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**Policy and procedure for the Insertion, Use and Care of Fine Bore  
Nasogastric Feeding Tubes for Adults and Children**

<b>POLICY TITLE</b>	Policy and procedure for the Insertion, Use and Care of Fine Bore Nasogastric Feeding Tubes for Adults and Children
<b>POLICY CODE</b>	<b>CP34</b>
<b>REPLACES POLICY CODE (IF APPLICABLE)</b>	CP34
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<b>TRUST BOARD SUB-COMMITTEE WHICH APPROVED ORIGINAL VERSION</b>	
Integrated Governance Committee	(Date of approval)
<b>DATE OF NEXT REVIEW</b>	April 2020

**REVIEW HISTORY**

<b>COMMITTEE WHICH APPROVED REVISED VERSION: QSCE</b>	
	<b>DATE</b>
	<b>DATE</b>
	<b>DATE</b>
	<b>DATE</b>

<b>CURRENT VERSION PLACED ON INTRANET</b>	<b>DATE</b>
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**CHAIR(S) OF APPROVING COMMITTEE**

**SIGNATURE(S)**.....

**TITLE(S)** .....

**DATE** .....



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**POLICY CONTROL DOCUMENT - 2**

<b>NUMBER OF PAGES (EXCLUDING APPENDICES)</b>	<b>9</b>
<b>SUMMARY OF REVISIONS:</b>  New policy as amalgamation of adult and paediatric policy.	

All policies controlled. revision is previous be Uncontrolled available but updated on revision. An copy with be the Trust information.

<b>Approval Checklist</b>	✓
<b>CQC Regulation/NHSLA Standard identified and how the policy meets the standard stated</b>	✓
<b>Consultation process undertaken</b> Rachel Cootes Fran Tutty Helen Moir Wendy Loving Lucy Gardner Linda Murray Sharon Ryan Nicola Jarvis Jackie Southgate Julie Lambert Dawn Goudge Sarah Smith (OUH) Laura Brown (OUH) Lauren Bailey (OUH)	✓
<b>Equality Impact Assessment completed</b>	✓
<b>Has the potential for an impact on a person's human rights been considered</b>	✓
<b>Training implications assessed and agreed where relevant with Learning Advisory Committee</b>	✓
<b>Any resource implications for operational services discussed with the Chief Operating Officer</b>	✓
<b>Monitoring/audit arrangements included</b>	✓

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		<table border="1"> <tr> <td style="width: 50px;">policy</td> <td style="background-color: black; color: black;">[REDACTED]</td> </tr> <tr> <td>review</td> <td></td> </tr> </table>	policy	[REDACTED]	review	
policy	[REDACTED]					
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<table border="1"> <tr> <td style="width: 20%;">Policy applicable to -</td> <td style="background-color: #e0ffff;">All adult areas</td> <td style="background-color: #e0ffff;">All paediatric areas</td> </tr> </table>			Policy applicable to -	All adult areas	All paediatric areas	
Policy applicable to -	All adult areas	All paediatric areas				
<b>Name of policy: Policy and procedure for the Insertion, Use and Care Fine Bore Nasogastric Feeding Tubes in Adults and Children.</b>						

<b>1</b>	<b>Aim of Policy</b>
	<p>The purpose of this policy is to describe how patients in the Oxford Health NHS Foundation Trust will receive safe and effective Nasogastric (NG) feeding. It sets staff roles and responsibilities and describes correct insertion technique, correct confirmation of NG tube position, continued monitoring, documentation and care of patients with fine bore nasogastric tubes. Following their kind permission, the Oxford University Hospitals NHS Foundation Trust, Insertion, Use and Care of Fine Bore Nasogastric Feeding Tubes: Policy and Procedure (2015) has been used to develop the Oxford Health NHS Foundation Trust policy. The Appendices following this policy are divided into 2 sections. Appendix 1 is related to Adults and Appendix 2 is related to Paediatrics.</p>
<b>2</b>	<b>Legal and policy framework</b>
	<ul style="list-style-type: none"> <li>National Patient Safety Agency (NPSA). Patient Safety Alert NPSA/2011/PSA002: Reducing the harm caused by misplaced nasogastric feeding tubes in adults, children and infants. Published in March 2011</li> <li>National Patient Safety Agency (NPSA). Rapid Response Report NPSA/2012/1330: Harm from flushing of nasogastric tubes before confirmation of placement. Published in March 2012</li> <li>National Patient Safety Agency (NPSA). Patient safety alert. Promoting safer measurement and administration of liquid medicines via oral and other enteral routes. Central Alerting System (CAS). March 2007.</li> <li>National Institute of Clinical Excellence (NICE). National Clinical Practice Guideline Number CG9: Eating disorders: Core Interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders. January 2004.</li> <li>National Institute of Clinical Excellence (NICE). National Clinical Practice Guideline Number CG32: Nutrition support in adults: Oral nutrition support, enteral tube feeding and parenteral nutrition. February 2006.</li> <li>National Institute of Clinical Excellence (NICE). National Clinical Practice Guideline Number CG69. Stroke: diagnosis and initial management of acute stroke and transient ischaemic attack (TIA). July 2008.</li> <li>National Nurses Nutrition Group (NNG). Good Practice Guideline: Safe Insertion of Nasogastric (NG) Feeding Tubes in Adults. March 2012.</li> <li>National Institute of Clinical Excellence (NICE). National Clinical Practice Guideline Number CG139: Infection: Prevention and control of healthcare-associated infections in primary and community care. March 2012.</li> <li>National Patient Safety Agency. Rapid response report: Harm from flushing of nasogastric tubes before confirmation of placement. March 2012</li> </ul>

- NHS England. Patient Safety Alert Placement Devices for nasogastric tube insertion do not replace initial position check. December 2013.
- NHS England. Revised Never Events Guidance and Framework. March 2015

**3 Policy**

Enteral tube feeding is used to improve and maintain nutritional, hydration and pharmacological intake. Nasogastric feeding is usually considered a short term method (used for less than 4 weeks). It is used to supplement or provide full nutrition, hydration and medication in some patients.

It is the policy of Oxford Health NHS Foundation Trust that patients requiring a fine bore nasogastric tube will be correctly risk assessed and that they will then receive safe and effective nasogastric care. This will include correct insertion technique, methods of position confirmation, continued monitoring, documentation and care of patients with fine bore nasogastric tubes.

All medical and nursing staff must be appropriately trained and deemed competent to assess and manage patients receiving nasogastric support and identify and respond appropriately to associated complications.

This policy applies to all employees in all areas and to all patients in Oxford Health NHS Foundation Trust. This policy applies to all of the Trust, including individuals employed by a third party, by external contractors, as voluntary workers, as students, as locums or as agency staff.

Student Nurses need to learn and develop the skills required in all aspects related to the insertion and care of the patient with a fine bore nasogastric feeding tube. It should be noted that:

Students should always act under the supervision and guidance of their mentor or supervising registered nurse.

