

Nasogastric Tube Policy (Children and Young People)

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Document Profile

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Version Control/Changes Made

Date	Version	Summary of changes	Author
2024	1	New policy to replace the 'Policy and Procedure Nasogastric Tube Insertion in Children and Initial Placement Checks'. Standard Operating Procedures document has been developed as well to support this policy.	and Team
			Nursing

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1 INTRODUCTION

1.1 Rationale

A naso-gastric tube is a fine-bore tube, usually made of PVC, polyurethane or silicone, which is passed through the nose, down the esophagus and into the stomach and is used to deliver medicines, fluids or specially formulated feeds.

In recent years, several patient safety alerts have highlighted a need to adopt a significant change in the practice of nasogastric tube feeding, with particular importance being placed on how positioning of the tube is confirmed. (National Patient Safety Alert 2005, NHS Improvement, 2016).

This policy has been developed to support evidence-based practice for the insertion of nasogastric tubes in children and young people and placement checks. A separate Standard Operating Procedures document is available to accompany this policy.

Enteral feeding is a very useful method of ensuring adequate intake of nutrients in patients who, for a variety of reasons, are unable to use the oral route or are unable to take sufficient nutrients to maintain growth and development.

Children and young people who require enteral feeding often have underlying complex health needs, for example:

- gastro-intestinal disorders
- neuromuscular disorders
- metabolic condition

Whilst there are other routes suitable for enteral feeding, the naso-gastric route is the most common.

Benefits include:

- it is easy to establish and minimally invasive
- parents and mature patients can be taught to pass the tube at home

Risks/drawbacks associated with naso-gastric tube feeding include:

- the procedure for inserting a tube is traumatic for the majority of children
- the tube is very noticeable
- babies and young children are likely to pull out the tube making regular re-insertion necessary
- aspiration
- damage to the skin on the face

Contraindications:

- Maxillo facial disorders, surgery or Trauma
- Oesophageal / gastric surgery
- Basal skull fractures
- Head and neck surgery
- Tracheostomy
- Patient who is known to have coagulopathy / is receiving anticoagulant medication
- Patient known to have oesophageal varices.

1.2 Scope

This policy applies to Nurses and care workers employed by Family Nursing & Home Care who may be required to insert nasogastric tubes, undertake placement checks and support children/young people or carers with these interventions.

This procedural document applies to children and young people.

It does not cover enteral feeding/medication administration procedures nor does it cover the use of wide-bore nasogastric tubes (sometimes called Ryle's tubes).

1.3 Role and Responsibilities

Chief Executive Officer

The Chief Executive Officer has ultimate responsibility for ensuring that the organisation has robust governance measures in place to support the safety of children/young people having a nasogastric tube inserted. They are also responsible for ensuring that funding is available for the resources required to support the safe execution of nasogastric tube insertion and placement checks.

Director of Governance and Care

The Director of Governance and Care is responsible for ensuring that the organisation has evidence-based procedural documents available to enable safe nasogastric tube insertion and placement checks and that these are reviewed at appropriate intervals. They are also responsible for monitoring incidents relating to this practice and the implementation of any action required to prevent recurrence of untoward incidents.

Registered Manager for Child and Family Services

The Registered Manager for Child and Family Services is responsible for ensuring that their teams have access to this policy and procedures and any equipment necessary for safe practice. They are also responsible for ensuring that untoward incidents relating to nasogastric tube insertion and placement are investigated and action taken to mitigate risk.

<u>Team Leader</u>

The Team Leader has a responsibility to ensure that their staff read and understand this document and for ensuring that staff are given the time to access training and for supporting them in achieving competence in nasogastric tube insertion and placement checks. They are

also responsible for ensuring that staff who are required to undertake these skills are competent to do so and, where required, for assessing the competence of staff to teach others to insert nasogastric tubes and undertake placement checks.

