Non Nutritive Sucking Neonatal Clinical Guideline

V2.0

December 2019
Summary

Prior to Use:

Explain the rationale for NNS to the infant’s parents / care givers enabling an informed decision regarding its use, with their infant.

Once consent gained, document this on the infant’s Nutritional care-plan.

Select appropriate pacifier for infants gestational age;
- ‘Wee Thumblie’, for infants 30 weeks and under.
- ‘Wee Soothie’, for infants 30-34 weeks and ‘small gestational age’ infants.
- ‘NICU Soothie’ for term to 3 months

Ensure the pacifier is sterilised, prior to each NNS episode as per unit policy and stored in a named pot when not in use.

Document in the infant’s notes if NNS has been used, and its effects on the infant.

Use of a pacifier

Encourage infant to open their mouth wide and extend their tongue (to mimic pre-feeding behaviour) by stroking around the mouth and on each side of the infants cheeks

For the preterm infant who has never been fed, a pacifier can be offered if the infant is awake and behavioural cues indicate that they may be receptive to a sucking experience

For the tube fed neonate, offer a pacifier 5-10 minutes before a tube feed. Offer it again during and after the feed until the infant does not appear to want it anymore

For the breastfed neonate, when the infant begins to establish regular breastfeeding, discontinue use of NNS

For the bottle-fed neonate, offer a pacifier 5-10 minutes before a bottle feed if they show signs of hunger, enabling them to establish a quiet awake state, before beginning the bottle feed. When bottle-feeding is fully established the use of a pacifier for deliberate NNS will not be required
1. **Aim/Purpose of this Guideline**

1.1. The aim of this document is to outline the indication for, and provide guidance on the use of pacifiers in Non Nutritive Sucking (NNS). This guideline applies to all staff that care for infants who may benefit from Non Nutritive Sucking.

1.2. This version supersedes any previous versions of this document.

1.3. **Data Protection Act 2018 (General Data Protection Regulation – GDPR) Legislation**

The Trust has a duty under the DPA18 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed and documented. We can't rely on Opt out, it must be Opt in.

DPA18 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the DPA18 please see the ‘information use framework policy’, or contact the Information Governance Team rch-tr.infogov@nhs.net

2. **The Guidance**

2.1. **Rationale**

Non-Nutritive Sucking [NNS] is when an infant sucks on a pacifier [non-nutritive tool] or gloved finger. The infant does not receive any nutritional intake or fluid but may benefit from self-regulation, organisation and relief from pain. It is beneficial for preterm infants and often a useful precursor to breastfeeding.

In utero, the 28-33 week foetus produces rhythmic bursts of NNS. Their ability to suck and swallow gradually develops until approximately 34-36 weeks, when the sucking rhythm and co-ordination matures due to an increase in organisation and regulation of the Central Nervous System. Infants born prematurely miss out on this opportunity to practice and develop their sucking and swallowing skills and by offering them NNS, we can help to develop these.

The rationale for using NNS is to offer infants, who have not fully established oral feeding, the benefits of NNS.

2.2. **Advantages of Non Nutritive Sucking.**

There are several benefits associated with NNS:

- Pleasurable oral experience, used to comfort and settle the distressed infant.
- Reduces behavioural distress during painful procedures, lowers
heart rate, helps infants to self-regulate, improving organised state and physiological stability, particularly during tube feeding.

- NNS provides a developmentally supportive response to behavioural cues.
- May provide easier or more rapid transition from nasogastric to oral feeding.
- Increases organisation and efficiency of sucking, accelerates the maturation of the sucking reflex, enhances weight gain and may increase gastric emptying.
- Preterm infants have the opportunity to practice sucking skills as they would do in utero.
- Linked to a reduction in the incidence of Sudden Infant Death Syndrome [SIDS].
- Reduction in duration of hospital stay.

### 2.3. Practice Guidelines

#### 2.3.1. Prior to Use:

1. **2.3.1.1.** Explain the rationale for NNS to the infant’s parents / caregivers enabling an informed decision regarding its use, with their infant.

2. **2.3.1.2.** Once consent gained, document this on the infant’s Nutritional care-plan.

3. **2.3.1.3.** Select appropriate pacifier for infants gestational age;
   - ‘Wee Thumblie’, for infants 30 weeks and under.
   - ‘Wee Soothie’, for infants 30-34 weeks and ‘small gestational age’ infants.
   - ‘NICU Soothie’ for term to 3 months.

4. **2.3.1.4.** Ensure the pacifier is sterilised, prior to each NNS episode as per unit policy and stored in a named pot when not in use.