Accountability for patient care will always remain with the registered nurse.

**Definitions**

Fine bore nasogastric feeding: nutrition, hydration and pharmacological support provided through a fine bore tube inserted through the nose via the oesophagus into the stomach.

**Consent**

Agreement for the procedure should be obtained from the patient or parent/guardian. This needs to be documented in the patient's health care records in accordance with the Consent to Examination or Treatment policy (CP19). If patient is unable to give consent, a best interests decision must be made by the multi-disciplinary team according to the Mental Capacity Act (2005)

**Indications**

To improve or maintain nutritional, hydration and pharmacological status on a short-term basis, where the patient has inadequate or unsafe oral intake and has a functional, accessible gastrointestinal tract.

**Risk Assessment**

Before a decision is made to insert a fine bore nasogastric feeding tube, an assessment and patient history is undertaken to identify if nasogastric feeding is appropriate for the patient and the rationale for any decision is recorded in the patient's medical notes including the use of the mental health act as clinically indicated.

The initial risk assessment, evaluating the risks and benefits of insertion of a fine bore nasogastric feeding tube, should be clearly documented, signed, dated and timed in the patient's clinical notes.

It is policy that before a NG tube is used, the pH of aspirate must be tested and that it is safe to use only if the pH is 5.0 or less. If it is decided that there is a clinically accepted variation to this (such as the use of Proton Pump Inhibitor (PPI) medication that may raise the pH of stomach aspirate) the consultant in charge of the patients care must complete a risk assessment and document this in the patients care notes.

### **Contraindications**

Maxillo-facial disorders  
Oesophageal tumour or surgery  
Laryngectomy  
Oro-pharyngeal tumours or surgery  
Basal skull fractures  
Nasal Continuous Positive Airway Pressure  
Unstable Cervical Spinal injuries  
Oesophageal varices  
Gastroparesis  
Gastric Outlet obstruction  
Choanal atresia

### **Types of tube**

Fine bore nasogastric tubes used for the purpose of feeding, hydration and pharmacological support must be radio-opaque throughout their length and have externally visible length markings. Short term and long term tubes are available. The type most applicable to the clinical area should be used.

Orogastric tubes are used infrequently for children in the community. In these cases, a separate risk assessment and individual care plan is required.

Ryles tubes must not be used for feeding. This is a reportable incident should this occur.

### **Insertion of Nasogastric tubes**

This should only be performed by a competently trained practitioner who has completed the competency framework on insertion and checking of fine bore nasogastric tubes (see end of policy)

The competent practitioner must carry out the procedure as described in the procedure for insertion of fine bore nasogastric tubes (Appendix 1.1.or 2.1 dependent on clinical area).

Experienced staff must be available to support staff inserting nasogastric tubes. Where possible, nasogastric tubes should not be inserted between the hours of 20.00 and 08.00 unless essential medication is required.

Families with a child with an NG tube on the Community Children's Nursing Team caseload, can access support during the hours of 0800 until 2000, every day of the week. Only a competent Children's Nurse will attend the home to re-insert a naso-gastric tube.

### **Confirmation of gastric placement**

Confirmation of gastric placement must be carried out as per guidance

- following: initial tube insertion;
- before putting anything down the tube including flushes,
- starting the feed, each bolus feed or drug administration;
- if the patient complains of discomfort or feed reflux into the throat or mouth;
- if there is evidence of coughing or SOB whilst feeding;
- following vomiting or violent retching or severe coughing episodes or

- if there is any reason to believe the tube as moved eg. change in the measurement recorded at the nostril.

Ensuring that the pH in the 'safe range' or xray are the only acceptable methods of confirming initial placement of a nasogastric tube.

X-ray will be required if aspirate in the 'safe range' cannot be obtained, and for patients where not only exclusion of respiratory placement, but confirmation of optimum gastric placement is necessary. X-ray may be required in other specific scenarios and patient groups. Where X-rays are required X-ray request clinical staff **must** ensure that xray request forms clearly state that the purpose of the x-ray is to establish the position of the nasogastric tube for the purpose of feeding or the administration of medication.

Staff have access to a validated report within the PACS system (the IT system which sits behind Radiography). There will be a validated report within the PACS system for sign off by medical staff. It is suggested that this could be audited in order to provide assurance.

**Under no circumstance can a verbal 'safe to feed' instruction be accepted from Radiology.**

**Care and maintenance of fine bore nasogastric feeding tube**

Appendix 1.1.(Adult)

Appendix 2.1 (Children)

**Transferring to an external hospital setting**

The discharging area should ensure;

- A full multidisciplinary supported risk assessment has been made and documented prior to a patient with a fine bore nasogastric feeding tube being transferred within or discharged from the Oxford Health NHS Foundation Trust.

The accepting area should ensure;

- They have access to radiology.  
All necessary staff are competent to carry out insertion, care and management of fine bore nasogastric tubes.

**4 Responsibilities**

The Chief Executive has overall responsibility for health & safety within the Oxford Health NHS Foundation Trust and must ensure the identification and control of all risks in how patients in the Trust will receive safe and effective nasogastric support is undertaken and managed within the resources.

The Medical Director and the Director of Nursing have overall responsibility for ensuring the implementation of this policy.

All Managers are responsible for ensuring:

All medical and nursing staff are competent to manage patients receiving nasogastric support.

All medical and nursing staff can identify and respond appropriately to associated complications.

All practitioners are personally responsible for updating and maintaining their competency. Individual staff shall ensure all relevant training and competencies are completed. All medical and nursing staff must understand their role and their accountability for undertaking appropriate training and achieving the competencies required.

**5 Training**

	<p><b>Medical Practitioners:</b> An e-learning module for X-ray interpretation is available for medical staff and is the learning tool recommended and referenced in the NPSA alert: <a href="http://www.trainingngt.co.uk">www.trainingngt.co.uk</a> The lead consultant responsible must ensure that medical practitioners in their team have undertaken the learning module and have been assessed as competent and is appropriate to carry out this procedure in the specific area.</p> <p><b>Nursing and Support workers:</b> Staff competency in the insertion and checking of nasogastric tube position will be assessed in the clinical environment by designated competent trainers following the Oxford Health NHS Foundation competency framework. Competency should be assessed annually.</p> <p>Clinical Practice Educators may be available to support the provision of training and support for nursing staff to gain knowledge and practice in a controlled environment the insertion and the using of Nasogastric Tubes. On line information is also available from <a href="http://www.clinicalskills.net">www.clinicalskills.net</a> accessed via the learning and development portal.</p> <p>Agency or Temporary staff must not insert, check placement of, or administer feed/medications unless they can provide written evidence to demonstrate their competence. Health care assistants employed by the Children's Community Nurse Team will be trained for each individual child who requires nasogastric feeding care. They will be signed off as competent for an individual child, by a Registered Children's Nurse, and these competencies will be refreshed yearly. Re-insertion of Nasogastric Tubes should not be undertaken by a Healthcare assistant.</p>
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**6 Other relevant policies**

