East of England Neonatal ODN
(Hosted by Cambridge University Hospitals)

Clinical Guideline: Neonatal Baby Feeding Policy

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For use in: EoE Neonatal Units
Guidance specific to the care of neonatal patients

Used by: All staff caring for babies and supporting within neonatal services

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Approved by:

Neonatal Clinical Oversight Group	
Clinical Lead Matthew James	**Matthew James**

Ratified by ODN Board:

Date of meeting	

Audit Standards:

Monitoring implementation of the standards

The East of England Neonatal ODN requires that compliance with this policy, or the used unit specific policy, is audited at least annually using the UNICEF UK Baby Friendly Initiative neonatal audit tool (unicef.uk/audit), although more frequent audit is strongly recommended. Staff involved in carrying out this audit require training on the use of this tool. Audit via the Baby Friendly Dashboard within BadgerNet will support collation of data. Other methods may include, but are not limited to, questionnaires, clinical supervision of staff, and examination of appropriate records. Audit results will be reported to the individual unit's head of service and head of division and an action plan will be agreed by each unit's BFI Implementation/Management Team to address any areas of non-compliance that have been identified.

Monitoring outcomes

Policy implementation aims to improve outcomes in care for babies and their families by:

- increasing rates of mothers expressing breastmilk on admission, using the BadgerNet UNICEF Baby Friendly Report to assess
- increasing rates of breastmilk feeding initiation on admission, using the BadgerNet UNICEF Baby Friendly Report to assess
- increase rates of mothers expressing breastmilk during the first 24 hours following their baby's admission to the neonatal unit using the BadgerNet UNICEF Baby Friendly Report to assess
- increase rates of babies who receive human milk in the first 24 hours following admission to the neonatal unit using the BadgerNet UNICEF Baby Friendly Report to assess
- increasing of breastfeeding initiation rates, which may be assessed with the BadgerNet Unit Feeding Report and the Baby Friendly Initiative neonatal audit tool to assess
- increasing of breastmilk feeding / breastfeeding rates at discharge/transfer, using the BadgerNet UNICEF Baby Friendly Report to assess
- increase rate of babies receiving human milk when they leave the unit, using the BadgerNet UNICEF Baby Friendly Report to assess
- increase rate of mothers expressing breastmilk when their baby leaves the unit, using the BadgerNet UNICEF Baby Friendly Report to assess
- monitoring, amongst families who have chosen to bottle feed or do so out of necessity, embedding of bottle feeding techniques that are as safe and responsive as possible, using the Baby Friendly Initiative neonatal audit tool to assess
- improving parents' experience of neonatal care, using the Baby Friendly Initiative neonatal audit tool to assess

Outcomes will be reported to:
Each neonatal unit's appropriate head of service / head of division, Neonatal Baby Friendly Guardian, committee / board or working party, and the East of England Neonatal ODN Feeding Advisors. As a minimum, this should be reported quarterly, i.e., 30th June, 30th September, 31st December, and 31st March.

Equality, Diversity & Inclusivity Statement

This policy document aims to meet the diverse needs of our service, population and workforce, ensuring that none are placed at a disadvantage over others. It takes into account the provisions of the Equality Act 2010 and promotes equal opportunities for all. This document ensures that no one receives less favourable treatment on the protected characteristics of their age, disability, sex, gender reassignment, sexual orientation, marriage and civil partnership, race, religion or belief, pregnancy and maternity. The East of England Neonatal ODN advocates due regard to the various needs of different protected equality groups in our network.

The East of England Neonatal ODN acknowledges the additional challenges that gender identity can have, specifically around the perinatal period and in regards to infant feeding. We are aware that there is not yet universal language that addresses all families accessing maternity and neonatal care. We refer to breastfeeding and breastmilk but recognise terms such as chestfeeding, bodyfeeding, nursing, lactation, or providing human milk may be more preferable for and accurate to some of the families we support. We support mothers to express their breastmilk and to breastfeed their babies, but we also understand that not all birthing parents will identify as women or as mothers. We will always use the individual's preferred language, name, pronouns or terminology that they most comfortable with, as we recognise the importance of providing inclusive and respectful perinatal information and support to all pregnant women, pregnant people, mothers, parents and families.

Purpose

This collaborative policy shares its principles with the East of England Neonatal Operational Delivery Network (ODN) and all neonatal units therein. The purpose of this policy is to ensure that all staff caring for pregnant women, new parents, and babies (in the immediate postnatal period and throughout all levels of neonatal care) within the East of England Neonatal ODN need to understand their role and responsibilities in supporting parents to feed and care for their baby[1] in ways which support optimum health and wellbeing.