<u>Staff</u>

Staff required to undertake nasogastric tube insertion and placement checks are responsible for adhering to the requirements of this policy and for practicing these skills in accordance with the organisation's standing operating procedures. All staff must report any untoward incidents (including near-miss events) regarding nasogastric tube insertion and placement checks.

Registrants are responsible for ensuring that they maintain their knowledge and skills and for accessing support and/or further training where this is required. When delegating to non-registrants they must abide by the principles of safe delegation ensuring that the non-registrant has training that includes theoretical and practical components, is deemed competent in the required skills and receives ongoing support.

Non-registrants must only undertake nasogastric tube insertion and placement checks when deemed competent and when this task is delegated to them by a registrant. They must not undertake these skills if they do not feel competent or confident to do so. In this situation they must seek further support from a Registered Nurse.

2 POLICY

2.1 Principles

The decision for use of a NG tube should be a multi-disciplinary one including the paediatrician in charge of the child/young person's care.

Whilst few 'never events' have been reported relating to the use of nasogastric tubes in the community (BAPEN, 2020), the risks relating to misplacement of these tubes must not be ignored. Safe systems of work must be maintained and advice sought where there is **any** concern relating to the tube's placement.

Family Nursing & Home Care will not accept referrals for continuous feeding via a naso-gastric tube.

Care should be based on current best practice and current patient safety requirements must be maintained at all times.

The principles of safe delegation must be followed when nasogastric tube insertion and placement checks are delegated to non-registrants. This should only happen if it is in the child/young person's best interests and following a risk assessment. Consideration should always be given to whether tube reinsertion could wait until a Registered Health Care Professional is available to undertake this task.

Family Nursing & Home Care believes that all children/young people should receive the same standard of care regardless of who is undertaking the insertion of the nasogastric tube or placement checks.

2.2 Safety Critical Requirements

All nasogastric tubes (NGT) used for the purpose of feeding must be radio opaque through their length and have externally visible length markings. (NHS Improvement 2016)

Only ENFit compliant nasogastric tubes should be used (SCH 2020).

Following initial insertion and subsequently, prior to anything being put down the tube at any time e.g. feeds, medication, the NGT must be confirmed to be in the correct position. Tube position should also be checked at least once a day during continuous feeds, following episodes of vomiting, retching or coughing or where there is evidence that the tube has become displace e.g. loose tape, visible tube appears longer. N.B. the absence of coughing does not rule out that the tube is not in the correct position (NPSA 2011).

Confirmation of the correct position is done by testing the pH of the gastric aspirate. All pH test strips must be "CE marked and intended by the manufacturer to test human gastric aspirate" (NHS Improvement 2016, p.16). They must also be in date. The NPSA (2011) recommend pH strips with 0.5 graduations or those with a range of 0 to 6 or 1 - 11. It must be easy to distinguish colour changes on pH strips particularly between the pH5 and 6 range (NPSA 2011)

The following **must never** be used to test the position of a nasogastric feeding tube (NPSA 2011):

- the 'whoosh test' (auscultation of air put through the feeding tube)
- the use of blue litmus paper to test acidity/alkalinity
- interpreting the absence of respiratory distress as confirmation of correct tube position
- seeing bubbling at the end of the tube, the appearance of the aspirate

Until initial placement has been confirmed, **nothing** must be introduced down the tube. The tube mush not be flushed nor the guidewire pre-lubricated (NHS Improvement, 2016).

Where correct placement cannot be confirmed by pH testing, radiology (x-ray) will be used to do this. Radiology should not be used routinely for all patients (NHS Improvement 2016)

Staff must report misplaced feeding tube incidents through the 'Assure' Incident Reporting System. Other nasogastric feeding tube related incidents should also be reported, including near-miss events.

2.3 Training and Competency

All staff involved in the care of children/young people should be competent in age appropriate basic life support skills and have attended mandatory basic life support training within the last year.

3 PROCEDURE

Please see separate Standard Operating Procedures- Nasogastric Tube Insertion in Children and Young People and Initial Placement Checks.