	<p>RMHS01 Incident reporting and management policy IF01 Infection prevention and control policy RMHS 16 Risk management policy MM01 Medicine management policy CP19 Consent to examination and treatment policy CP70 Adult enteral tube feeding guidelines for community hospitals policy CP68 Tube feeding in the community: Guidelines for district nurses, care home staff, care agency staff and dietitians CP24 Management of dysphagia policy CP94 Nutrition and Hydration policy CP29 Reducing Restrictive Interventions</p>
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**Monitoring and evaluation**

Criteria	Measurable	Lead person/group	Frequency	Reported to	Monitored by	Frequency
There are no cases of harm caused by misplaced NG tubes	Incident reports	Risk Management Team	Weekly	Weekly Clinical Governance Meeting	Safety Committee	Quarterly
Clinicians are appropriately trained and competent	Audit of training records	Ward Managers	Annually	Divisional Clinical Audit and Effectiveness Group Meeting	Corporate Clinical Audit Committee	Annual

to perform correct placement and checking of NG Tubes						
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**Review**

This policy will be reviewed in 3 years, as set out in the Policy for the Development and Implementation of Procedural Documents, or if new NPSA alerts regarding misplaced NG tubes are issued.

**References**

Best C (2007) Nasogastric tube insertion in adults who require enteral feeding, Nursing Standard. 21, 40, 39-43

Burnham P (2000) A guide to nasogastric tube insertion. Nursing Times. 96 Suppl 8, 6-7.

British Association of Parenteral and Enteral Nutrition (BAPEN) Website – [www.bapen.org.uk](http://www.bapen.org.uk)

Dougherty L & Lister SE (2015) (Eds) The Royal Marsden Hospital manual of clinical nursing procedures. 9th ed. Oxford: Wiley Blackwell Chapter 7: Nutriiton, fluid balance and blood transfusion. Online Edition

McConnell, E (1997) Clinical Do's and don'ts: inserting a naso-gastric tube. Nursing. Jan.72

Mental Capacity Act 2005. C.9. London: HMSO

Merck Serono (2009) Corflo fine bore feeding tubes: Placement guidelines. Available from [http://www.corpakmedsystemsuk.com/PDFs/Corflo\\_pad\\_placement\\_guide\\_5991.pdf](http://www.corpakmedsystemsuk.com/PDFs/Corflo_pad_placement_guide_5991.pdf)

National Institute for Clinical Excellence (2006) CG32 Nutrition Support for adult oral nutrition support, enteral tube feeding and parenteral nutrition: Methods, Evidence and Guidance. National Collaborating Centre for Acute Care, February 2006.

National Institute of Clinical Excellence (2012) CG68 Stroke: diagnosis and initial management of acute stroke and transient ischaemic attack (TIA)

National Institute of Clinical Excellence (2008) National Clinical Practice Guideline Number CG139: Infection: Prevention and control of healthcare-associated infections in primary and community care.

National Nutrition Nurses Group NNG (2012) Good Practice Guideline Safe Insertion of Nasogastric Tube in Adults

National Patient Safety Agency, NPSA (2007) Patient Safety Alert. Promoting safer measurement and administration of liquid medicines via oral and other enteral routes, Ref NPSA/2007/19 9

National Patient Safety Agency, NPSA (2011) Patient Safety Alert. Reducing the harm caused by misplaced nasogastric feeding tubes in adults, children and infants. Ref NPSA/2011/PSA002.

National Patient Safety Agency, NPSA (2005) Patient Safety Alert 05. Reducing the harm caused by misplaced nasogastric feeding tubes.

National Patient Safety Agency, NPSA (2012) Rapid Response Report: Harm from flushing of nasogastric tubes before confirmation of placement.

NHS England (2013) Patient Safety Alert. Placement Devices for nasogastric tubes do not replace initial position check.

NHS England (2015) Revised Never Events Guidance and Framework

Procedure for the Insertion, Use and Care of Nasogastric Feeding Tubes (2015) Oxford Universities Hospital NHS Foundation Policy

RCN (2012) Managing children with health care needs: delegation of clinical procedures, training, accountability and governance issues.

## **Appendices**

### **Appendix 1 - Adults**

- 1.1 Procedure for the Insertion of a Fine Bore Nasogastric Feeding Tube
- 1.2 Position Record
- 1.3 Decision Tree
- 1.4 Confirmation of gastric placement and X-Ray
- 1.5 Step by Step Guide to Administering Drugs in adults via Fine Bore Nasogastric Tubes
- 1.6 Competency framework for the insertion and checking of fine bore nasogastric tubes in adults
- 1.7 Competency framework for the checking of fine bore nasogastric tubes in adults
- 1.8 Risk Assessment template

### **Appendix 2 – Paediatrics**

- 2.1 Procedure for Insertion and after care of a Fine Bore Nasogastric Feeding Tube in Children and infants
- 2.2 NG Position Record
- 2.3 NPSA Decision Tree
- 2.4 Guidelines for training
- 2.5 NG Troubleshoot Guide for home
- 2.6 Competencies for Insertion and Care of Fine Bore NG Tubes for children
- 2.7 Equality Impact Assessment form
- 2.8 NG Pathway

**APPENDIX 1.1: Procedure for the Insertion of a Fine Bore Nasogastric Feeding Tube in Adults**

**FINE BORE NASOGASTRIC TUBES**

Nasogastric tubes (NG tubes) can be passed by qualified healthcare professionals, patients or carers who have received specific training and have experience in passing these tubes.

**EQUIPMENT FOR INSERTION OF A FINE BORE NASOGASTRIC FEEDING TUBE**

Fine Bore Nasogastric tube	Non-sterile gloves
Apron	Sterile 50ml enteral syringe
Appropriate pH indicator strips	Gallipot with sterile/bottled water
Cup of water for the patient to sip – if appropriate	Tissues or wipes

**PROCEDURE FOR INSERTION OF A FINE BORE NASOGASTRIC FEEDING TUBE**

1	Explain the procedure to the patient/carer.
2	Ensure the patient /carers are in agreement with the procedure and that verbal/informed consent is gained.
3	If possible, arrange a signal by which the patient can communicate if they want to stop e.g. raising their hand or if this is not possible look for cues.
4	Assemble the equipment required. Wash hands with soap and water, rinse and dry. Put on gloves/ apron.
5	Support in an upright (semi-recumbent) position on a bed or chair.
6	Tilt the head forwards as tolerated supporting with pillows
7	Examine the nasal passages for any deformity/obstructions.
8	Select the appropriate distance on the tube by measuring using the <b>NEX measurement</b> . Place the proximal rounded end of the tube at the tip of the nose. Extend the tube across to the earlobe and then down to the xiphisternum. Make a note of the tube centimetre marker (NEX measurement)
9	Ensure that the guide wire moves freely within the tube, that it is not kinked or protruding from the end.
10	<b>Do not flush tube with anything prior to confirming placement following NPSA alert. NPSA/2011/PSA002.</b>
11	Lubricate proximal rounded end and body of the tube with sterile/bottled water. <b>(Do not use tap water or lubricant)</b>
12	Insert the rounded end of the tube into the clearest nostril and slide it backwards and inwards along the nose to the nasopharynx.