This policy adheres to the current UNICEF Baby Friendly Initiative (BFI) Neonatal Standards (1), Bliss Baby Charter Principles (2), and the World Health Organisation's (WHO) International Code of Marketing of Breastmilk Substitutes (3, 4, 5) (often referred to as "The Code") in order to promote that all babies are safely and optimally fed. This policy adheres to the recommendations of the NCCR (Neonatal Critical Care Review) (6) and NHSE (NHS England) to implement BFI neonatal standards within all neonatal units. All staff within the East of England Neonatal ODN are expected to comply with this policy, reading it upon commencement of their relevant role, as well as remain current with updates. Any deviation from this policy must be addressed by additional training from the baby feeding teams within the neonatal unit and supported by the care coordinator team within the neonatal ODN. All staff working within the neonatal units (clinical and non-clinical, medical, nursing, allied healthcare professionals, administration, support staff, etc.) will attend baby feeding education relevant to their role upon commencement and within six months, as well as regular updates, learning opportunities, and participation in audit to promote sustainability and current best practice (appendix 1). All curricula should adhere to Baby Friendly Initiative Neonatal Standards (1).

Outcomes

This policy aims to ensure that the care provided improves short and long term outcomes for children and families, specifically to deliver:[2]

- increasing rates of mothers expressing breastmilk on admission
- increasing rates of breastmilk feeding initiation on admission
- increase rates of mothers expressing breastmilk during the first 24 hours following their baby's admission to the neonatal
- increase rates of babies who receive human milk in the first 24 hours following admission to the neonatal unit
- increasing of breastfeeding initiation rates
- increasing of breastmilk feeding / breastfeeding rates at discharge/transfer
- increase rate of babies receiving human milk when they leave the unit
- increase rate of mothers expressing breastmilk when their baby leaves the unit
- families who have chosen to bottle feed or do so out of necessity, embedding of bottle feeding techniques that are as safe and responsive as possible Of the mothers who chose to formula feed, an increase in reporting that they have received proactive support to do so as safely and responsively as possible in line with Department of Health guidance (7)
- Improvements in parents' experiences of care and promote close and loving relationships
- improving parents' experience of neonatal care, using the Baby Friendly Initiative neonatal audit tool to assess

Our commitment

All neonatal units within the East of England Neonatal ODN are committed to:

- Providing the highest standard of care to support parents with a baby on the neonatal unit to feed their baby and build strong and loving parent-baby relationships. This is in recognition of the profound importance of early relationships to acute and future health and wellbeing, and the significant contribution that breastfeeding makes to good physical and emotional health outcomes for children and mothers.
- Ensuring that all care integrates the mother and family as valued and essential members of their baby's care team, is non-judgmental and that parents' decisions are informed, supported and respected.
- Working together across disciplines and organisations to improve parents' experiences of care.

As part of this commitment, neonatal units within the East of England Neonatal ODN will ensure that:

- All new staff are familiarised with the policy on commencement of employment so that they understand what is required of their practice. This includes all staff routinely involved in the care of pregnant women, mothers, their babies, and their families, such as neonatal nurses, children's nurses, midwives, nursery nurses, healthcare assistants, midwifery care

[1] We refer to a singleton "baby" throughout this document but accept that parents/carers may have multiple babies.
[2] List the appropriate outcome indicators in alignment with national policy and local agreements

assistants, the medical team involved in the care of the family not exclusively neonatologists and obstetricians.