3.1 Training and Competency

Registered Nurses

Registered Nurses undertaking nasogastric tube insertion must be trained in this clinical skill and in undertaking placement checks. Training should include theoretical and practical components and following this training they must successfully undertake an assessment which covers both components. <u>Appendix 1</u> and <u>Appendix 2</u> should be used when assessing competence.

Care/Support Workers

Care/support workers may undertake nasogastric tube insertion and placement checks as part of care delegated by a Registered Nurse. Training should be competency based and include theoretical and practical learning. Assessment of competence must include tube position checks (NHS Improvement 2016). Reassessment of competence must be undertaken at least annually and earlier if required.

Mature Patients and Parents/Carers

Mature patients and parents/carers must only be trained when the appropriateness of this training has been considered on an individual basis. Training should be planned in negotiation with the patient/parent/carer and all sessions and assessments should be documented and kept in the child/young person's records.

It is important that patients/parents/carers are given the opportunity to learn and become competent with a naso-gastric tube. This will include:

- passing the tube
- knowing how to aspirate the tube
- confirming the correct position of the tube
- knowing how to proceed if no aspirate obtained
- knowing their child's usual pH level

Training should be given by a qualified nurse who has been appropriately trained and assessed as competent. Training should be competency based and include theoretical and practical learning. Assessment of competence must include tube position checks (NHS Improvement 2016). <u>Appendix 1</u> and <u>Appendix 2</u> should be used to assess competence. Care/support workers cannot undertake the training of patients/parents/carers nor can they assess competence.

Parents/carers should be advised to have training in basic life support skills and where they can access such training.

3.2 Documentation

Competency documents are available for nasogastric insertion (<u>Appendix 1</u>) and placement checks (<u>Appendix 2</u>) and should be used to evidence successful achievement of these skills.

Standardised care plans are available as EMIS templates to support safe management of nasogastric tube insertion and tube placement checks. (See relevant Standard Operating Procedures)

A patient information leaflet is available.

The 'Nasogastric Tube Insertion Record' should be used to record all tube insertions/changes (see relevant Standard Operating Procedures).

Confirmation of the position of the nasogastric tube should be recorded on the appropriate form (see relevant Standard Operating Procedures). Each pH test (including failure to obtain aspirate) and test result should be documented as it also provides an ongoing record of a patient's normal range (NHS Improvement, 2016).

4 MONITORING COMPLIANCE

All patient safety incidents and near miss events regarding nasogastric tubes must be reported via the organisation's Incident Reporting System (ASSURE) to enable learning to take place.

Incidents involving nasogastric tubes, in particular in relation to insertion and placement checks, will be reported monthly during discussions relating to the quality and performance dashboard. This will enable the emergence of trends to be identified and provide evidence and assurance that incidents have led to practice improvement work.

5 CONSULTATION PROCESS

Name	Title	Date
Dr David Lawrenson	Consultant Pediatrician	28 th November 2023
Gill John	Team Lead- CCNT	4 th January 2024
Lyn Vidler	Childrens Community Nurse	6 th February 2024
Polly Axford	Childrens Community Nurse	9 th January 2024

6 EQUALITY IMPACT STATEMENT

Family Nursing & Home Care is committed to ensuring that, as far as is reasonably practicable, the way services are provided to the public and the way staff are treated reflects their individual needs and does not discriminate against individuals or groups on any grounds.

This policy document forms part of a commitment to create a positive culture of respect for all individuals including staff, patients, their families and carers as well as community partners. The intention is to identify, remove or minimise discriminatory practice in the areas of race, disability, gender, sexual orientation, age and 'religion, belief, faith and spirituality' as well as to promote positive practice and value the diversity of all individuals and communities.

The Family Nursing & Home Care values underpin everything done in the name of the organisation. They are manifest in the behaviours employees display. The organisation is committed to promoting a culture founded on these values.

