Title: Short term nasogastric feeding at home for babies discharged for the neonatal service

Version: 1

Ratification Date: June 2016

Review Date: June 2020

Approval: Nottingham Neonatal Service Clinical Guideline Meeting

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Distribution: Nottingham Neonatal Service, Neonatal Intensive Care Units

Target audience: Staff of the Nottingham Neonatal Service, Delivery Suites and Postnatal Wards

Patients to whom this applies: Patients of the Nottingham Neonatal Service and newborn infants on the Postnatal Wards and Labour Suites of the Nottingham University Hospitals NHS Trust who fit the inclusion criteria of the guideline below

Key Words: Nasogastric feeding

Risk Managed: Sub-optimal or inappropriate provision of the home visiting programme of family care

Evidence used: The contemporary evidence base has been used to develop this guideline. References to studies utilised in the preparation of this guideline are given at its end.

Clinical guidelines are guidelines only. The interpretation and application of clinical guidelines remain the responsibility of the individual clinician. If in doubt, contact a senior colleague. Caution is advised when using guidelines after the review date. This guideline has been registered with the Nottingham University Hospitals NHS Trust.

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1 Introduction

The programme of short term nasogastric tube (NGT) feeding at home is to facilitate safe earlier discharge of babies from the neonatal setting.

Multiple birth and low birth weight babies frequently experience extended length of hospital stay within the neonatal unit, often due to their inability to establish oral feeds¹. This results in increased demand on neonatal cots², and a proposed solution is to offer families an opportunity to provide naso-gastric feeds at home while the infant establishes oral feeding.

The early introduction of short-term NGT feeding has proven, to not only have financial and resource benefits, but has physical and psychological benefit to the whole family unit³. It restores a sense of control over their babies’ care and progress and helps the family by not having to travel to and from the neonatal unit, and creates less disruption for siblings¹.

The purpose of this guideline is to inform all staff on the advised procedure for the use of short-term NGT feeding at home, and to assist with the teaching of parents before discharge.

Many parents express anxiety about passing NGT into their baby. This may delay babies going home despite being medically well and fit for discharge. This guideline facilitates two pathways (Appendix 2: Pathway A and Appendix 3: Pathway B) whereby the parents/carers will have a choice whether they wish to learn how to pass a NGT or not. This will allow families to take their baby home NGT feeding with the required support in place.

This guideline should be used in conjunction with the companion guidelines,

- Passing a Nasogastric Tube / Orogastric Tube – feeding.
- Nottingham Neonatal Service Guideline F11: Home visiting programme of family care

2 Discharge Home Criteria

To qualify for the short-term NGT feeding at home programme the following criteria listed are prerequisites for the baby and family to fulfil and ensure a safe and effective package of care:

2.1 Baby Criteria

- At least 34 weeks corrected gestation at discharge
- Medically well (as agreed by the Service Consultant Neonatologist) and stable (fit for discharge)
- Maintaining body temperature in a cot for 48 hours
- Appropriate weight gain and following centile lines on growth chart
- Clinically stable with no continuous monitoring for at least 48 hours
- Tolerating feeds by NGT and breast or bottle
- Feeding at least 3 hourly
- Clear feeding plan in place

Appendix 2: Pathway A (Going home where parents have not learnt how to pass NGT): Able to take at least 50% of feeds, over 24 hours, by breast or bottle, with good coordination when given by the parents/carers

Appendix 3: Pathway B (Going home where parents/carers have learnt how to pass NGT): Able to take 2-3 feeds, every 24 hours, by breast or bottle with good coordination when given by parents/carers
2.2 Family Criteria

- Family are willing to undertake NGT feeding and give 24-hour care
- Parents/carers must have confidently completed the ‘Tube feeding your baby’ competencies/confidence certificates

2.3 Neonatal service criteria

- The neonatal Continuing Care team is able to provide a good quality, safe service at home with appropriate staffing levels and equipment.