- All staff receive training to enable them to implement the policy as appropriate to their role. New staff receive this training within six months of commencement of employment, and all staff receive regular updates (at least annually) specific to their role and the current needs of the local neonatal unit and neonatal ODN, to promote consistent adherence to the standards. Neonatal unit feeding leads/link role will be supported to develop and/or update staff training curricula that incorporate the Baby Friendly Initiative Neonatal Standards (1). In order to improve outcomes for families, where the neonatal unit feeding leads roles are not yet in place, the East of England Neonatal ODN recommends their development.
- Collaborative working should exist across professions and all sectors so that resources and workstreams can be streamlined to improve outcomes for mothers and babies. Some may exist locally or across the ODN, whilst others will be established. This will include:
    - Neonatal units working with their maternity units to provide consistent and complementary care
    - Services working closely with local voluntary groups and peer supporters to improve support for mothers and parents on the neonatal units
    - Liaising with local children's centres and or third sector organisations
    - Health visitors
- The International Code of Marketing of Breastmilk Substitutes (3,4,5) is adopted throughout the East of England Neonatal ODN. This includes: no advertising, displays or distributions of materials that are direct or indirection promotions or sales aimed at parents or staff of any part of the breastmilk substitute (BMS) industry, feeding bottles, teats or dummies[3]. Therefore, any contact from representatives of manufacturers of breastmilk substitutes and additives should be regulated by the neonatal baby feeding teams, named dietician, and/or named senior member of the neonatal team at local or ODN level, as appropriate.
- Conflict of interest will be avoided between staff and representatives of the manufacturers of breastmilk substitutes or additives, which may include: study days, education opportunities, and meetings offered to staff and/or parents; staff engagement by speaking at events or writing for the BMS industry, gifts or awards made to staff or services by the BMS industry or other organisations themselves sponsored by the BMS industry.
- Parents' experiences of care will be listened to through: regular audit using the Baby Friendly Initiative audit tool, parents' experience surveys (e.g. Care Quality Commission, Bliss Baby Charter audit tool etc.), the East of England Neonatal ODN Parent Advisory Group, national, regional, and local Maternity and Neonatal Voices Partnerships (8). Results of audit and feedback will be communicated to clinical staff, audit departments, and stakeholders, as appropriate.
- An ODN and/or unit leaflet for new mothers and parents that reflects this policy will be displayed or otherwise made available to all parents of babies admitted to neonatal care.
- This policy will be publically available on the East of England Neonatal ODN's website.

Care standards

Supporting parents to have a close and loving relationship with their baby

[3] We recognise that use of a dummy for non-nutritive sucking (always with parental informed consent), when the baby is not able to suckle at their mother's breast for the same purposes, is a developmental care intervention that can facilitate transition from enteral to oral feeding and serve as a comfort measure (9, 13).

The neonatal units within the East of England Neonatal ODN recognise the profound importance of secure parent-baby attachment for the future health and wellbeing of the baby and the challenges that the experience of having a sick or premature baby can present to the development of this relationship. Therefore, each neonatal unit is committed to care that actively supports parents to develop a close and loving bond with their baby. All parents will:

- Have a discussion with an appropriate member of staff as soon as possible (either before or after their baby's birth) about the importance of touch, comfort and communication for their baby's health and development, which will be recorded in the baby's neonatal clinical notes

- Be actively encouraged and enabled to provide touch, comfort and emotional support to their baby throughout their baby's stay on the neonatal unit (9)

- Be actively encouraged to be responsive to their baby's behavioural cues (9, 10, 11)

- Be enabled to have frequent and prolonged skin contact with their baby as soon as possible after birth and throughout the baby's stay on the neonatal unit (9, 12) aiming for 60 minutes or more.

    - Whilst facilitating skin to skin contact / kangaroo care, the staff member caring for the family will ensure that the baby cannot fall to the floor, that the baby is routinely monitored, and that they respond immediately to any parental concern expressed, acknowledging that the parents are their baby's experts. They will also ensure the following safety considerations are taken into account:

        - Responsiveness – while a relaxed and calm environment is promoted, parents should not be distracted or overly sleepy, e.g. due to immediate postpartum tiredness, effects of pain or analgesia, etc., as they will be encouraged to respond to their baby and alert staff with any concerns.

        - Airway and breathing – positioning of the baby is carefully considered and demonstrated to parents in order to avoid obstruction of the airway by observing respiratory rate, work of breathing, unusual breath sounds or absence of breath sounds / chest rise. If continuous monitoring is required, this continues to work appropriately.

        - Colour – as subtle changes can indicate concerns with oxygenation, the colour of the baby's body and limbs should be observed before, throughout and after skin to skin, avoiding the baby becoming trapped by pillows, blankets, or the mother's/parent's body.

        - Tone – tone should be observed prior to, throughout, and after skin to skin, ensuring that the baby's tone has not deteriorated during repositioning and that the baby remains responsive.

- Temperature – the baby's temperature should be maintained during skin to skin, ensuring that thermoregulation is maintained, 36.5-37.5ºC (14)

- The ODN suggests documenting the skin-to-skin period on baby's notes or/and on record sheets, such as the one developed by Bliss and Best Beginnings (15). Units may wish to provide parents with a personal log / diary to record their own daily observations and interactions, which can include touch, comfort holding, and skin to skin / kangaroo care.

Enabling babies to receive breastmilk and to breastfeed

The neonatal units in this ODN recognise the importance of breastmilk for babies' survival and health, particularly when they are sick, small, and premature. Breastmilk is clean, safe, contains antibodies, anti-inflammatory factors, and growth hormones; it improves enteral feeding tolerance, protects babies from NEC (necrotising enterocolitis) and other infections, and can be used for analgesia (9,16, 17) and mouth care (18, 19, 20).

