom of pre-eclampsia, evaluate further (emergency action).
- 1.2.16 If diastolic blood pressure is greater than 90 mm Hg and does not fall below 90 mm Hg within 4 hours, evaluate for pre-eclampsia (emergency action).

Thromboembolism

- 1.2.17 Women should be encouraged to mobilise as soon as appropriate following the birth.
- 1.2.18 Women with unilateral calf pain, redness or swelling should be evaluated for deep venous thrombosis (emergency action).
- 1.2.19 Women experiencing shortness of breath or chest pain should be evaluated for pulmonary thromboembolism (emergency action).
- 1.2.20 Routine use of Homan's sign as a tool for evaluation of thromboembolism is not recommended.
- 1.2.21 Obese women are at higher risk of thromboembolism and should receive individualised care.

Mental health and well-being

- 1.2.22 At each postnatal contact, women should be asked about their emotional well-being, what family and social support they have and their usual coping strategies for dealing with day-to-day matters. Women and their families/partners should be encouraged to tell their healthcare professional about any changes in mood, emotional state and behaviour that are outside of the woman's normal pattern.
- 1.2.23 Formal debriefing of the birth experience is not recommended.
- 1.2.24 All healthcare professionals should be aware of signs and symptoms of maternal mental health problems that may be experienced in the weeks and months after the birth.
- 1.2.25 At 10–14 days after birth, women should be asked about resolution of symptoms of baby blues (for example, tearfulness, feelings of anxiety and low mood). If symptoms have not resolved, the woman should be assessed for postnatal depression, and if symptoms persist, evaluated further (urgent action)⁴.
- 1.2.26 Women should be encouraged to help look after their mental health by looking after themselves. This includes taking gentle exercise, taking time to rest, getting help with caring for the baby, talking to someone about their feelings and ensuring they can access social support networks.

⁴ NICE clinical guideline in development on antenatal and postnatal mental health. Publication expected in January 2007. See www.nice.org.uk for further information

Physical health and well-being

Perineal care

- 1.2.27 At each postnatal contact, women should be asked whether they have any concerns about the healing process of any perineal wound; this might include experience of perineal pain, discomfort or stinging, offensive odour or dyspareunia.
- 1.2.28 The healthcare professional should offer to assess the perineum if the woman has pain or discomfort.
- 1.2.29 Women should be advised that topical cold therapy, for example crushed ice or gel pads, are effective methods of pain relief for perineal pain.
- 1.2.30 If oral analgesia is required, paracetamol should be used in the first instance unless contraindicated.
- 1.2.31 If cold therapy or paracetamol is not effective a prescription for oral or rectal non-steroidal anti-inflammatory (NSAID) medication should be considered in the absence of any contraindications (non-urgent action).
- 1.2.32 Signs and symptoms of infection, inadequate repair, wound breakdown or non-healing should be evaluated (urgent action).
- 1.2.33 Women should be advised of importance of perineal hygiene, including frequent changing of sanitary pads, washing hands before and after doing this, and daily bathing or showering to keep their perineum clean.

Dyspareunia

- 1.2.34 Women should be asked about resumption of sexual intercourse and possible dyspareunia 2–6 weeks after the birth.

- 1.2.35 If a woman expresses anxiety about resuming intercourse, reasons for this should be explored.
- 1.2.36 Women with perineal trauma who experience dyspareunia should be offered an assessment of the perineum. (See perineal care section)
- 1.2.37 A water-based lubricant gel to help ease discomfort during intercourse may be advised, particularly if a woman is breastfeeding.
- 1.2.38 Women who continue to express anxiety about sexual health problems should be evaluated (non-urgent action).

Headache

For severe headache see section on pre-eclampsia/eclampsia.

- 1.2.39 Women should be asked about headache symptoms at each postnatal contact.
- 1.2.40 Women who have had epidural or spinal anaesthesia should be advised to report any severe headache, particularly one which occurs while sitting or standing.
- 1.2.41 Management of mild postnatal headache should be based on differential diagnosis of headache type and local treatment protocols.
- 1.2.42 Women with tension or migraine headaches should be offered advice on relaxation and how to avoid factors associated with the onset of headaches.

Fatigue

- 1.2.43 Women who report persistent fatigue should be asked about their general well-being, and offered advice on diet, exercise and planning activities, including spending time with her baby.

1.2.44 If persistent postnatal fatigue impacts on the woman's care of herself or baby, underlying physical, psychological or social causes should be evaluated.

1.2.45 If a woman has sustained a postpartum haemorrhage, or is experiencing persistent fatigue, her haemoglobin level should be evaluated and if low, treated according to local policy.