The Low Dependency coordinators, with other staff and the Continuing Care Team, will complete the Admission to Discharge pathway with the 'Short term NGT feeding at home' pathway (Appendix 1: Care Pathway) to ensure that these criterions are met.

Staff teaching the use of a NGT should be competent health care professionals who are experienced in passing and using NGTs in accordance with the local guidelines, and those signing final competencies should be registered nurses qualified in the neonatal speciality.

3 Teaching and Advising Parents/Carers:

Once parents/carers have decided and consented to taking their baby home NGT feeding and have made a decision about what Pathway they wish to use with their baby (A or B), the Care Pathway for Babies Going Home With Short Term Nasogastric Tube Feeding can be implemented and completed between the parents/carers and staff in the neonatal unit.

All Parents/carers will be given an NGT Home Feeding Programme Information Pathway (A or B) containing a Parent Information Leaflet which contains pictorial and written information on giving NGT feeds with the required parent/carer agreement (Appendix 1: Care Pathway), the Passing an NGT competency (Appendix 5: Parent/Carer Certificate) and the feeding and care plans (Appendix 4: Feeding Plan for Home).

The Neonatal Continuing Care team will have telephone contact and/or a home visit the day after discharge. This service is available 7 days a week between 0900-1700hrs.

Outside of these hours, families will be directed to contact the neonatal unit (of discharge) for advice as part of the feeding and care plan.

Advice sheets will be available in the pathway packages for the parents/carers and in the ‘Home NGT feeding’ folder in Low Dependency areas in both neonatal units. This folder will also contain a copy of the individual feeding and care plan for each baby who has been discharged on short term NGT feeding to provide information for health professionals to refer to in the event a parent/carer phones the neonatal unit for advice about their baby

4 Weaning babies onto full oral feeds once at home

All parents should document the feeds on a home feeding chart (included in feeding and care plan).

Note that as part of the discharge criteria for Package A the baby should be capable of taking at least 50% of oral bottle or breast feeds with good co-ordination. The discharge criteria for Package B the baby should be capable of taking at least 2-3 of oral bottle or breast feeds with good co-ordination.

If breastfeeding, the positioning and attachment should be correctly witnessed by a member of the Continuing Care Team if not carried out already prior to discharge.

Each baby will be assessed on an individual basis by the continuing care team visiting the family as to how quickly to wean the baby off the NGT feeding. This should be achieved for short term feeding at home via NGT within the first two weeks after baby has gone home.
5 Babies who require further intervention and support with feeding and possible readmission to hospital

If babies do not progress onto full oral feeding within two weeks of going home the following options for further care should be considered:

1. Seek advice from the baby's Neonatal Consultant (or if not available in a reasonable timeframe the relevant Service Consultant).
2. If weight gain is also part of the problem seek advice from the Neonatal Consultant (or if not available in a reasonable timeframe the relevant Service Consultant) and/or the Neonatal Dietitian (email or by phone).
3. There may be certain circumstances where it will be in the best interests of the baby and the parents/carers that readmission to hospital is indicated. Readmission will be through the GP or if deemed urgent through the nearest A & E department. The Neonatal Continuing Care Team will facilitate this and support families as appropriate.

Reasons for readmission may include:

- Baby is not gaining weight despite appropriate changing of feeding plan
- Baby is not sucking or uncoordinated and not making progress
- Parents are not coping with NGT feeding
- NGT being frequently displaced
- Problematic Gastro Oesophageal Reflux
- Continuing care team concerns
- Need for further specialist intervention

Babies may also become unwell whilst receiving home NGT feeding. Whilst many babies may be able to continue with sucking feeds during an intercurrent illness, others may need to have a period when they increase the number of tube feeds or revert to being fully tube fed. Others may require admission.

6 When babies are discharged from Continuing Care Team

Babies are discharged from the Continuing Care Team, after they are fully feeding by bottle or breast, at the discretion of the Continuing Care Team and according to the neonatal guidelines for the Home Visiting Programme.

7 Data Collection

The Continuing Care Team will collect data on all babies on the Home NGT feeding Programme.