Therefore, East of England neonatal units will ensure that:

- A mother's own breastmilk is promoted as the first choice of feed for her baby; if there are any contraindications, babies should be safely fed the best available nutritional alternative, according to WHO guidance.
- Mothers have a discussion regarding the vital importance of their breastmilk for their preterm or ill baby – this may be done antenatally if a neonatal unit admission is anticipated at birth or in the immediate perinatal period, as soon as appropriate, to ensure that they are able to make informed decisions in the health of their baby.
- Mothers expressing next to their baby is advocated, and practical measures will be employed to achieve this, e.g. comfortable chairs, sufficient expressing equipment, privacy screens if requested, etc. In rare instances when this is not possible, another suitable and pleasant environment is created that is conducive to effective expression.
- Mothers have access to effective breast pumps and equipment, including various funnel sizes (this can change throughout the neonatal journey), on the neonatal unit and that there are arrangements in place so that mothers can also access equipment once home, with support provided in practical use and troubleshooting.
- Mothers are enabled to express breastmilk for their baby, including support to:
    - Express as early as possible after birth, whether this is on the neonatal unit or a maternity ward.
    - Learn how to hand express early, frequently, and effectively, and also be shown how to use an electric pump, with staff adapting support to the mother's individual learning needs.
    - Learn how to use pump equipment and store milk safely on the neonatal units (individual units will have pump equipment and milk storage guidance and/or information, as specific to the pumps used and milk storage facilities) and once home.
    - Express eight to ten times in 24 hours, at least once overnight. Gaps for expressing do not need to be evenly spaced within 24 hours. Cluster expressing produces a higher fat content milk (avoid routine expressing and long gaps).

Following this plan, especially in the first two to three weeks following delivery will optimise long-term milk supply potential.
    - Overcome expressing difficulties where necessary, e.g. if <750ml in 24 hours is expressed by day 10 or the pump kit is no longer effective, etc. This may be resolved by support given around technique, frequency, general support, or reassurance, which all neonatal staff are trained to provide. If a referral is indicated for more complex difficulties or queries, staff will liaise with a member of the neonatal baby feeding team (unit dependent, this may be a Lactation Consultant (IBCLC), baby feeding coordinator, baby feeding lead/ link nurse, etc.)
    - Stay close to their baby (when possible) when expressing milk
    - Use their milk for mouth care when their baby is not tolerating enteral feeds or not yet orally feeding and later to encourage their baby to feed
- A documented formal review of expressing is undertaken a *minimum* of four times in the first two weeks to support optimum expressing and milk supply, with staff from maternity and neonatal units working together to ensure consistent support. The reviews should be carried out collaboratively between the staff allocated to care for the baby and the neonatal infant feeding team. East of England Neonatal ODN recommend this is done around: Day 1, Day 3, Day 5, Day 7, and Day 9 (21), and staff could choose to record these reviews on the Nutrition Care Pathway. Staff will understand the typical timing of transition from colostrum to copious milk production, what can prolong or inhibit this, and reassure mothers appropriately. If issues are identified, an action plan should be put in place to support resolution. (Appendix 1)
- Mothers are provided with an individual expressing log so that they can record the frequency and volumes expressed, enabling them to monitor efficacy and when to request further support.
- Mothers receive care that supports the transition to breastfeeding, including support to:
    - Recognise and respond to early feeding cues
    - Use skin-to-skin contact to encourage instinctive feeding behaviour
    - Hand expressing some milk for the baby to taste and/or to soften a full breast in order to ease latching
    - Position their baby for effective attachment for breastfeeding
    - Recognise effective attachment, watching for sucking/swallowing patterns, evolving hand expressing skills in order to use breast compressions, where indicated, to maintain a high flow after initial “letdown/milk ejection reflex” to promote effective milk transfer and continued feeding
    - Discuss when their baby requires naso/orogastric tube top-ups (or parent requested method) by using assessment tools (an example in Appendix 2)
    - Continuing to express her breastmilk in order to maintain a high milk supply as her baby becomes more mature and efficient, gradually reducing expressing when top-up feeds are not indicated
    - Overcome challenges when needed, with access to 1:1 support from the neonatal baby feeding team when indicated
- Mothers are provided with details of local and national voluntary breastfeeding peer support they can choose to access at any time during their baby’s stay and during any neonatal outreach package of care and beyond

- Mothers are supported through the transition to discharge home from hospital, including having the opportunity to stay overnight/for extended periods to support the development of mothers' confidence and modified responsive feeding.
- Parents and carers are again, provided with information about all available NHS and voluntary sources of support before they are transferred home.