Always:

- Putting patients first
- Keeping people safe
- Have courage and commitment to do the right thing
- Be accountable, take responsibility and own your actions
- Listen actively
- Check for understanding when you communicate
- Be respectful and treat people with dignity
- Work as a team

This policy should be read and implemented with the Organisational Values in mind at all times. See overleaf/below for the Equality Impact Assessment for this policy.

6.1 EQUALITY IMPACT SCREENING TOOL

Stage 1 - Scre	ening								
Title of Procedu	ral Docume	ent: Nasogastric Tu	be Polic	cy (C	hildren	and You	ng People	e)	
Date of Assessi	ment	06/02/2024	Respo	1 1			Children: Nursing		Community n
Completed by	Stephanie	Egre	Job Ti	tle	Childr	ens Nurs	e		
Does the policy/function affect one group less or more favourably than another on the basis of:									
				Ye	es/No		Comr	nent	s
Age				No					
Disability				No					
		sical disability; s alth problems e.g. dei	sensory mentia)						
Ethnic Origin (in	cluding hard	l to reach groups)		No					
Gender reassig	nment			No					
Pregnancy or M	laternity			No					
Race				No					
Sex				No					
Religion and Be	elief			No					
Sexual Orientat	ion			No					
		above questions ssment is require	•		• •		Assessm	ent	is complete.
Stage 2 – Full I	mpact Ass	sessment							
What is t	the impact	Level of Impact	Mitigating Actions (what needs to be done to minimise / remove the impact)				sponsible Officer		
Monitoring of Actions									
The monitoring	of actions t	o mitigate any impa	act will b	e ur	dertake	en at the	appropriat	te lev	/el

7 IMPLEMENTATION PLAN

Action	Responsible Person	Planned timeline
Policy to be uploaded to the Procedural Document Library	Education and Development Administrator	Within 2 weeks following ratification
Email to all staff	Education and Development Administrator	Within 2 weeks following ratification
Upload policy (+/- assessment tool) to Virtual College and allocate to relevant staff	Education and Development Department	Within 2 weeks following ratification
Relevant staff to sign (via Virtual College) that they have read and understood policy.	All staff notified via Virtual College.	Within 2 months of notification

8 GLOSSARY OF TERMS

Carer – includes anyone who has main/parental responsibility for the child

Child/Children – includes young people aged 0 to 18 years of age.

ENFit - ENFit is the global enteral feeding device connector design that complies with the new International Standard (ISO 80369-3) (BAPEN 2016)

Infant – a child under one year of age.

Neonate – a newborn baby under the age of 28 days.

9 **REFERENCES**

British Association for Parenteral and Enteral Nutrician (BAPEN) (2020) A Position Paper on Nasogastric Tube Safety "Time to put patient safety first"; available at <u>A Position Paper on</u> <u>Nasogastric Tube Safety (bapen.org.uk)</u> (last accessed 09.06.23)

British Association for Parenteral and Enteral Nutrician (BAPEN) (2016) ENFit Phase 2 ISO 80369-3 IMPORTANT UPDATE – ENFit Implementation; available at <u>ENFit (bapen.org.uk)</u> (last accessed 12.06.23)

National Patient Safety Agency (2011). Decision Tree for Nasogastric Placement Checks in Children and Infants (not neonates), <u>www.npsa.nhs.uk/alerts</u> (last accessed 7.12.16)

NHS Improvement, (2016) Resource set, Initial placement checks for nasogastric and orogastric tubes. <u>Resource set - Initial placement checks for NG tubes 1.pdf</u> (england.nhs.uk) (last accessed 9.06.23)

Southampton Children's Hospital - Nasogastric Tube Placement and Care in Paediatrics. Version 7. Date Issued: July 2020 for revision July 2023 (last accessed 01.01.2024)



10 APPENDICES

10.1 Appendix 1 Competency Framework: Nasogastric Tube Insertion

This competency framework can be used to assess the competence of anyone who has completed both theoretical learning and practical training in nasogastric tube insertion. Competence in the undertaking of placement checks must also be assessed (see relevant competency framework)