8 Parents/Carers will be invited to give feedback on the service via a parent feedback survey (Appendix 6: Parent Feedback Survey).
9 References


10 Appendix 1: Care Pathway

<table>
<thead>
<tr>
<th>Home NGT Care Pathway</th>
<th>Due</th>
<th>Nurse initial, date &amp; time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish whether family are happy to take their baby home NGT feeding. Gain their verbal consent to go ahead.</td>
<td>30-34 weeks corrected gestation age (CGA)</td>
<td></td>
</tr>
<tr>
<td>Discuss this pathway, when parents have consented, with medical staff.</td>
<td>30-34 weeks CGA</td>
<td></td>
</tr>
<tr>
<td>If baby is still feeding partially via naso-gastric tube (NGT) and is clinically well, gaining weight, establish from parents whether they would like to take baby home NGT feeding:</td>
<td>30-34 weeks CGA</td>
<td></td>
</tr>
<tr>
<td>1. With Pathway A (do not wish to learn how to pass NGT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. With Pathway B (are happy to learn how to pass NGT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Delete inapplicable Package)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify Continuing Care (CC) team member who will be following baby up at home</td>
<td>30-34 weeks</td>
<td>Name of CC Team member doing follow up at home</td>
</tr>
<tr>
<td>Give the appropriate information pack including leaflets competencies, care plans and pathway for Pathway A or B and commence learning for discharge home.</td>
<td>30-34 weeks CGA</td>
<td></td>
</tr>
<tr>
<td>Facilitate and sign off competency/confidence with parent/carer for Pathway A</td>
<td>30-34 weeks CGA</td>
<td></td>
</tr>
<tr>
<td>Facilitate and sign off competency/confidence with parent/carer for Pathway B</td>
<td>30-34 weeks CGA</td>
<td></td>
</tr>
<tr>
<td>Notify Neonatal CC Team member of baby possibly going home NGT feeding and identify type of package.</td>
<td>30-34 weeks CGA</td>
<td></td>
</tr>
<tr>
<td>All physiological monitoring should be stopped as soon as clinical condition allows to facilitate confidence of parent/carer to take baby home NGT feeding when baby 'normalised'</td>
<td>At &gt;31 weeks CGA</td>
<td></td>
</tr>
<tr>
<td>Plan for family to be resident in Transitional</td>
<td>1 - 3 days prior to</td>
<td>Date booked:</td>
</tr>
<tr>
<td>care/parents room? (this is voluntary but recommended).</td>
<td>Discharge</td>
<td></td>
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<td>-------------------------------------------------------</td>
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<tr>
<td><strong>Pathway A:</strong> When Baby is taking 50% of oral feeds by Breast or Bottle in a 24hr period.</td>
<td>34+ weeks CGA</td>
<td></td>
</tr>
<tr>
<td>Facilitate discharge with continuing care team</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pathway B:</strong> When baby is taking 2 or 3 full feeds by bottle of breast in a 24hr period</td>
<td>34+ weeks CGA</td>
<td></td>
</tr>
<tr>
<td>Facilitate discharge with continuing care team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give family at least 72 hours supply of equipment: NGT syringes 20ml/10ml, Duoderm to secure and clean pair of scissors.</td>
<td>At Discharge</td>
<td></td>
</tr>
<tr>
<td>Ensure admission to discharge pathway is complete.</td>
<td>At Discharge</td>
<td></td>
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</tbody>
</table>

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<thead>
<tr>
<th><strong>Baby at Home</strong></th>
<th><strong>Due</strong></th>
<th><strong>Nurse initials, date and time</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor baby’s feeding and support parent/carer to full oral feeding with all other routine community follow up.</td>
<td>As required</td>
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<tr>
<td>Referral to Children’s Community Nurse if NGT feeding is still required after 2 weeks at home and implement long term NGT feeding at home. Form is on NUH Intranet and e-mail referral to team</td>
<td>2 weeks post discharge by continuing care staff.</td>
<td></td>
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<tr>
<td>Refer to neonatal dietician if required and discuss with Consultant if required</td>
<td>2 weeks post discharge by continuing care staff</td>
<td></td>
</tr>
<tr>
<td>Arrange joint visit with health visitor/community paediatric team (if involved) to hand over care</td>
<td>4-6 weeks post discharge</td>
<td>Date of discharge from continuing care</td>
</tr>
</tbody>
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11 Appendix 2: Pathway A