13	Advance the tube gently and slowly and if able, ask the patient to swallow water via a straw as the tube passes into the nasopharynx. <u>NB: If the patient has an impaired swallow gently continue to advance the tube.</u>
14	Advance the tube until the predetermined mark has been reached.
15	Attach an enteral syringe to the end of the NG tube draw back to aspirate a small sample of gastric fluid. Test a sample of the aspirate using recommended pH indicator strips. Using the colour guide check the aspirate has a pH 5 or less. If no aspirate can be obtained see section 'If NG aspirate cannot be obtained' (See section 1.3: Decision Tree).
16	<b>Once correct pH has been gained</b> , flush lumen with 10mls of water and remove the guide wire by using gentle traction.  <b>pH has been gained.</b>
17	Secure the tube to the nostril and cheek with hypoallergenic tape and/or appropriate fixation device. Keep the NG tube out of patient's field of vision. #
18	Complete tube position record (Appendix 1.2) and note in Patient record

#### DURING THE NG TUBE INSERTION BE AWARE THAT

- If any resistance is felt, withdraw the tube and try again in a slightly different direction or use the other nostril. Gentle rotation of the tube can be helpful. If the patient shows signs of distress e.g. gasping, coughing or cyanosis, remove the tube immediately.
- If the patient complains of sudden onset ear pain the tube should be removed immediately. Distress or ear pain may indicate the incorrect placing of nasogastric tube into the trachea.
- Signs of respiratory distress may be absent in less able, sedated or un communicative patients

#### CONFIRMING NG TUBE POSITION

Aspirate a sample of fluid using a 50ml enteral syringe with gentle suction (over a period of up to 5 minutes). **Do not feed or attempt to flush anything down the tube prior to placement confirmation.**

Place the aspirate onto pH paper and check for an acidic reaction.

Gastric contents should have a pH below 5. **(If a pH 5 or less is not obtained follow the guidance below before x-ray is used to confirm position). If pH >5 DO NOT FEED. Repeat gastric aspirate pH test after 1 hour. Also see section 1.3- Decision Tree.**

#### IF NG ASPIRATE CANNOT BE OBTAINED

Problem	Possible cause
<b>Air can be gained but no aspirate</b>	May mean the tube is not inserted far enough reposition the tube and try again.
<b>No aspirate</b>	The tube may be through the pylorus - pull the tube back as it may be inserted too far and try again.
<b>No air or aspirate can be obtained</b>	The tube may be occluded on the gastric mucosa - inject 10mls of air and then try aspirating again.
<b>Very little or no aspirate can be obtained</b>	Place the patient in the left lateral position to allow pooling of gastric contents and then aspirate in 15-30 minutes.

**Consider x-ray confirmation if no aspirate can be obtained after trying the above methods**

#### WHEN TO CHECK AND RECORD NG TUBE POSITION

The positioning of Nasogastric tubes should be checked and documented (Appendix 1.2)

- Following initial tube insertion and
- Before starting the feed, each bolus feed or drug administration
- If the patient complains of discomfort or feed reflux into the throat or mouth or if there is evidence of coughing or SOB whilst feeding
- Following; vomiting or violent retching, severe coughing bouts, endotracheal tube or tracheotomy suctioning
- If the tube appears visibly longer or if measurement on the tube is not the same as measurement recorded in notes
- If the patient's vital signs indicate a reduced oxygen saturation, change in respiratory rate or distress
- **If there are concerns regarding possible misplacement of tube and feed is in progress or medications have just been given, the feed should be stopped immediately. Allow a minimum of one hour prior to testing pH gastric aspirate.**  
**Checking the tube after initial insertion only confirms where the tube tip is positioned at that particular time. It is very easy for this tube to become displaced during the course of the day.**

#### NG TUBE USAGE AND AFTERCARE

<b>Skin</b>	Dressings should be changed regularly; be aware of skin sensitivity. A hydrocolloid dressing may be used under the NG tube to protect the skin.
<b>Nasal care</b>	Where possible swap nostrils each replacement
<b>Tube blockage</b>	Gently squeeze the tube between two fingers. Attach an empty 20ml enteral syringe to the end of the tube and gently push and pull on the tube with the enteral syringe. <b>If in any doubt of the position of the tube then do not attempt to flush anything down the tube.</b> Remove tube if blockage cannot be resolved.

#### REPLACING NASOGASTRIC TUBES

Polyurethane tubes	Fine bore NG tubes	To be replaced when blocked or if any signs of nasal erosion or if time recommended by the manufacturers for safe use has lapsed.
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APPENDIX 1.2: FINE BORE NASOGASTRIC FEEDING TUBE POSITION RECORD (ADULTS)

**FINE BORE NASOGASTRIC FEEDING TUBE POSITION RECORD**

<b>PATIENT ID / STICKER</b>	<p>Fine Bore Nasogastric feeding tubes must be checked for correct position:</p> <ul style="list-style-type: none"> <li>● <b>Following initial tube insertion (AVPU, RR and O2 Saturation every 30 minutes for two hours)</b></li> <li>● Before putting anything down the tube including water flushes, feed or medication* (if a feed is not in progress*)</li> <li>● If there has been a break in feeding</li> <li>● If the patient complains of discomfort or feed reflux into the throat or mouth</li> <li>● If there is evidence of coughing or SOB whilst feeding, or change in oxygen saturation</li> <li>● Following vomiting or violent retching or severe coughing episodes</li> <li>● After suctioning</li> <li>● If there is any reason to believe the tube has moved eg. Change in measurement at the nostril.</li> </ul> <p>Daily checks of the dressing or bridle securing the NG should be done to prevent pressure areas Consider changing nostrils when replacing NG tubes, routine replacement should be considered at 6-8 weeks</p>		
<b>INSERTION</b>			
<b>Date tube inserted:</b>		<b>Consent obtained:</b> Y / N Risk Assessment completed: Y / N <b>If no, state why:</b>	
<b>Type:</b>	<b>Size:</b>	<b>NEX measurement:</b>	<b>First visible marker at nostril (cm):</b>
<b>Method used to confirm placement:</b>	<p><b>Gastric aspirate:</b>  <b>Aspirate obtained:</b> Yes / No <b>Patient taking PPIs?</b> Yes / No  <b>pH of aspirate:</b>  <b>pH checked by:</b>  <b>Confirmed by(if required):</b></p>		