Theory Competencies

Component	Yes / No	Assessment date	Signature of Assessor
Can discuss why and when a child may require a nasogastric tube (NGT)			
Can describe the anatomy and physiology of where the nasogastric tube should sit			
Can discuss the benefits of a NGT			
Can state the problems and risks associated with having a NGT			
Can state the standards that NGTs must comply with (radio-opaque through their length and have externally visible length markings)			
Can describe when and who to contact for advice			
Can describe what to do in an emergency including when to call an ambulance			



N.B. Theoretical competencies must be passed before practical competencies are assessed.

Practical Competencies

Date of Assessment				
Component	Practical Assessment 1 yes/no	Practical Assessment 2 yes/no	Practical Assessment 3 yes/no	Date Deemed Competent & Assessor Signature
Ensures all equipment is available including relevant paperwork				
Explains procedure to child/parent and confirms consent				
Positions child appropriately and ensure comfort				
Washes hands and applies personal protective equipment in line with local policy				
Checks tube is intact and stretches it to remove any shape retained from being packed				
If guidewire present, checks it is correctly inserted in the tube				
Age appropriate NEX measurement correctly determined				
Documents external tube length and notes point measured on tube				
Lubricates the tip of the tube using water if required.				



Practical Competencies - continued

Name:	. Position/Role:
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Date of Assessment				
Component	Practical Assessment 1 yes/no	Practical Assessment 2 yes/no	Practical Assessment 3 yes/no	Date Deemed Competent & Signature of Assessor
Uses the correct technique to insert the nasogastric tube to the correct length				
Secures the tube using an appropriate tape				
Once the correct placement has been confirmed (use competency framework for placement checks), removes the guidewire (if present)				
Flushes the tube with water				
Cleans, dries and places the guidewire in a sealed container for re-use				
Removes personal protective equipment and undertakes hand hygiene				
Records insertion including tube details and confirmation of placement using the appropriate documentation.				
Provides the patient/parent with an information leaflet and contact details.				
Assessor's Signature				



10.2 Appendix 2 Competency Framework – Checking the Placement of a Nasogastric Tube

This competency framework can be used to assess the competence of anyone who has completed both theoretical learning and practical training in checking the placement of a nasogastric tube. Assessment to be undertaken by a Registered Nurse competent in nasogastric tube placement checks

Theory Competencies

Component	Yes / No	Assessment date	Signature of Assessor
Can list six occasions when placement checks should be undertaken			
Can state why placement checks are vital			
Can describe the standard for pH test strips (CE marked and for human gastric aspirate)			
Can explain what might happen if the tube is not correctly sited			
Can explain what tests must not be used to confirm tube placement			
Can state the recommended safe pH limits for NGT feeding			
Can describe the correct procedure to follow if the pH of the aspirate is not within the recommended limits of $1 - 5$			
Can explain what might affect the pH reading			
Can describe what to do when no aspirate is obtained (must include documenting failure to obtain aspirate)			
Knows when the use of x-ray should be considered			
Can discuss when and who to contact for advice			
Can describe the procedure to follow in an emergency.			



Practical Competencies

Name:	Posit	ion/Role:		
Date of Assessment				
Component	Assessment 1 yes/no	Assessment 2 yes/no	Assessment 3 yes/no	Date Deemed Competent & Signature of Assessor
Checks if the child/young person is on medication that may increase the pH level of the gastric contents				
Gathers all equipment together including relevant documentation				
Explains procedure and obtains consent				
Assists child/young person to adopt correct position.				
Undertakes hand hygiene and applies personal protective equipment as per local policy				
Checks tube for signs of displacement (e.g. tape loose, change in length of external tubing)				
Checks pH strips are CE marked, in date and for use with human gastric aspirate.				
Undertakes correct procedure for obtaining gastric aspirate				
Correctly determines the pH level				
Correctly documents pH level				
Assessor's Signature				