PATHWAY A
FOR SHORT TERM NASO GASTRIC TUBE (NGT) FEEDING AT HOME

Criteria:

1. Parents wish to take baby home NGT feeding but DO NOT wish to learn how to pass an NGT.
2. Baby must be able to take at least 50% of feeds by breast or bottle with good coordination in 24 hours given by the parents/carers of family
3. Parents/carers must have confidently completed the ‘Tube feeding your baby’ competencies for Package ‘A’
4. Met all other criteria prior to discharge as advised in guideline on Short Term NGT feeding at Home.

Contents of package:

- Information leaflets on NGT Feeding at home which includes contact numbers for Neonatal Continuing Care Team, contact numbers for neonatal unit and Emergency contact numbers
- Confidence/competency documents
- Short Term Nasogastric feeding at Home pathway
- Feeding and care plan for Home
- Equipment for home enough for 72 hours:
  - NG Tubes,
  - Oral Syringes
  - pH sticks
  - Duoderm or Tape

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12 Appendix 3: Pathway B

PATHWAY B

FOR SHORT TERM NASO GASTRIC TUBE (NGT) FEEDING AT HOME

Criteria:

1. Parents wish to take baby home nasogastric tube feeding AND WOULD LIKE to learn how to pass a NGT.
2. Baby must be able to take at least 2 or 3 full oral of feeds by breast or bottle with good coordination in 24 hours given by the parents/carers of family
3. Parents/carers must have confidently completed the ‘Tube feeding your baby’ competencies for Package ‘B’
4. Met all other criteria prior to discharge as advised in guideline on Short Term NGT feeding at Home.

Contents of Package:

- Information leaflets on NGT Feeding at home which includes contact numbers for Neonatal Continuing Care Team, contact numbers for neonatal unit and Emergency contact numbers
- Confidence/competency documents
- Short Term Nasogastric feeding at Home pathway
- Feeding and care plan for Home
- Equipment for home enough for 72 hours:
  - NG Tubes,
  - Oral Syringes
  - pH sticks
  - Duoderm or tape

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### 13 Appendix 4: Feeding Plan for Home

<table>
<thead>
<tr>
<th>Name</th>
<th>Hospital Number</th>
<th>NHS Number</th>
<th>Date of Birth</th>
<th>Gestation age</th>
<th>Sex</th>
<th>Birth weight</th>
</tr>
</thead>
</table>

#### Neonatal Short Term Nasogastric Feeding and Care Plan for Home

**Type of package**

*(circle the appropriate package)*

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
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**Feeding by Breast or Bottle**

- Combination of both

**Regularity of feeds at Discharge**

- No of NGT feeds in 24 hrs at discharge
- No of full coordinated feeds at discharge

**Feeding/care Plan for 1st 24-48 hours at home**

- No details provided
Feed Chart for parents/carers (to fill in at home):

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Type of feed (NGT/oral)</th>
<th>Volume given</th>
<th>Total in 24 hrs</th>
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### 14 Appendix 5: Parent/Carer Certificate

**STANDARD:** The parent / carer understands why a nasogastric tube (NGT) is required, and is able to safely and confidently insert an NGT and give a feed via the NGT to their baby.

**Name of Parent / Carer assessed:** ..............................................................................................