**X-Ray required:** Yes /No

**Interpretation of X-ray:** Position of tube confirmed by (name of radiologist):

Date:                      Time:

Radiologist has confirmed tube position: Yes /No

OUTCOME: Placement of NGT confirmed as correct and safe for use: Yes / No

**Radiology report MUST have been seen and placed a validated report within the PACS system for sign off by medical staff and entry into patient notes. Under no circumstance can a 'Safe to Feed' instruction be accepted.**

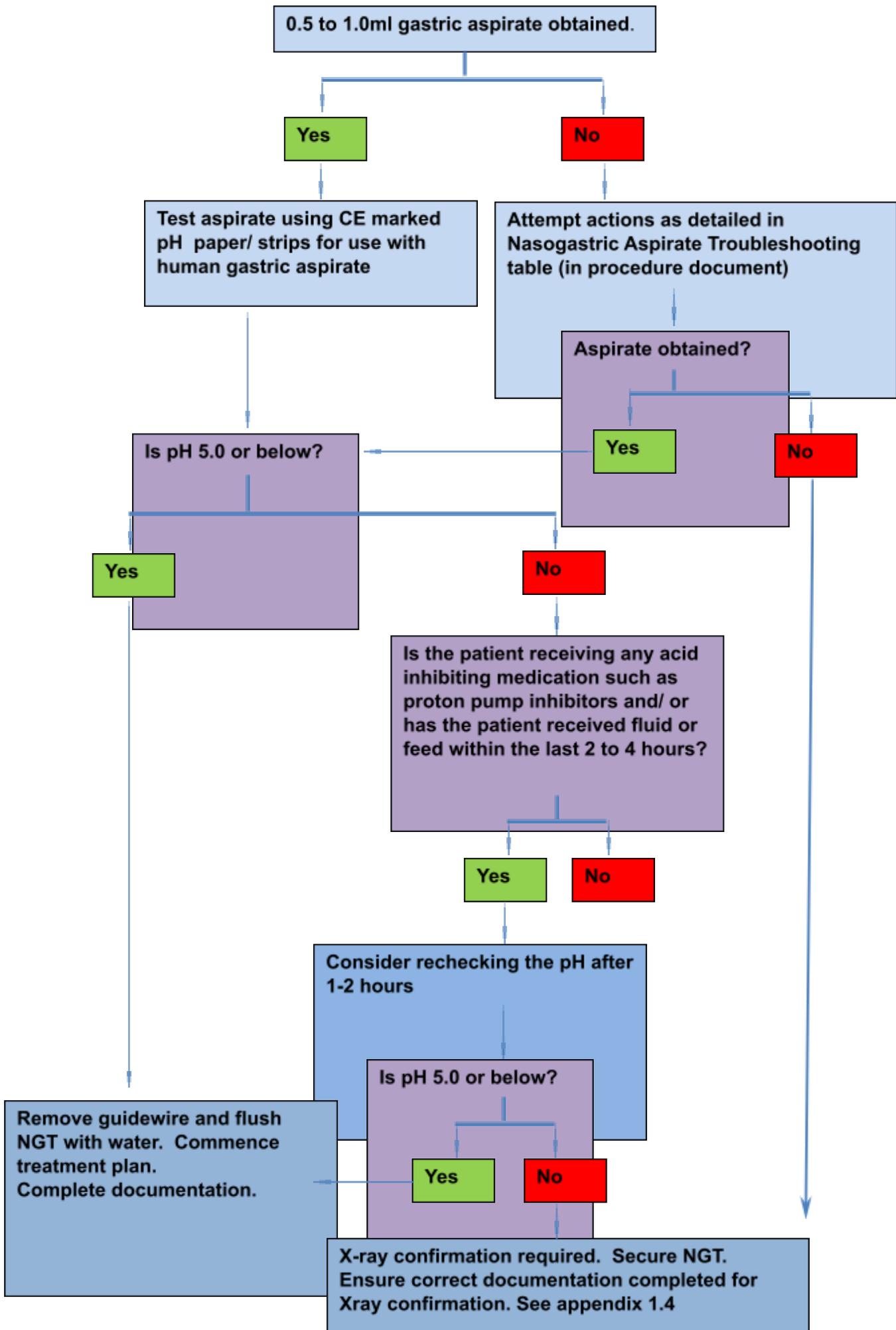
**Nasogastric Tube Feeding Record – ongoing position checks**

The NG Tube should be checked for correct placement at least once every 24 hours

<u>Date</u>	<u>Time</u>	<u>First visible marker (CM)</u>	<u>pH of gastric aspirate</u>	<u>Safe to use Y/N</u>	<u>Chest X-Ray required Y/N</u>	<u>Outcome e.g.</u> <ul style="list-style-type: none"> <li>● <u>pH aspirate not obtained</u></li> <li>● <u>Safe to use</u></li> <li>● <u>Additional checks made with details of confirmed results</u></li> <li>● <u>Escalation to medical team</u></li> <li>● <u>Chest X Ray requested</u></li> </ul>	<u>Other care given (✓)</u> <u>Dressing/Tape checked</u> <input type="checkbox"/> <u>Skin checked</u> <input type="checkbox"/> <u>Nasal Care given</u> <input type="checkbox"/> <u>Mouth care given</u> <input type="checkbox"/>	<u>Name and Signature</u>
							<u>Dressing/Tape checked</u> <input type="checkbox"/> <u>Skin checked</u> <input type="checkbox"/> <u>Nasal Care given</u> <input type="checkbox"/> <u>Mouth care given</u> <input type="checkbox"/>	
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							<u>Dressing/Tape checked</u> <input type="checkbox"/> <u>Skin checked</u> <input type="checkbox"/> <u>Nasal Care given</u> <input type="checkbox"/> <u>Mouth care given</u> <input type="checkbox"/>	

							<u>Nasal Care given</u> <input type="checkbox"/> <u>Mouth care given</u> <input type="checkbox"/>	
							<u>Dressing/Tape checked</u> <input type="checkbox"/> <u>Skin checked</u> <input type="checkbox"/> <u>Nasal Care given</u> <input type="checkbox"/> <u>Mouth care given</u> <input type="checkbox"/>	
							<u>Dressing/Tape checked</u> <input type="checkbox"/> <u>Skin checked</u> <input type="checkbox"/> <u>Nasal Care given</u> <input type="checkbox"/> <u>Mouth care given</u> <input type="checkbox"/>	
							<u>Dressing/Tape checked</u> <input type="checkbox"/> <u>Skin checked</u> <input type="checkbox"/> <u>Nasal Care given</u> <input type="checkbox"/> <u>Mouth care given</u> <input type="checkbox"/>	
							<u>Dressing/Tape checked</u> <input type="checkbox"/> <u>Skin checked</u> <input type="checkbox"/> <u>Nasal Care given</u> <input type="checkbox"/> <u>Mouth care given</u> <input type="checkbox"/>	
							<u>Dressing/Tape checked</u> <input type="checkbox"/> <u>Skin checked</u> <input type="checkbox"/> <u>Nasal Care given</u> <input type="checkbox"/> <u>Mouth care given</u> <input type="checkbox"/>	
							<u>Dressing/Tape checked</u> <input type="checkbox"/> <u>Skin checked</u> <input type="checkbox"/> <u>Nasal Care given</u> <input type="checkbox"/> <u>Mouth care given</u> <input type="checkbox"/>	
							<u>Dressing/Tape checked</u> <input type="checkbox"/> <u>Skin checked</u> <input type="checkbox"/> <u>Nasal Care given</u> <input type="checkbox"/> <u>Mouth care given</u> <input type="checkbox"/>	