Backache

1.2.46 Women experiencing backache in the postnatal period should be managed as in the general population.

Constipation

1.2.47 Women should be asked if they have opened their bowels within 3 days of the birth.

1.2.48 Women who are constipated and uncomfortable should have their diet and fluid intake assessed and offered advice on how to improve their diet.

1.2.49 A gentle laxative may be recommended if dietary measures are not effective.

Haemorrhoids

1.2.50 Women with haemorrhoids should be advised to take dietary measures to avoid constipation and should be offered management based on local treatment protocols.

1.2.51 Women with a severe, swollen or prolapsed haemorrhoid or any rectal bleeding should be evaluated (urgent action).

Faecal incontinence

1.2.52 Women with faecal incontinence should be assessed for severity, duration and frequency of symptoms. If symptoms do not resolve, evaluate further (urgent action).

Urinary retention

- 1.2.53 Urine passed within 6 hours of urination during labour should be documented.
- 1.2.54 If urine has not been passed within 6 hours after the birth, efforts to assist urination should be advised, such as taking a warm bath or shower.
- 1.2.55 If urine has not been passed by 6 hours after the birth and measures to encourage micturition are not immediately successful, bladder volume should be assessed and catheterisation considered (urgent action).

Urinary incontinence

- 1.2.56 Women with involuntary leakage of a small volume of urine should be taught pelvic floor exercises.
- 1.2.57 Women with involuntary leakage of urine which does not resolve or becomes worse should be evaluated.

Contraception

- 1.2.58 Methods and timing of resumption of contraception should be discussed within the first week of the birth.
- 1.2.59 The coordinating healthcare professional should provide proactive assistance to women who may have difficulty accessing contraceptive care. This includes providing contact details for expert contraceptive advice.

Immunisation

- 1.2.60 Anti-D immunoglobulin should be offered to every non-sensitised Rh-D-negative woman within 72 hours following the delivery of an RhD-positive baby.

- 1.2.61 Women found to be sero-negative on antenatal screening for rubella should be offered an MMR (measles, mumps, rubella) vaccination following birth and before discharge from the maternity unit if they are in hospital.
- 1.2.62 MMR vaccine may be given with anti-D (Rh0) immunoglobulin injection provided that separate syringes are used and the products are administered into different limbs. If not given simultaneously, MMR should be given 3 months after anti-D (Rh0) immunoglobulin.
- 1.2.63 Women should be advised that pregnancy should be avoided for 1 month after receiving MMR, but that breastfeeding may continue.

Safety

Domestic abuse

- 1.2.64 Healthcare professionals should be aware of the risks, signs and symptoms of domestic abuse and know who to contact for advice and management, following guidance from the Department of Health^{5,6}.

6–8-week check

- 1.2.65 At the end of the postnatal period, the coordinating healthcare professional should ensure that the woman's physical, emotional and social well-being is reviewed. Screening and medical history should also be taken into account.

⁵ Department of Health (2005) *Responding to domestic abuse: a handbook for health professionals*. London: Department of Health. Available from: www.dh.gov.uk

⁶ National Service Framework for Children, Young People and Maternity Services. Available from: www.dh.gov.uk

1.3 Infant feeding

A supportive environment for breastfeeding

- 1.3.1 Breastfeeding support should be made available regardless of the location of care.
- 1.3.2 All healthcare providers (hospitals and community) should have a written breastfeeding policy that is communicated to all staff and parents. Each provider should identify a lead healthcare professional responsible for implementing this policy.
- 1.3.3 All maternity care providers (whether working in hospital or in primary care) should implement an externally evaluated, structured programme that encourages breastfeeding, using the Baby Friendly Initiative (www.babyfriendly.org.uk) as a minimum standard.
- 1.3.4 Healthcare professionals should have sufficient time, as a priority, to give support to a woman and baby during initiation and continuation of breastfeeding.
- 1.3.5 Where postnatal care is provided in hospital, attention should be paid to facilitating an environment conducive to breastfeeding. This includes making arrangements for:
- 24 hour rooming-in and continuing skin-to-skin contact when possible
 - privacy
 - adequate rest for women without interruption caused by hospital routine
 - access to food and drink on demand.
- 1.3.6 Formula milk should not be given to breastfed babies unless medically indicated.

- 1.3.7 Commercial packs, for example those given to women when they are discharged from hospital, containing formula milk or advertisements for formula should not be distributed.
- 1.3.8 Women who leave hospital soon after birth should be reassured that this should not impact on breastfeeding duration.
- 1.3.9 Written breastfeeding education materials as a stand-alone intervention are not recommended.