(Use a separate competency form for each parent or carer)

<table>
<thead>
<tr>
<th>OUTCOME</th>
<th>Criteria for practice assessment</th>
<th>Demonstration</th>
<th>Observed</th>
<th>Assessed By</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Understand their responsibility for the insertion of a NGT.</td>
<td>Can describe how to safely insert a NGT when in hospital and / or at home.</td>
<td>Date: Comment</td>
<td>Date: Comment</td>
<td>Date: Comment</td>
</tr>
<tr>
<td>2 Explain the reasons why their baby requires a NGT.</td>
<td>Can explain why a NGT is required for their baby.</td>
<td>Date: Comment</td>
<td>Date: Comment</td>
<td>Date: Comment</td>
</tr>
<tr>
<td>3 Understand the importance of hand hygiene.</td>
<td>Demonstrate good hand hygiene.</td>
<td>Date: Comment</td>
<td>Date: Comment</td>
<td>Date: Comment</td>
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<td>4</td>
<td>Is able to explain what equipment is required; and how to check that the equipment is fit for purpose.</td>
<td>Select the correct size of NGT and oral syringe size. Check packaging is intact, and check NGT and syringe are not damaged.</td>
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<td></td>
<td></td>
<td>Date: Comment</td>
<td>Date: Comment</td>
<td>Date: Comment</td>
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<tr>
<td>5</td>
<td>Demonstrate safe insertion of a NGT.</td>
<td>Is able to measure the correct length of ngt to be inserted correctly.</td>
<td>Date: Comment</td>
<td>Date: Comment</td>
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<td></td>
<td>Demonstrate how to pass an NGT in to the stomach correctly.</td>
<td></td>
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<tr>
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<td></td>
<td>Demonstrate correctly how to aspirate gastric content and test the pH.</td>
<td></td>
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<td></td>
<td></td>
<td>Safely secure the NGT in the correct position with the appropriate tape.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Knows when feeds are due and how to safely administer a feed.</td>
<td>Is able to explain when the feed is due.</td>
<td>Date: Comment</td>
<td>Date: Comment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Can give an NGT feed correctly.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Can record accurately in their baby’s chart.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Is able to explain when to change the NGT.</td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>Explain in what circumstances to stop an NGT feed.</td>
<td>Is able to describe signs of colour change, breathing problem, or NGT displaced.</td>
<td>Date: Comment</td>
<td>Date: Comment</td>
</tr>
<tr>
<td>8</td>
<td>Understand the importance of correct disposal of all items used.</td>
<td>Demonstrate safe practice when disposing of all items used.</td>
<td>Date: Comment</td>
<td>Date: Comment</td>
</tr>
</tbody>
</table>
I, (print name) ....................................................... confirm that I have been taught and assessed on how to insert a nasogastric tube and, give a feed via the nasogastric tube for my baby. I am confident to undertake this responsibility.

Parent / Carer signature: ............................................. Date: ....................

Nurse signature: ........................................................................................................

Print name: ................................................................. Date: ....................

**Additional Comments**

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15 Appendix 6: Parent Feedback Survey

Taking Your Baby Home with an NGT

Taking your baby home with an NGT to establish sucking feeds at home is a new initiative for our Neonatal Service. We very much appreciate your feedback in helping us to improve our services to you. We would be grateful if you would take some time to answer the following questions. Any information will be treated in confidence.

Please rate the following from 1 – 5 with 1 being poor and 5 being excellent.

Please Circle

<table>
<thead>
<tr>
<th>Poor</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

1. Did you feel satisfied with the preparation you had for NGT feeding your baby/ babies at home?

2. Did you feel satisfied with the preparation you had for NGT feeding your baby/ babies at home?

3. Were you happy with the support provided by the Continuing Care team?

4. Was there anything else you felt would have made the discharge better for you and your baby / babies?

5. Is there anything else you would like to comment on?

Thank you for taking the time to complete this survey. Please put it in the enclosed envelope and hand it back to one of the Continuing Care Team member.

If you would prefer to return by post the address is:

Heather Nelson
Family Care Coordinator
Neonatal Service
Maternity block
City Hospital Campus
Nottingham University Hospitals NHS Trust
Hucknall Road
NG5 1PB