#### 2.3.2. Document in the infant’s notes if NNS has been used, and its effects on the infant.

### 2.4. Use of a pacifier

1. **2.4.1.** Encourage infant to open their mouth wide and extend their tongue (to mimic pre-feeding behaviour) by stroking around the mouth and on each side of the infant’s cheeks. Gently place pacifier in the infant’s mouth, never use force.

2. **2.4.2.** For the preterm infant who has never been fed, a pacifier can be offered if the infant is awake and behavioural cues indicate
that they may be receptive to a sucking experience- allow them to suck for as long as they wish.

2.4.3. For the tube fed neonate, offer a pacifier 5-10 minutes before a tube feed. Offer it again during and after the feed until the infant does not appear to want it anymore.

2.4.4. For the breastfed neonate, when the infant begins to establish regular breastfeeding, discontinue use of NNS.

2.4.5. For the bottle-fed neonate, offer a pacifier 5-10 minutes before a bottle feed if they show signs of hunger, enabling them to establish a quiet awake state, before beginning the bottle feed. When bottle-feeding is fully established the use of a pacifier for deliberate NNS will not be required.

2.5. Useful information:

2.5.1. As infants grow, the size of the pacifier should be increased accordingly. It is better for an infant to maintain a wide mouth posture for later development and breastfeeding, rather than the tiny pursed attachment around a teat that has become too small. This information should also be shared with parents to enable them to recognise the importance of moving onto the next size.

2.5.2. Ensure NNS is offered to an infant as a therapeutic intervention and not indiscriminately or for long periods of time to keep them quiet or making them wait for a feed.

2.5.3. As a method of pain relief, offer the pacifier shortly before, during and after a painful procedure, until the infant is in an organised state again. Other methods of consolidation should be considered if they are reluctant to partake in NNS, i.e. containment holding.

2.5.4. A gloved finger can be used as a short term NNS tool, the glove should be latex free and consent should be obtained if parents are present.
3. Monitoring compliance and effectiveness

<table>
<thead>
<tr>
<th>Element to be monitored</th>
<th>Key changes in practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lead</strong></td>
<td>Dr Chris Bell, Consultant Paediatrician</td>
</tr>
<tr>
<td><strong>Tool</strong></td>
<td>Audit. To be included in the Neonatal Clinical Audit programme. Findings to be reported to the Directorate Audit / governance meetings</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td>As dictated by audit findings.</td>
</tr>
<tr>
<td><strong>Reporting arrangements</strong></td>
<td>Child Health Directorate Audit and neonatal Clinical Guidelines meetings.</td>
</tr>
<tr>
<td><strong>Acting on recommendations and Lead(s)</strong></td>
<td>Dr Chris Bell, Consultant Paediatrician</td>
</tr>
<tr>
<td><strong>Change in practice and lessons to be shared</strong></td>
<td>Required changes to practice will be identified and actioned within 3 months of audit. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders</td>
</tr>
</tbody>
</table>

4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the 'Equality, Inclusion & Human Rights Policy' or the Equality and Diversity website.

4.2. **Equality Impact Assessment**

The Initial Equality Impact Assessment Screening Form is at Appendix 2.
# Appendix 1. Governance Information

<table>
<thead>
<tr>
<th>Document Title</th>
<th>Non Nutritive Sucking – Neonatal Clinical Guideline V2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Issued/Approved:</td>
<td>4(^{th}) December 2019</td>
</tr>
<tr>
<td>Date Valid From:</td>
<td>December 2019</td>
</tr>
<tr>
<td>Date Valid To:</td>
<td>December 2022</td>
</tr>
<tr>
<td>Contact details:</td>
<td>(01872) 252667</td>
</tr>
<tr>
<td>Brief summary of contents</td>
<td>The aim of this document is to outline the indication for, and provide guidance on the use of pacifiers in Non Nutritive Sucking (NNS). This guideline applies to all staff that care for infants who may benefit from Non Nutritive Sucking.</td>
</tr>
<tr>
<td>Suggested Keywords:</td>
<td>Non Nutritive Sucking, Pacifier, Dummy, Neonatal, Newborn, Neonate</td>
</tr>
<tr>
<td>Target Audience</td>
<td>RCHT</td>
</tr>
<tr>
<td>Executive Director responsible for Policy:</td>
<td>Medical Director</td>
</tr>
<tr>
<td>Date revised:</td>
<td>July 2019</td>
</tr>
<tr>
<td>This document replaces (exact title of previous version):</td>
<td>Non Nutritive Sucking – Neonatal Clinical Guideline V1.0</td>
</tr>
<tr>
<td>Approval route (names of committees)/consultation:</td>
<td>Neonatal Consultants, Neonatal Guidelines Group</td>
</tr>
<tr>
<td>Care Group General Manager confirming approval processes</td>
<td>Debra Shields</td>
</tr>
<tr>
<td>Name and Post Title of additional signatories</td>
<td>Not Required</td>
</tr>
<tr>
<td>Name and Signature of Care Group/Directorate Governance Lead confirming approval by specialty and care group management meetings</td>
<td>{Original Copy Signed}</td>
</tr>
<tr>
<td>Name: Caroline Amukusana</td>
<td></td>
</tr>
<tr>
<td>Signature of Executive Director giving approval</td>
<td>{Original Copy Signed}</td>
</tr>
<tr>
<td>Publication Location (refer to Policy on Policies – Approvals and Ratification):</td>
<td>Internet &amp; Intranet</td>
</tr>
</tbody>
</table>
### Related Documents:

- NICE guideline for Non-nutritive sucking

### Training Need Identified?

No

### Version Control Table

<table>
<thead>
<tr>
<th>Date</th>
<th>Version No</th>
<th>Summary of Changes</th>
<th>Changes Made by (Name and Job Title)</th>
</tr>
</thead>
<tbody>
<tr>
<td>05:05:2015</td>
<td>V1.0</td>
<td>Initial Issue</td>
<td>Jo Roberts. Neonatal Staff Nurse</td>
</tr>
<tr>
<td>27:01:2016</td>
<td>V1.0</td>
<td>Approved and formatted</td>
<td>Approved by Neonatal Guidelines group. Formatted by Kim Smith S/N</td>
</tr>
<tr>
<td>30:07:2019</td>
<td>V2.0</td>
<td>Full review. Changes made as follows: 2:1 - change from suck and swallow developing at 35 - 36 weeks to “gradually develops until approximately 34 - 36 weeks”</td>
<td>Jo Roberts. Neonatal Staff Nurse</td>
</tr>
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</table>
Appendix 2. Initial Equality Impact Assessment Form

<table>
<thead>
<tr>
<th>Name of the strategy / policy / proposal / service function to be assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Nutritive Sucking – Neonatal Clinical Guideline V2.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Directorate and service area: Child Health - Neonatal.</th>
<th>New or existing document: Existing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of individual completing assessment: Jo Roberts. Staff Nurse</td>
<td>Telephone: (01872) 252667</td>
</tr>
</tbody>
</table>

1. **Policy Aim***
   - **Who is the strategy / policy / proposal / service function aimed at?**
   
   To outline the indication for, and provide guidance on the use of pacifiers in Non Nutritive Sucking (NNS). This guideline applies to all staff that care for infants who may benefit from Non Nutritive Sucking.

2. **Policy Objectives**
   - As above

3. **Policy – intended Outcomes**
   - The safe and appropriate use of pacifiers in Non Nutritive Sucking (NNS).

4. **How will you measure the outcome?**
   - Audit

5. **Who is intended to benefit from the policy?**
   - Medical, nursing and midwifery staff responsible for the care of infants who may benefit from Non Nutritive Sucking, and infants.

6a. **Who did you consult with**
   - Workforce
   - Patients
   - Local groups
   - External organisations
   - Other
   - X

   **Please record specific names of groups**
   - Consultant led Neonatal Guidelines Group

What was the outcome of the consultation?
- Approved

7. **The Impact**
   Please complete the following table. If you are unsure/don't know if there is a negative impact you need to repeat the consultation step.
Are there concerns that the policy could have differential impact on:

<table>
<thead>
<tr>
<th>Equality Strands:</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
<th>Rationale for Assessment / Existing Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex (male, female, trans-gender / gender reassignment)</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race / Ethnic communities /groups</td>
<td></td>
<td>X</td>
<td></td>
<td>Any information provided should be in an accessible format for the parent/carer’s needs – i.e. available in different languages if required/access to an interpreter if required.</td>
</tr>
<tr>
<td>Disability - Learning disability, physical impairment, sensory impairment, mental health conditions and some long term health conditions.</td>
<td>X</td>
<td></td>
<td></td>
<td>Those parent/carers with any identified additional needs will be referred for additional support as appropriate - i.e to the Liaison team or for specialised equipment. Written information will be provided in a format to meet the family’s needs e.g. easy read, audio etc.</td>
</tr>
<tr>
<td>Religion / other beliefs</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marriage and Civil partnership</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnancy and maternity</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Orientation, Bisexual, Gay, heterosexual, Lesbian</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**You will need to continue to a full Equality Impact Assessment if the following have been highlighted:**

- You have ticked “Yes” in any column above and
- No consultation or evidence of there being consultation- this excludes any policies which have been identified as not requiring consultation. or
- Major this relates to service redesign or development

8. Please indicate if a full equality analysis is recommended.  
   Yes No x

9. If you are not recommending a Full Impact assessment please explain why.
   Not indicated
This EIA will not be uploaded to the Trust website without the approval of the Policy Review Group.

A summary of the results will be published on the Trust’s web site.