Responsive feeding

The term responsive feeding is used to describe a feeding relationship, which is sensitive, reciprocal, and about more than nutrition. Staff should ensure that mothers have the opportunity to discuss this aspect of feeding and reassure mothers that breastfeeding can be used to feed, comfort and calm babies. Breastfeeds can be long or short, breastfed babies cannot be overfed or 'spoiled' by too much feeding and breastfeeding will not, tire mothers in addition to caring for a new baby, which is not breastfeeding (22).

Valuing parents as partners in care

East of England Neonatal ODN recognises that a positive parent/baby relationship is critical to ensuring the best possible short and long-term outcomes for babies and therefore, parents should be considered as the primary partners in care. All staff will enable parents to be fully involved in the care of their babies, valuing their much-needed contribution.

The service will ensure that parents:

- Have unrestricted access to their baby, unless individual restrictions can be justified in the baby's best interest (23).
- Are fully involved in their baby's care, with all care possible entrusted to them (23)
- Are fully engaged with their baby's progress and listened to, including their observations, feelings and wishes regarding their baby's care (11). This necessitates clear and regular updates with full information on their baby's condition, treatment, and care plans to promote parents' informed decision-making.
- Have full information regarding their baby's condition and treatment to enable informed decision-making (11, 23)
- Are made comfortable and welcome when on the unit, with the aim of enabling them to spend as much time as is possible with their baby (11, 23).

The neonatal units will ensure that parents whose babies transition to bottle feeding (1, 7):

- Receive information about how to clean and sterilise equipment and make up a bottle of expressed breastmilk or formula milk.

- Are able to feed this to their baby using a safe and responsive technique.
- Understand that giving bottles of formula will reduce breastmilk supply and are given support if they wish to return to breastfeeding or to expressing more breastmilk.

It is the joint responsibility of midwifery and neonatal unit staff to ensure that mothers who are separated from their baby receive this information and support.

References

1. UNICEF UK. *Guide to the UNICEF UK Baby Friendly Initiative Neonatal Standards*. UNICEF UK; 2022. https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2022/03/UNICEF-UK-Baby-Friendly-Initiative-Guide-to-the-Neonatal-Standards.pdf.
2. BLISS. *Best Practice Bank.* https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2022/03/UNICEF-UK-Baby-Friendly-Initiative-Guide-to-the-Neonatal-Standards.pdf [Accessed 22nd June 2022].
3. WHO. *The international Code of marketing of breastmilk substitutes*. Geneva: World Health Organization;1981. https://apps.who.int/iris/bitstream/handle/10665/40382/9241541601.pdf?sequence=1&isAllowed=y.
4. WHO. *The international Code of marketing of breastmilk substitutes – Frequently asked questions (2017 Update).* Geneva: World Health Organization; 2017. https://apps.who.int/iris/bitstream/handle/10665/254911/WHO-NMH-NHD-17.1-eng.pdf.
5. UNICEF UK. Working within The International Code of marketing of breast-milk substitutes – A guide for healthcare workers. UNICEF UK; 2019. https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2020/02/Health-Professionals-Guide-to-the-Code.pdf.
6. NHS England and NHS Improvement. *Implementing the recommendations of the Neonatal Critical Care Transformation Review.* NHS England and NHS Improvement; 2019. https://www.england.nhs.uk/wp-content/uploads/2019/12/Implementing-the-Recommendations-of-the-Neonatal-Critical-Care-Transformation-Review-FINAL.pdf.
7. Public Health of England and the UK Committee for UNICEF. *Guide to Bottle Feeding – How to prepare baby formula and sterilise bottles.* APS; 2021. https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2008/02/start4life_guide_to_bottle_-feeding.pdf.
8. Department of Health and Social Care and Public Health of England. *Handbook to the NHS Constitution.* 2022. https://www.gov.uk/government/publications/supplements-to-the-nhs-constitution-for-england.
9. East of England Neonatal Operational Delivery Network. Developmental Care guideline [NEO-ODN-2021-3]. 2021. https://www.eoeneonatalpccsicnetwork.nhs.uk/wp-content/uploads/2021/09/Developmental-Care-Guideline-Sept-2021.pdf. [Accessed 18th July 2022].
10. Bliss – for babies born premature or sick. *Look at me – I'm talking to you, Watching and understanding your premature baby*. Paris: SPARADRAP; 2014. https://shop.bliss.org.uk/shop/files/Lookatme2019WEB.pdf.
11. Bliss – for babies born premature or sick. *Baby Bliss Charter – Helping to make family-centred care a reality on your neonatal unit.* 2020. https://s3.eu-west-2.amazonaws.com/files.bliss.org.uk/images/Baby-Charter-booklet-2020.pdf?mtime=20210104142806&focal=none.
12. Bliss – for babies born premature or sick. *Skin-to-skin with your premature baby.* Winnicott Foundation and SPARADRAP. https://shop.bliss.org.uk/shop/files/skintoskin_2019WEB.pdf.
13. Pinelli J, Symington AJ. Non-nutritive sucking for promoting physiological stability and nutrition in preterm babys. *Cochrane Database of Systematic Reviews*. 2011; 6(4): 1134-1169. https://doi.org/10.1002/ebch.808.
14. East of England Neonatal Operational Delivery Network. Thermoregulation guideline [NEO-ODN-2016-11]. 2020. https://www.eoeneonatalpccsicnetwork.nhs.uk/wp-content/uploads/2021/10/Thermoregulation-guideline-2020-Final.pdf [Accessed 27th July 2022].