Starting successful breastfeeding

- 1.3.10 In the first 24 hours after birth, women should be given information on the benefits of breastfeeding, the benefits of colostrum and the timing of the first breastfeed. Support should be culturally appropriate.
- 1.3.11 Initiation of breastfeeding should be encouraged as soon as possible after the birth, ideally within 1 hour.
- 1.3.12 Separation of a woman and her baby within the first hour of the birth for routine postnatal procedures, for example weighing, measuring and bathing, should be avoided unless these measurements are requested by the woman, or are necessary for the immediate care of the baby.
- 1.3.13 Women should be encouraged to have skin-to-skin contact with their babies as soon as possible after the birth.
- 1.3.14 It is not recommended that women are asked about their proposed method of feeding until after the first skin-to-skin contact.
- 1.3.15 From the first feed, women should be offered skilled breastfeeding support (from a healthcare professional, mother-to-mother or peer support) to enable comfortable positioning of the mother and baby and to ensure that the baby attaches correctly to the breast to

establish effective feeding and prevent concerns such as sore nipples.

- 1.3.16 Additional support with positioning and attachment should be offered to women who have had:
- a narcotic or a general anaesthetic, as the baby may not initially be responsive to feeding
 - a caesarean section, particularly to assist with handling and positioning the baby to protect the woman's abdominal wound
 - initial contact with their baby delayed.

Continuing successful breastfeeding

- 1.3.17 Unrestricted breastfeeding frequency and duration should be encouraged.
- 1.3.18 Women should be advised that babies generally stop feeding when they are satisfied, which may follow a feed from only one breast. Babies should be offered the second breast if they do not appear to be satisfied following a feed from one breast.
- 1.3.19 Women should be reassured that brief discomfort at the start of feeds in the first few days is not uncommon, but this should not persist.
- 1.3.20 Women should be advised that if their baby is not attaching effectively he or she may be encouraged, for example by the woman teasing the baby's lips with the nipple to get him or her to open their mouth.
- 1.3.21 Women should be advised of the indicators of good attachment, positioning and successful feeding. These are given in box 1.

Box 1. Breastfeeding

Indicators of good attachment and positioning:

- mouth wide open
- less areola visible underneath the chin than above the nipple
- chin touching the breast, lower lip rolled down, and nose free
- no pain.

Indicators of successful feeding in babies:

- audible and visible swallowing
- sustained rhythmic suck
- relaxed arms and hands
- moist mouth
- regular soaked/heavy nappies.

Indicators of successful breastfeeding in women:

- breast softening
- no compression of the nipple at the end of the feed
- woman feels relaxed and sleepy.

1.3.22 Women should be given information about local breastfeeding support groups.

Assessing successful breastfeeding

1.3.23 A woman's experience with breastfeeding should be discussed at each contact to assess if she is on course to breastfeed effectively and identify any need for additional support. Breastfeeding progress should then be assessed and documented in the postnatal care plan at each contact.

1.3.24 If an insufficiency of milk is perceived by the woman, attachment and positioning should be reviewed and her baby's health should be

evaluated. Reassurance should be offered to support the woman to gain confidence in her ability to produce enough milk for her baby.

- 1.3.25 If the baby is not taking sufficient milk directly from the breast and supplementary feeds are necessary, expressed breast milk should be given by a cup or bottle.
- 1.3.26 Supplementation with fluids other than breast milk is not recommended.

Expression and storage of breast milk

- 1.3.27 All breastfeeding women should be shown how to hand express their colostrum or breast milk and advised on how to correctly store and freeze it.
- 1.3.28 Breast pumps should be available in hospital, particularly for women who have been separated from their babies, to establish lactation. All women who use a breast pump should be offered instructions on how to use it.

Preventing, identifying and treating breastfeeding concerns

Nipple pain

- 1.3.29 Women should be advised that if their nipples are painful or cracked, it is probably due to incorrect attachment.
- 1.3.30 If nipple pain persists after repositioning and re-attachment, assessment for thrush should be considered.

Engorgement

- 1.3.31 Women should be advised that their breasts may feel tender, firm and painful when milk 'comes in' at or around 3 days after birth.
- 1.3.32 A woman should be advised to wear a well-fitting bra that does not restrict her breasts.

- 1.3.33 Breast engorgement should be treated with:
- frequent unlimited breastfeeding including prolonged feeding from the affected breast
 - breast massage and, if necessary, hand expression
 - analgesia.