**APPENDIX 1.3: (Adapted from OUH NG policy)**



## APPENDIX 1.4

1. There are two methods to confirm placement of a fine bore NG tube after insertion and a summary of the process is detailed in Appendix 1.1

1. **First line method after initial insertion:** pH Indicator Paper
2. **Second line method:** X-Ray Confirmation

X-ray imaging is not the first line method for placement confirmation. It should only be considered if other methods for the checking of placement have failed. If a placement device has been used to aid the insertion of the nasogastric tube, the methods used to confirm placement should still be followed. (NHS England 2013).

2. **First line method after initial insertion:** pH indicator paper:

pH indicator paper must be CE marked and intended to test human gastric aspirate. pH reading of 5 or below confirms gastric placement so safe to use.

pH indicator strips should be stored clean and dry and in accordance with the brand specific instructions.

An aspirate of at least 0.5ml to 1ml (NPSA, 2005) should be obtained using a 50ml enteral syringe and the aspirate dropped onto the pH indicator paper. A pH reading of 5.0 or below is considered to confirm that the nasogastric tube is correctly positioned and therefore safe to use.

**Any gastric aspirate pH reading more than 5.0 must be checked using second line method unless a Risk Assessment has considered PPIs**

Appendix 1.3 details a decision tree with regards to gastric aspirate and this is adapted from the BAPEN decision tree resources, November 2012 <http://www.bapen.org.uk/pdfs/decision-trees/naso-gastric-tube-insertion.pdf>

Documentation following pH testing should include:

- Whether aspirate was obtained.
- What the aspirate pH was.
- Who checked the aspirate pH
- When it was confirmed to be safe to administer feed and/or medication.

For patients receiving proton pump inhibitors (PPI) if a pH above 5.0 is obtained following initial placement a chest x-ray must be performed to confirm the position of the fine bore NG tube. The chest x-ray must be reported on by the radiologist and documented in the medical notes by the doctor. The pH should be noted to be the baseline for that patient and documented by the consultant. The consultant must have completed a risk assessment for this patient.

Nothing (other than air) should be instilled or flushed down the nasogastric tube until the position of the tube is confirmed as correct. (NPSA, 2012).

3. **Second line method:** X-Ray confirmation:

An x-ray request must be completed and clearly state the purpose of the x-ray, which is, to establish the correct position of the fine bore NG tube for the purpose of feeding and/or enteral drug administration.

It is the radiographer's responsibility to ensure that the nasogastric tube can be clearly seen on the x-ray by:

Ensuring the exposure of the x-ray is adjusted to allow the NG tube to be visible to the bottom of the film;

Ensure the film is centred lower than normal for a chest x-ray so that it shows the abdomen as far as possible below the diaphragm, the x-ray film must show the bottom of both hemi-diaphragms in the midline.

Documentation following x-ray should include:

- Who authorised the x-ray
- The person who confirmed the position of the fine bore NG tube. This person must be deemed competent to do so
  - Confirmation that any x-ray viewed was the most current x-ray for the correct patient
- How the placement was interpreted and clear instructions as to required action, i.e. the fine bore NG tube bisects the carina and the tip is seen below the diaphragm so is safe to be used for feeding
- Documentation of time of review of fine bore NG feeding tube position in patient's notes

Whether an incidental finding or otherwise, it is the responsibility of the person interpreting the x-ray to ensure the appropriate action is taken to prevent a misplaced fine bore NG tube being used. Where a misplaced tube is identified the person must immediately inform the named nurse or doctor responsible for the patient to remove the fine bore NG tube. This decision should be documented in the patient's medical record.

Any NG tubes identified to be in an incorrect position should immediately be removed by staff competent to do this.

The medical practitioner, who requested the chest x-ray (or the patients' medical ward doctor), or the patient's nurse should check that radiology has reported on the position of the fine bore nasogastric feeding tube and he/she must document confirmation of the radiology report in the patient medical record.

Prior to use for feeding, fluid or medication administration, the named nurse checks that the x-ray report has been documented in the medical record and that there is documented confirmation that the fine bore NG feeding tube is safe to use.

If confirmation of NGT position is reported verbally, staff must wait for the written report before feeding commences.

Even if an x-ray has been completed and reported on that has confirmed correct placement of the nasogastric tube, there should be a repeat attempt to gain gastric aspirate immediately prior to use of the tube.

X-rays will only confirm the position of the nasogastric tube at the time of imaging; caution should therefore be exercised if there is suspicion that the tube has migrated between the time of the x-ray and the time of use.

#### **Confirmation of Placement: Methods That Should Never be Used**

4. The following techniques are those that should not be used in order to confirm if a nasogastric tube is correctly placed.

**The 'whoosh test' – injecting air into the tube and auscultating the stomach.**

**Use of litmus paper to determine acid/alkaline state of aspirate**

**Interpretation based on the appearance of the aspirates**

**Monitoring of bubbling at the proximal end of the tube**

**Injecting of water into the feeding tube**

## **The absence of respiratory distress**

### **Radiology interpretation by anyone who is not a radiologist**

#### **Initial Checks and Monitoring**

5. Following placement and initial use of a fine bore nasogastric feeding tube, there must be frequent monitoring and observation of the patient. This is to help ensure early detection of problems and enable prompt intervention in cases of tube misplacement.