15. Bliss – for babies born premature or sick. *Using the Kangaroo stickers*. http://www.tinylives.org.uk/wp-content/uploads/2013/02/Kangaroo-Care-Guide.pdf [Accessed 27th July 2022].
16. Lan HY, Yang L, Lin, CH, Hsieh, KH, Chang, YC, Yin, T. Breastmilk as a multisensory intervention for relieving pain during newborn screening procedures: a randomized control trial. *International Journal of Environmental Research and Public Health*. 2021, 13023. https://doi.org/10.3390/ijerph182413023.
17. Shah PS, Herbozo, C, Aliwalas, LL, Shah, VS. Breastfeeding or breastmilk for procedural pain in neonates. *Cochrane Database of Systematic Reviews.* 2012. https://doi.org/10.1002/14651858.CD004950.pub3.
18. Cai M, Lin L, Peng Y, Chen L, Lin Y. Effect of breast milk oral care on mechanically ventilated preterm babys: a systematic review and meta-analysis of randomized controlled trials. *Frontiers in Pediatrics.* 2022; 10. https://doi.org/10.3389/fped.2022.899193.
19. Gross D, Oude-Reimer M, Frauenfelder O, Camba F, Ceccatelli M, Hankes-Drielsma, Jorgensen, E, Silva E. *Mouth care*. https://www.imperial.ac.uk/admin-services/library/learning-support/reference-management/vancouver-style/your-reference-list/ [Accessed on 15t August 2022].
20. East of England Neonatal Operational Delivery Network. Mouthcare guideline. [NEO-ODN-2022-2]. 2022. https://www.eoeneonatalpccsicnetwork.nhs.uk/wp-content/uploads/2022/04/Mouth-Care-Guideline.pdf [Accessed 27th July 2022].
21. East of England Neonatal Operational Delivery Network. Enteral feeding of preterm babies on the neonatal unit [NEO-ODN-2020-11]. 2020. https://www.eoeneonatalpccsicnetwork.nhs.uk/wp-content/uploads/2021/10/Enteral-Feeding-guideline.pdf [Accessed 27th July 2022].
22. UNICEF UK. *UNICEF UK Baby Friendly Initiative infosheet – Responsive feeding: supporting close and loving relationships*. https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2017/12/Responsive-Feeding-Infosheet-Unicef-UK-Baby-Friendly-Initiative.pdf [Accessed 28th July 2022].
23. British Association of Perinatal Medicine. *Family Integrated Care – A framework for practice*. 2021. https://hubble-live-assets.s3.amazonaws.com/bapm/file_asset/file/793/BAPM_FICare_Framework_November_2021.pdf [Accessed 18th July 2022].
24. North West Anglia NHS Foundation Trust. Baby Feeding Policy for babies on SCBU/NICU (version 1). 2021.
25. UNICEF UK. *Bottle feeding assessment tool*. https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2021/03/Unicef-UK-Baby-Friendly-Initiative-Bottle-Feeding-Assessment.pdf [Accessed 28th July 2022].
26. UNICEF UK. *Assessment of breastmilk expression checklist.* https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2016/10/Assessment-of-breastmilk-expression-checklist-2017.pdf [Accessed 28th July 2022].
27. UNICEF UK. *Neonatal Breastfeeding Assessment Tool*. https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2018/03/breastfeeding_assessment_tool_neonatal.pdf [Accessed 28th July 2022].