Mastitis

- 1.3.34 Women should be advised to report any signs and symptoms of mastitis including flu like symptoms, red, tender and painful breasts to their healthcare professional urgently.
- 1.3.35 Women with signs and symptoms of mastitis should be offered assistance with positioning and attachment and advised to:
- continue breastfeeding and/or hand expression to ensure effective milk removal; if necessary, this should be with gentle massaging of the breast to overcome any blockage
 - take analgesia compatible with breastfeeding, for example paracetamol
 - increase fluid intake.
- 1.3.36 If signs and symptoms of mastitis continue for more than a few hours of self management, a woman should be advised to contact her healthcare professional again (urgent action).
- 1.3.37 If the signs and symptoms of mastitis have not eased, the woman should be evaluated as she may need antibiotic therapy (urgent action).

Inverted nipples

- 1.3.38 Women with inverted nipples should receive extra support and care to ensure successful breastfeeding.

Ankyloglossia (tongue tie)

- 1.3.39 Evaluation for ankyloglossia should be made if breastfeeding concerns persist after a review of positioning and attachment by a skilled healthcare professional or peer counsellor.
- 1.3.40 Babies who appear to have ankyloglossia should be evaluated further (non-urgent action).⁷

Sleepy baby

- 1.3.41 Women should be advised that skin-to-skin contact or massaging a baby's feet should be used to wake the baby. The baby's general health should be assessed if there is no improvement.

Formula feeding

- 1.3.42 All parents and carers who are giving their babies formula feed should be offered appropriate and tailored advice on formula feeding to ensure this is undertaken as safely as possible, in order to enhance infant development and health, and fulfil nutritional needs.
- 1.3.43 A woman who wishes to feed her baby formula milk should be taught how to make feeds using correct, measured quantities of formula, as based on the manufacturer's instructions, and how to clean and sterilise bottles and teats and how to store formula milk⁸.
- 1.3.44 Parents and family members should be advised that milk, either expressed milk or formula should not be warmed in a microwave.

⁷ National Institute for Health and Clinical Excellence (2005) Division of ankyloglossia (tongue-tie) for breastfeeding. *NICE interventional procedure guidance* no. 149. London: National Institute for Health and Clinical Excellence. Available from: www.nice.org.uk/IPG149

⁸ Department of Health (2005) *Bottle feeding*. London: Department of Health. Available from: www.dh.gov.uk

- 1.3.45 Breastfeeding women who want information on how to prepare formula feeds should be advised on how to do this.

1.4 Maintaining infant health

The purpose of this section of the guidance is to provide the framework for the healthcare professional, with the parents, to facilitate the health and well-being of a baby up to 8 weeks old. It lays out the care given to a healthy baby and support to be offered to the parents. It should be read in conjunction with 'Birth to five'.

- 1.4.1 Healthy babies should have normal colour for their ethnicity, maintain a stable body temperature, and pass urine and stools at regular intervals. They initiate feeds, suck well on the breast (or bottle) and settle between feeds. They are not excessively irritable, tense, sleepy or floppy. The vital signs of a healthy baby should fall within the following ranges:
- respiratory rate normally 30–60 breaths per minute
 - heart rate normally between 100 and 160 beats per minute in a newborn
 - temperature in a normal room environment of around 37°C (if measured).
- 1.4.2 At each postnatal contact, parents should be offered information and advice to enable them to:
- assess their baby's general condition
 - identify signs and symptoms of common health problems seen in babies
 - contact a healthcare professional or emergency service if required.
- 1.4.3 Parents, family members and carers should be offered information and reassurance on:
- their baby's social capabilities as this can promote parent–baby attachment (in the first 24 hours)

- the availability, access and aims of all postnatal peer, statutory and voluntary groups and organisations in their local community (within 2–8 weeks).

1.4.4 Both parents should be encouraged to be present during any physical examination of their baby to promote participation of both parents in the care of their baby and enable them to learn more about their baby's needs.

Parenting and emotional attachment

1.4.5 Assessment for emotional attachment should be carried out at each postnatal contact.

1.4.6 Home visits should be used as an opportunity to promote parent- or mother-to-baby emotional attachment.

1.4.7 Women should be encouraged to develop social networks as this promotes positive mother–baby interaction.

1.4.8 Group based parent-training programmes designed to promote emotional attachment and improve parenting skills should be available to parents who wish to access them.

1.4.9 Healthcare providers should offer fathers information and support in adjusting to their new role and responsibilities within the family unit.

Physical examination and screening

1.4.10 The aims of any physical examination should be fully explained and the results shared with the parents and recorded in the postnatal care plan and the personal child health record.