Monitoring and observation should be for a minimum of two hours of at least 30 minute intervals unless the patient's clinical condition requires this to be completed more frequently. Elements to be monitored should include:

Respiratory rate

Oxygen saturation

AVPU

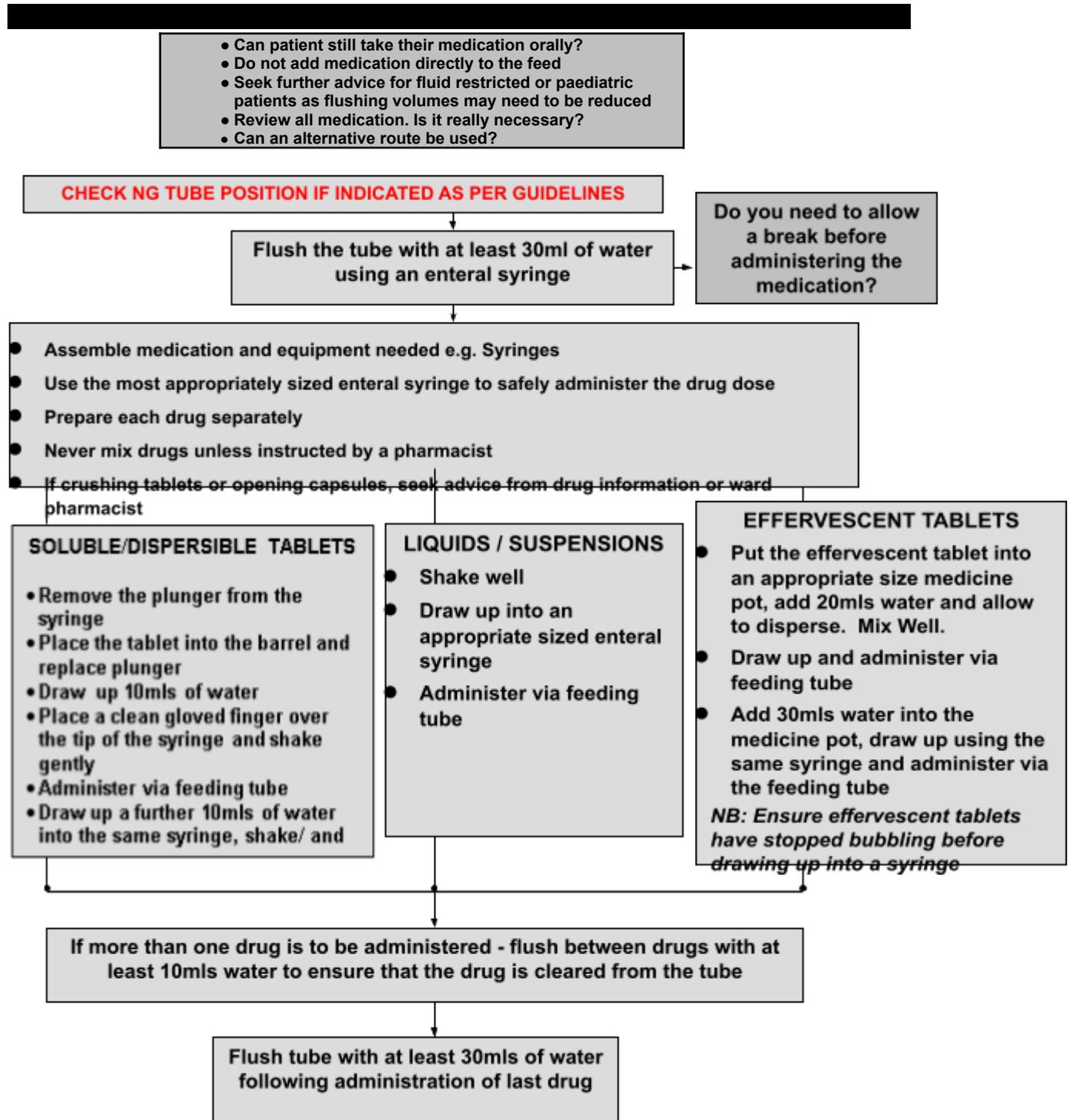
Observations

6. Tube length should be recorded on a daily basis at minimum and prior to administration of any liquid via the nasogastric feeding tube.

On-going vital signs monitoring should continue in accordance with Track and Trigger scores or should be no less frequent than every 12 hours. Note that "BD" or "twice daily" observations should be evenly spaced out over the 24 hour period.

**In addition, AVPU, Respiratory Rate and Pulse Oximetry should be monitored every 30 minutes for the first two hours after insertion of a new nasogastric tube.**

## APPENDIX 1.5



Please contact medicines information on **01865 904365**  
[Med.Info@oxfordhealth.nhs.uk](mailto:Med.Info@oxfordhealth.nhs.uk) for specific information regarding administration and prescribing of drugs via enteral feeding tubes.

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## APPENDIX 1.6

Name..... Assessor.....

Role / Band..... Level of competency expected of role: Competent / Experienced / Senior

**Competency Insertion of naso-gastric tubes (NGT's)**

**Competency Statement; To be able to insert and check the position of NGT's**

*Initially please self-assess your current level of competence in relation to the competency statements outlined. You may feel that you are at different levels for different components of this competency. For example you may feel that you are safe to practice autonomously in some aspects of the competency but only understand basic principles for other elements. Initial and date where you feel that you are for each statement. This information will help you focus your learning needs. Agree with your assessor a timeframe to complete the competency. At the end of this period reassess your competence and ask your assessor to do the same*

- ❖ Complete self-assessment regarding this competency on day 1.
- ❖ At agreed date re-assess your level of knowledge / skills / attitude. Competencies must be reassessed yearly as a minimum. In clinical areas where NGT's are not routinely used, it may be necessary to assess competency more regularly (to be agreed with your manager).
- ❖ Assessor to indicate level of competency achieved at negotiated end point

The NMC code (2015) states: As a professional, you are personally accountable for actions and omissions in your practice and must always be able to justify your decisions". For the full code: [The code in full | Nursing and Midwifery Council](#)

<b>Link to KSF dimensions and levels</b>	<b>1. Understands basic principles</b>	<b>3. Consistently able to demonstrate principles and apply to practice</b>	<b>3. Safe to practice unsupervised</b>	<b>4. Autonomous Clinical decision making</b>	<b>Negotiated timeframe for successful completion</b>
	<b>Self-assessment At induction</b>	<b>Following Training</b>	<b>Following Assessment</b>	<b>By first 1 year PDR.</b>	
<p><b>Knowledge required</b></p> <ul style="list-style-type: none"> <li>● Knowledge of reasons why an individual may require tube feeding</li> <li>● Knowledge of the different types of tube feeding and the rationale behind using a particular type of feeding tube</li> <li>● Knowledge and anatomy of the gastro-intestinal tract</li> <li>● Know the type of NG tube to use and its limitations eg. how long it can stay in situ for</li> <li>● Know and be able to access the policy for insertion and checking of nasogastric tubes</li> <li>● Know and be able to access Oxfordshire's adult tube feeding guidelines</li> <li>● Know how to correctly insert a NG tube</li> <li>● Know what to do if resistance is felt during insertion</li> <li>● Know what to do if a patient is showing signs of distress or complains of ear pain</li> <li>● Know how to correctly check NG tube position</li> <li>● To make informed decisions on whether a tube is correctly positioned</li> <li>● Know what to try if no aspirate can be obtained</li> <li>● Explain rational for requesting x-rays with regard to NG position.</li> <li>● Infection control policies</li> </ul> <p><a href="#">Home - Policies &amp; Procedures</a></p>					