Appendix 1 - Assessment of Breastmilk Expression Checklist (26)

ASSESSMENT OF BREASTMILK EXPRESSION: STAFF INFORMATION

For sick and preterm babies the importance of breastmilk cannot be overestimated, supporting growth and providing protection from infection. In particular, evidence suggests that the use of breastmilk decreases the incidence and severity of the life threatening disease necrotising enterocolitis. By providing her breastmilk a mother can be assured that she is uniquely contributing to the wellbeing and development of her baby. However, expressing breastmilk over a long period of time is extremely demanding and if a mother is to succeed, effective support is needed from those involved with caring for her and her baby.

The Baby Friendly Initiative recommends that a formal review is carried out at least once within the first 12 hours following delivery to support early expressing and **at least four times within the first two weeks.** This will ensure that mothers are expressing effectively and will provide an opportunity to address any issues or concerns they may have. Early (within the first 2 hours), frequent (at least 8 to 10 times in 24 hours including once at night) and effective expressing (combining hand and pump expression) is crucial to ensuring a mother is able to maximise her individual milk production so that she can maintain her supply for as long as she wishes. Many women will be able to express between 700 and 900mls per day when provided with the support to express effectively. There are many factors, however, that may impact on the amount of milk an individual woman may produce, so the focus should primarily be on enabling the woman to achieve her potential rather than on specific amounts.

Delays in starting to express or any reduction in the frequency or effectiveness of expression will compromise her long term supply. Early detection and correction of problems will help her maintain confidence in her ability to produce milk for her baby.

- **Tips to help mothers succeed**
  - Hand expressing is a good technique for obtaining small volumes of colostrum.
  - Breast massage and relaxation techniques support a mother's milk flow by increasing oxytocin.
  - Expressing close to her baby or having a photo or piece of baby's clothing can also help a mother's milk production and flow.
  - Encouraging frequent and prolonged skin-to-skin contact or, where this is not possible, interacting with and undertaking cares for the baby will further support an emotional connection and increase milk making hormones.
  - When using a pump mothers should be taught how to use this correctly and staff should ensure that the equipment fits effectively.
  - Double pumping should be encouraged as this can save time and may contribute to being able to express long term. Larger volumes can often be achieved when mothers double pump.
  - Support mothers to develop a plan for expressing and consider using an expressing log to help. Flexibility around when a mother expresses often helps mothers sustain expressing for prolonged periods. Emphasis on the frequency of 8-10 times (including once at night), will enable a mother to express for as long as she wishes. She does not have to stick to a strict 3-4 hourly routine (she can cluster express if she wishes i.e.

expressing 2-3 times in a 4 hourly period), but should avoid long gaps between expressions and maintain at least 8 to 10 times in 24 hours including once at night.

- The importance of the night-time expression should be emphasised to replicate normal physiology and support long term milk production.
- It is expected that milk volumes will increase in the first two weeks. Frequent evaluation of how the mother is expressing will enable staff to support the mother in increasing the effectiveness of her expressing. Referral to specialist support should be considered if, despite effective expressing, the amount the mother is able to express is not increasing as hoped.
- Emotional support is important throughout the mother's journey. This may include enabling the mother to stay with her baby as often and for as long as she wishes, frequent updates on the condition of her baby and participation in as much care as she feels comfortable with.

Expressing assessment form

If any responses in the right hand column are ticked refer to specialist practitioner. Any additional concerns should be followed up as needed. Please date and sign when you have completed the assessments.

Mother's name:	*Baby's name:* *Date of birth:*	*Date of assessment:*				*Birth weight:* *Gestation:*				
What to observe/ask about	**Answer indicating effective expressing**	✓	✓	✓	✓	**Answer suggestive of a problem**	✓	✓	✓	✓
Frequency of expression	At least 8-10 times in 24 hours including once during the night.					Fewer than 8 times. Leaving out the night expression.				
Timings of expressions	Timings work around her lifestyle – if cluster expressing, no long gaps, maintain 8-10 times in 24 hours including once during the night					Frequent long gaps between expressions. Difficulty 'fitting in' 8 expressions in 24 hours.				
Stimulating milk ejection	Uses breast massage, relaxation, skin contact and/or being close to baby. Photos or items of baby clothing to help stimulate oxytocin.					Difficulty eliciting a milk ejection reflex. Stressed and anxious.				
*Hand expression	*Confident with technique. Appropriate leaflet/information provided.					*Poor technique observed. Mother not confident.				
Using a breast pump	Access to electric pump. Effective technique including suction settings, correct breast shield fit. Double pumping (or switching breasts) to ensure good breast drainage. Uses massage and/or breast compression to increase flow.					Concern about technique. Suction setting too high/low, restricting expression length, breast shield too small/large.				
Breast condition	Mother reports breast fullness prior to expression which softens following expression. No red areas or nipple trauma.					Breasts hard and painful to touch. Evidence of friction or trauma to nipple.				
Milk flow	Good milk flow. Breasts feel soft after expression.					Milk flow delayed and slow. Breasts remain full after expression.				
Milk volumes	Gradual increases in 24 hr volume at each assessment.					Milk volumes slow to increase or are decreasing at each assessment.				