1.4.11 A complete examination of the baby should take place within 72 hours of birth. This examination should incorporate a review of parental concerns and the baby's medical history should also be reviewed including: family, maternal, antenatal and perinatal history; fetal, neonatal and infant history including any previously plotted

birth-weight and head circumference; whether the baby has passed meconium and urine (and urine stream in a boy). Appropriate recommendations made by the NHS National Screening Committee should also be carried out (www.nsc.nhs.uk/ch_screen/child_ind.htm).

A physical examination should also be carried out. This should include checking the baby's:

- appearance including colour, breathing, behaviour, activity and posture
- head (including fontanelles), face, nose, mouth including palate, ears, neck and general symmetry of head and facial features. Measure and plot head circumference
- eyes; check opacities and red reflex
- neck and clavicles, limbs, hands, feet and digits; assess proportions and symmetry
- heart; check position, heart rate, rhythm and sounds, murmurs and femoral pulse volume
- lungs; check effort, rate and lung sounds
- abdomen; check shape and palpate to identify any organomegaly; also check condition of umbilical cord
- genitalia and anus; check for completeness and patency and undescended testes in males
- spine; inspect and palpate bony structures and check integrity of the skin
- skin; note colour and texture as well as any birthmarks or rashes
- central nervous system; observe tone, behaviour, movements and posture. Elicit newborn reflexes only if concerned
- hips; check symmetry of the limbs and skin folds (perform Barlow and Ortolani's manoeuvres)
- cry; note sound
- weight; measure and plot.

- 1.4.12 The newborn blood spot test should be offered to parents when their baby is 5–8 days old.
- 1.4.13 At 6–8 weeks, an examination, comprising the items listed in 1.4.11, should be carried out. In addition, an assessment of social smiling and visual fixing and following should be carried out.
- 1.4.14 A hearing screen should be completed before discharge from hospital or by week 4 in the hospital programme or by week 5 in the community programme.
- 1.4.15 Parents should be offered routine immunisations for their baby according to the schedule recommended by the Department of Health⁹.

Physical health and well-being

Jaundice

- 1.4.16 Parents should be advised to contact their healthcare professional if their baby is jaundiced, their jaundice is worsening, or their baby is passing pale stools.
- 1.4.17 Babies who develop jaundice within the first 24 hours after birth should be evaluated (emergency action).
- 1.4.18 If jaundice develops in babies aged 24 hours and older, its intensity should be monitored and systematically recorded along with the baby's overall well-being with particular regard to hydration and alertness.
- 1.4.19 The mother of a breastfed baby who has signs of jaundice should be actively encouraged to breastfeed frequently, and the baby awakened to feed if necessary.

⁹ Department of Health (1996) London: Department of Health. *Immunisation against infectious disease*. Available from: www.dh.gov.uk

- 1.4.20 Breastfed babies with jaundice should not be routinely supplemented with formula, water or dextrose water.
- 1.4.21 If a baby is significantly jaundiced or appears unwell, evaluation of the serum bilirubin level should be carried out.
- 1.4.22 If jaundice first develops after 7 days or jaundice remains after 14 days in an otherwise healthy baby and a cause has not already been identified, it should be evaluated (urgent action).

Skin

- 1.4.23 Parents should be advised that cleansing agents should not be added to a baby's bath water nor should lotions or medicated wipes be used. The only cleansing agent suggested, where it is needed, is a mild non-perfumed soap.
- 1.4.24 Parents should be advised how to keep the umbilical cord clean and dry and that antiseptics should not be used routinely.

Thrush

- 1.4.25 If thrush is identified in the baby, the breastfeeding woman should be offered information and guidance about relevant hygiene practices.
- 1.4.26 Thrush should be treated with an appropriate antifungal medication if the symptoms are causing pain to the woman or the baby or feeding concerns to either.
- 1.4.27 If thrush is non-symptomatic, women should be advised that antifungal treatment is not required.

Nappy rash

- 1.4.28 For babies with nappy rash the following possible causes should be considered:
- hygiene and skin care

- sensitivity to detergents, fabric softeners or external products that have contact with the skin
- presence of infection.

1.4.29 If painful nappy rash persists it is usually caused by thrush, and treatment with antifungal treatment should be considered.

1.4.30 If after a course of treatment the rash does not resolve, it should be evaluated further (non-urgent action).

Constipation

1.4.31 If a baby has not passed meconium within 24 hours, the baby should be evaluated to determine the cause, which may be related to feeding patterns or underlying pathology (emergency action).

1.4.32 If a baby is constipated and is formula fed the following should be evaluated: (urgent action)

- feed preparation technique
- quantity of fluid taken
- frequency of feeding
- composition of feed.

Diarrhoea

1.4.33 A baby who is experiencing increased frequency and/or looser stools than usual should be evaluated (urgent action).

Colic

1.4.34 A baby who is crying excessively and inconsolably, most often during the evening, either drawing its knees up to its abdomen or arching its back, should be assessed for an underlying cause, including infant colic (urgent action).

1.4.35 Assessment of excessive and inconsolable crying should include:

- general health of the baby

- antenatal and perinatal history
- onset and length of crying
- nature of the stools
- feeding assessment
- woman's diet if breastfeeding
- family history of allergy
- parent's response to the baby's crying
- any factors which lessen or worsen the crying.

1.4.36 Healthcare professionals should reassure parents of babies with colic that the baby is not rejecting them and that colic is usually a phase that will pass. Parents should be advised that holding the baby through the crying episode, and accessing peer support may be helpful.

1.4.37 Use of hypoallergenic formula in bottle-fed babies should be considered for treating colic, but only under medical guidance.

1.4.38 Dicycloverine (dicyclomine) should not be used in the treatment of colic due to side effects such as breathing difficulties and coma.

Fever

1.4.39 The temperature of a baby does not need to be taken, unless there are specific risk factors, for example maternal pyrexia during labour.

1.4.40 When a baby is suspected of being unwell, the temperature should be measured using electronic devices that have been properly calibrated and are used appropriately¹⁰.

1.4.41 A temperature of 38°C or more is abnormal and the cause should be evaluated (emergency action). A full assessment, including physical examination, should be undertaken.

¹⁰ NICE clinical guideline in development on feverish illness in children. Publication expected May 2007. See www.nice.org.uk for further information

Vitamin K

- 1.4.42 All parents should be offered vitamin K prophylaxis for their babies to prevent the rare but serious and sometimes fatal disorder of vitamin K deficiency bleeding.
- 1.4.43 Vitamin K should be administered as a single dose of 1 mg intramuscularly as this is the most clinically and cost-effective method of administration.
- 1.4.44 If parents decline intramuscular vitamin K for their baby, oral vitamin K should be offered as a second-line option. Parents should be advised that oral vitamin K must be given according to the manufacturer's instructions for clinical efficacy and will require multiple doses.

Safety

- 1.4.45 All home visits should be used as an opportunity to assess relevant safety issues for all family members in the home and environment and promote safety education.
- 1.4.46 The healthcare professional should promote the correct use of basic safety equipment, including, for example, infant seats and smoke alarms and facilitate access to local schemes for provision of safety equipment.
- 1.4.47 Parents should be given information in line with the Department of Health guidance¹¹ about sudden infant death syndrome (SIDS) and co-sleeping, which states that 'The safest place for your baby to sleep is in a cot in your room for the first six months. While it's lovely to have your baby with you for a cuddle or a feed, it's safest to put your baby back in their cot before you go to sleep. There is also a risk that you might roll over in your sleep and suffocate your

¹¹ Department of Health (2005) *Reduce the risk of cot death: an easy guide*. London: Department of Health. Available from: www.dh.gov.uk

baby, or that your baby could get caught between the wall and the bed, or could roll out of an adult bed and be injured.’

- 1.4.48 Parents should be advised never to sleep on a sofa or armchair with their babies.
- 1.4.49 If parents choose to share a bed with their baby, they should be advised that there is an increased risk of SIDS, especially when the baby is less than 11 weeks old, if either parent:
- is a smoker
 - has recently drunk any alcohol
 - has taken medication or drugs that make them sleep more heavily
 - is very tired.
- 1.4.50 If a baby has become accustomed to using a pacifier (dummy) while sleeping, it should not be stopped suddenly during the first 26 weeks.

Child abuse

- 1.4.51 Healthcare professionals should be alert to risk factors and signs and symptoms of child abuse.
- 1.4.52 If there is raised concern, the healthcare professional should follow local child protection policies.

2 Notes on the scope of the guidance

NICE guidelines are developed in accordance with a scope that defines what the guideline will and will not cover. The scope of this guideline is available from www.nice.org.uk/CG037

The guideline has been developed with the following aims:

- to advise on appropriate objectives, purpose, content and timing of postnatal contact and care for the woman and her baby
- to advise on best practices and competencies for assessment of postnatal health and management of postnatal problems in the woman and/or her infant
- to advise on information, education and support required during the postnatal period
- to advise on postnatal care
- to consider good practice in communication between healthcare providers and women.