Hand expression may not need to be reviewed every time

Date	Information/support provided	Signature

Appendix 2 Neonatal Breastfeeding Assessment Tool (27)

How you and your nurse/midwife can recognise that your baby is feeding well								***please see reverse of form for guidance on top-ups post breastfeed**
What to look for/ask about	☐	☐	☐	☐	☐	☐	☐	**Wet nappies:** Day 1-2 = 1-2 or more in 24 hours Day 3-4 = 3-4 or more in 24 hours, heavier Day 6 plus = 6 or more in 24 hours, heavy
Your baby: Is not interested, when offered breast, sleepy **(*A)**								
Is showing feeding cues but not attaching **(*B)**								
Attaches at the breast but quickly falls asleep **(*C)**								
Attaches for short bursts with long pauses **(*D)**								
Attaches well with long rhythmical sucking and swallowing for a short feed (requiring stimulation) **(*E)**								**Stools/dirty nappies:** **Day 1-2** = 1 or more in 24 hours, meconium **Day 3-4** = 2 (preferably more) in 24 hours changing stools By day 10-14 babies should pass frequent soft, runny stools everyday; 2 dirty nappies in 24 hours being the minimum you would expect. Exclusively breastfed babies should not have a day when they do not pass stool within the first 4-6 weeks. If they do then a full breastfeed should be observed to check for effective feeding. However, it is recognised that very preterm babies who transition to breastfeeding later may have developed their individual stooling pattern before beginning to breastfeed, and therefore this may be used as a guide to what is normal for each baby.
Attaches well for a sustained period with long rhythmical sucking and swallowing **(*F)**								
Normal skin colour and tone								
Gaining weight appropriately								
Your baby's nappies: At least 5-6 heavy, wet nappies in 24 hours								
At least 2 dirty nappies in 24hrs, at least £2 coin size, yellow and runny								
At least 2 dirty nappies in 24hrs, at least £2 coin size, yellow and runny								
Your breasts: Breasts and nipples are comfortable								**Feed frequency:** Babies who are born preterm/sick may not be able to feed responsively in the way a term baby does. It is important that they have 8-10 feeds in 24 hours and they may need to be wakened if they don't show feeding cues after 3 hours. During this time it is important that you protect your milk supply by continuing to express.
Nipples are the same shape at the end of the feed as at the start								
Referred for additional breastfeeding support								
Date								Being responsive to your baby's need to breastfeed for food, drink, comfort and security will ensure you have a good milk supply and a secure, happy baby.
Midwife/nurse initials								
Midwife/nurse: If any responses not ticked: watch a full breastfeed, develop a care plan including revisiting positioning and attachment and/or refer for additional support. Consider specialist support if needed.								

Breastfeeding assessment score to determine tube top ups adapted from Imperial College Hospitals NHS Trust
To be used in conjunction with the assessment of maternal lactation, attachment and signs of effective milk transfer

Score	Definition	Action
A	Offered the breast, not showing feeding cues, sleepy	Full top up
B	Some interest in feeding (licking and mouth opening/head turning) but does not attach	Full top up
C	Attaches onto the breast but comes on and off or falls asleep	Full top up
D	Attaches only for a short burst of sucking, uncoordinated with breathing and swallowing and/or frequent long pauses	Half top up if the mother is available for next feed. The baby may wake early
E	Attaches well, long, slow, rhythmical sucking and swallowing – sustained for a short time with breasts not softened throughout	Half top up if mother is not available for next feed. If mother is available for next feed do not top up, and assess effectiveness of next feed.
F	Attaches well, long, slow, rhythmical sucking and swallowing – sustained for a longer time with breasts feeling soft following feed	No top up

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Exceptional Circumstances Form
Form to be completed in the **exceptional** circumstances that the Trust is not able to follow ODN approved guidelines.

Details of person completing the form:	
Title:	Organisation:
First name:	Email contact address:
Surname:	Telephone contact number:
Title of document to be excepted from:	
Rationale why Trust is unable to adhere to the document:	
Signature of speciality Clinical Lead: Date:	Signature of Trust Nursing / Medical Director: Date:
Hard Copy Received by ODN (date and sign):	Date acknowledgement receipt sent out:

Please email form to: mandybaker6@nhs.net requesting receipt.
Send hard signed copy to: Mandy Baker
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