It is outside the remit of the guideline to advise on the management of complications arising in the woman or her baby before, during or after the birth, existing pregnancy and/or non-pregnancy-related acute or chronic diseases or conditions, or any aspect of antepartum or intrapartum care, including procedures immediately following the birth. The guideline offers recommendations on the essential core postnatal care that all women and their babies should be offered. It does not offer information on the additional care that a woman or her baby may require, although aspects of the guideline may continue to be relevant to either the woman or her baby, or both. Referral to the guideline may also be appropriate in particular circumstances where elements of core postnatal care may be required, for example women who have had a caesarean section or infants who require special care.

How this guideline was developed

NICE commissioned the National Collaborating Centre for Primary Care to develop this guideline. The Centre established a Guideline Development Group (see appendix A), which reviewed the evidence and developed the recommendations. An independent Guideline Review Panel oversaw the development of the guideline (see appendix B).

There is more information in the booklet: 'The guideline development process: an overview for stakeholders, the public and the NHS' (second edition, published April 2006), which is available from www.nice.org.uk/guidelinesprocess or by telephoning 0870 1555 455.

3 Implementation

The Healthcare Commission assesses the performance of NHS organisations in meeting core and developmental standards set by the Department of Health in 'Standards for better health' issued in July 2004. Implementation of clinical guidelines forms part of the developmental standard D2. Core standard C5 says that national agreed guidance should be taken into account when NHS organisations are planning and delivering care.

NICE has developed tools to help organisations implement this guidance (listed below). These are available on our website (www.nice.org.uk/CG037).

- Slides highlighting key messages for local discussion.
- Costing tools
 - Costing report to estimate the national savings and costs associated with implementation.
 - Costing template to estimate the local costs and savings involved.
- Implementation advice on how to put the guidance into practice and national initiatives which support this locally.
- Audit criteria to monitor local practice (see appendix C).

4 Research recommendations

The Guideline Development Group has made the following recommendations for research, based on its review of evidence, to improve NICE guidance and patient care in the future. The Guideline Development Group's full set of research recommendations is detailed in the full guideline (see section 5).

4.1 Routine monitoring of the weight of babies

Does routine monitoring of the weight of all low-risk babies during the first 6–8 weeks after birth reduce the incidence of serious morbidities?

Why this is important

Healthy babies normally lose weight in the first week of life. This weight loss is usually transient and of no significance, but may be exaggerated if there is difficulty establishing feeding or if the baby is ill. In the past, all babies were routinely weighed at least twice in the first 10 days after birth. There is debate about the benefits and harms of routine weighing in the first weeks of life.

The existing evidence base relies on findings from population-based surveillance systems and small-scale evaluations. A large-scale randomised controlled trial is therefore required to evaluate whether there is a significant difference in the incidence of important outcomes between routine regular and expectant weighing of babies at low risk of complications in the first 6–8 weeks after birth

4.2 Evaluation of Baby Friendly Initiative

What is the impact of the use of the Baby Friendly Initiative (BFI) on breastfeeding uptake and duration in English and Welsh hospitals and community settings?

Why this is important

The health and social benefits of breastfeeding to both mother and baby are multidimensional, yet, despite concerted and prolonged policy designed to improve breastfeeding rates, UK rates are among the lowest in Europe. The BFI sets rigorous standards for healthcare organisations to adopt, with the

aim of improving breastfeeding rates. Positive evaluations of the initiative have been published in Scotland, and other countries outside the UK but cost-effectiveness studies that deal with the Baby Friendly Hospital Initiative have yet to be carried out in England and Wales.

This postnatal care guideline recommends that 'All healthcare providers (hospitals and community) should implement an externally evaluated structured programme that encourages breastfeeding, using the Baby Friendly Initiative (BFI) as a minimum standard.'

Further research to evaluate the cost-effectiveness of BFI compared to another programme, or to standard care, should be carried out. Outcomes should include necessarily initiation, duration and exclusive breastfeeding rates and may also attempt to construct Health Economic measures of outcome, such as the QALY.

4.3 The effect of peer support on severity of postnatal depression

Is the severity of postnatal depression among socially isolated women reduced by the provision of peer social support compared with standard care?

Why this is important

Postnatal depression affects 10–15% of mothers and can lead to cognitive and emotional disturbance in the baby alongside the effects on the mother. Children of depressed mothers are more likely to access Child and Adolescent Mental Health Services (CAMHS) and suffer mental health problems as adolescents and adults. Social isolation is a known risk factor for postnatal depression and reducing this may have a range of clinical and psycho-social benefits.

A randomised controlled trial is proposed to evaluate the effect on the rate of postnatal depression of providing enhanced peer support compared to standard care for women who are at risk of social isolation after childbirth.

Outcomes should include quality of life and clinical measures: maternal and infant/child psychological wellbeing, depression, social wellbeing, physical health

This research would complement research funded by the Health Technology Assessment programme evaluating different models of care in the postnatal period.

5 Other versions of this guideline

5.1 Full guideline

The full guideline, 'Postnatal care: routine postnatal care of women and their babies', contains details of the methods and evidence used to develop the guideline. It is published by the National Collaborating Centre for Primary Care, is available from our website (www.nice.org.uk/CG037fullguideline) and the National Library for Health (www.nlh.nhs.uk).

5.2 Quick reference guide

A quick reference guide for healthcare professionals is available from www.nice.org/CG037quickrefguide

For printed copies, phone the NHS Response Line on 0870 1555 455 (quote reference number N1074).

5.3 Understanding NICE guidance

A version of this guideline for women and their families is available from our website (www.nice.org.uk/CG037publicinfo) and the NHS Response Line (0870 1555 455); quote reference number N1075.

6 Related NICE guidance

The guideline builds on work from other relevant NICE guidelines, including induction of labour, electronic fetal monitoring, antenatal care and caesarean

section. It should also be used in conjunction with the guideline on antenatal and postnatal mental health and intrapartum care, which are in development.

Division of ankyloglossia (tongue-tie) for breastfeeding. *Interventional procedure guidance* no. 149 (2005). Available from: www.nice.org.uk/IPG149

Caesarean section. *NICE clinical guideline* no. 13 (2004). Available from: www.nice.org.uk/CG013

Antenatal care: routine care for the healthy pregnant woman. *NICE clinical guideline* no. 6 (2003). Available from: www.nice.org.uk/CG006

Induction of labour. *Inherited clinical guideline* D (2001). Available from: www.nice.org.uk/guidelineD

The use of electronic fetal monitoring: the use and interpretation of cardiotocography in intrapartum fetal surveillance. *Inherited clinical guideline* C (2001). Available from: www.nice.org.uk/guidelineC

NICE is in the process of developing the following guidance (details available from www.nice.org.uk):

- Antenatal and postnatal mental health: clinical management and service guidance. *NICE clinical guideline*. (Publication expected January 2007.)
- Intrapartum care: management and delivery of care to women in labour. *NICE clinical guideline*. (Publication expected February 2007.)
- Maternal and child nutrition. *NICE public health programme guidance*. (Publication expected May 2007.)

7 Updating the guideline

NICE clinical guidelines are updated as needed so that recommendations take into account important new information. We check for new evidence 2 and 4 years after publication, to decide whether all or part of the guideline

should be updated. If important new evidence is published at other times, we may decide to do a more rapid update of some recommendations.

Acknowledgements

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This briefing was produced by the Public Health Collaborating Centre on Maternal and Child Nutrition on behalf of the Health Development Agency (HDA), but published after the functions of the HDA were transferred to the National Institute for Health and Clinical Excellence (NICE).

Appendix A: The Guideline Development Group

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Appendix B: The Guideline Review Panel

The Guideline Review Panel is an independent panel that oversees the development of the guideline and takes responsibility for monitoring adherence to NICE guideline development processes. In particular, the panel ensures that stakeholder comments have been adequately considered and responded to. The Panel includes members from the following perspectives: primary care, secondary care, lay, public health and industry.

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Appendix C: Technical detail on the criteria for audit

The audit criteria below are to assist with implementation of the guideline recommendations. The recommendations below are felt to be key to the guideline and are amenable to an auditing system.

Criterion	Exception	Definition of terms
A documented, individualised postnatal care plan.	None	The existence of a plan which documents: <ul style="list-style-type: none"> • relevant details of history • healthcare professionals and their role in care • feeding plans • advice and management at each contact • emotional well-being.
Local protocols about communication during the transfer of care.	None	Existence of protocols detailing: <ul style="list-style-type: none"> • method of communication • relevant items of information • method of handover of care plan.
Information given at first postnatal contact of the signs and symptoms of potentially life-threatening conditions to mother and baby and whom to contact.	None	Evidence in the care plan. Case-note audit of cases of late, life-threatening re-admissions of mother or infant.
All maternity care providers should implement and evaluate externally a structured programme that encourages breastfeeding using the Baby Friendly Initiative as a minimum standard.		Evidence of implementation of scheme including: <ul style="list-style-type: none"> • training of staff • BFI principles implemented • external audit.