<p><b>Link to KSF dimensions and levels</b></p>	<p><b>1. Understands basic principles</b></p>	<p><b>3. Consistently able to demonstrate principles and apply to practice</b></p>	<p><b>3. Safe to practice unsupervised</b></p>	<p><b>4. Autonomous Clinical decision making</b></p>	<p><b>Negotiated timeframe for successful completion</b></p>
	<p><b>Self-assessment At induction</b></p>	<p><b>Following Training</b></p>	<p><b>Following Assessment</b></p>	<p><b>By first 1 year PDR.</b></p>	
<ul style="list-style-type: none"> <li>● Understand need to gain consent for the procedure and what to do if the patient does not have the capacity to give consent</li> <li>● To be aware of all MDA alerts</li> <li>● Is aware and understands the implications of never events in relation to NG tubes</li> <li>● <a href="#">Never Events - NRLS</a></li> </ul>					
<p><b>Skills required</b></p> <ul style="list-style-type: none"> <li>● To put knowledge acquired into practice</li> <li>● To be able to gather all the necessary equipment</li> <li>● To be able to explain procedure to patient and gain consent</li> <li>● To be able to position patient correctly</li> <li>● To be able to measure NEX measurement correctly</li> <li>● To be able to lubricate the tube appropriately</li> <li>● To Insert the tube correctly</li> <li>● To confirm placement correctly</li> <li>● To secure the tube appropriately</li> <li>● To check the position of the tube</li> <li>● To be able to flush the tube with appropriate liquid, syringe and technique</li> <li>● To monitor skin integrity and dressing securing the tube</li> <li>● To share knowledge with colleagues</li> <li>● To able to reassess/evaluate in a timely fashion</li> <li>● Able to record information and intervention accurately in patient records</li> </ul>					

<p><b>Link to KSF dimensions and levels</b></p>	<p><b>1. Understands basic principles</b></p>	<p><b>3. Consistently able to demonstrate principles and apply to practice</b></p>	<p><b>3. Safe to practice unsupervised</b></p>	<p><b>4. Autonomous Clinical decision making</b></p>	<p><b>Negotiated timeframe for successful completion</b></p>
<p><b>Attitude/Behaviour required</b></p> <ul style="list-style-type: none"> <li>• To be aware of gaps in knowledge and to act upon it</li> <li>• To demonstrate a sensitive approach to the psychological needs of the patient</li> <li>• To take a responsible attitude to managing finite resources.</li> </ul>	<p><b>Self-assessment At induction</b></p>	<p><b>Following Training</b></p>	<p><b>Following Assessment</b></p>	<p><b>By first 1 year PDR.</b></p>	
<p><b>Other resources</b></p> <ul style="list-style-type: none"> <li>• Dietitians / CNS – Enteral feeding at JRH</li> <li>• Colleagues/ ward manager / clinical development nurses</li> <li>• Practice Development Nurses</li> </ul> <p><b>Related Policies :</b>  <b>Incident reporting policy RMHS1:</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Risk%20Management%20(inc%20Health%20and%20Safety)/Incident%20Reporting%20and%20Management%20Policy%20Incident%20Reporting%20SIRI%20Procedure%20(RMHS1).pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Risk%20Management%20(inc%20Health%20and%20Safety)/Incident%20Reporting%20and%20Management%20Policy%20Incident%20Reporting%20SIRI%20Procedure%20(RMHS1).pdf</a>  <b>Infection Control policy IF1:</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Infection%20Control/IF1%20Infection%20Control%20May2011.pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Infection%20Control/IF1%20Infection%20Control%20May2011.pdf</a>  <b>Consent to Treatment CP1:</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical</a></p>					

<b>Link to KSF dimensions and levels</b>	<b>1. Understands basic principles</b>	<b>3. Consistently able to demonstrate principles and apply to practice</b>	<b>3. Safe to practice unsupervised</b>	<b>4. Autonomous Clinical decision making</b>	<b>Negotiated timeframe for successful completion</b>
	<b>Self-assessment At induction</b>	<b>Following Training</b>	<b>Following Assessment</b>	<b>By first 1 year PDR.</b>	
<p><a href="#">Clinical Risk Assessment and Management CP16</a>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Clinical%20Risk%20Assessment%20and%20Management%20(CP16).pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Clinical%20Risk%20Assessment%20and%20Management%20(CP16).pdf</a></p> <p><b>Medical Devices Management Policy and Procedures CP08</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Medical%20Devices%20Policy%20and%20Guidelines%20(CP08).pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Medical%20Devices%20Policy%20and%20Guidelines%20(CP08).pdf</a></p> <p><b>Privacy and Dignity CP51:</b><a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Privacy%20and%20Dignity%20(CP51).pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Privacy%20and%20Dignity%20(CP51).pdf</a></p>					

The policies identified within this competency framework are not exhaustive and clinicians should have a working knowledge of all relevant policies for required competency. [Home - Policies & Procedures](#)

Links to Care Quality Commission Outcomes: 1, 2, 4,7,8,11,12, 14, 16,

<b>Clinicians Comments</b>	<b>Assessors Comments</b>
<b>Signature</b>	<b>Signature</b>
<b>Date</b>	<b>Date</b>
<b>Date of competency/Training review</b>	

**Subsequent Review Period**

<b>Clinicians Comments</b>	<b>Assessors Comments</b>
<b>Signature</b>	<b>Signature</b>
<b>Date</b>	<b>Date</b>
<b>Date of competency/Training review</b>	

**APPENDIX 1.7**

**Competency framework for checking Naso-gastric tube position in Adults.**

Name..... Assessor.....

Role / Band..... Level of competency expected of role: **Competent / Experienced / Senior**

.....

**Competency Checking of naso-gastric tube (NGT) position**

**Competency Statement; To be able to check the position of NGT's and know what to do if unable to obtain correct aspirate**

*Initially please self-assess your current level of competence in relation to the competency statements outlined. You may feel that you are at different levels for different components of this competency. For example you may feel that you are safe to practice autonomously in some aspects of the competency but only understand basic principles for other elements. Initial and date where you feel that you are for each statement. This information will help you focus your learning needs. Agree with your assessor a timeframe to complete the competency. At the end of this period reassess your competence and ask your assessor to do the same*

- ❖ *Complete self-assessment regarding this competency on day 1.*
- ❖ *At agreed date re-assess your level of knowledge / skills / attitude. This must be done at least yearly but in areas where NGT's are not routinely used, this may need to be more regularly (to be agreed with your manager).*

❖ *Assessor to indicate level of competency achieved at negotiated end point*

The NMC code (2015) states: As a professional, you are personally accountable for actions and omissions in your practice and must always be able to justify your decisions”. For the full code: [The code in full | Nursing and Midwifery Council](#)

<b>Link to KSF dimensions and levels</b>	<b>1. Understands basic principles</b>	<b>2. Consistently able to demonstrate principles and apply to practice</b>	<b>3. Safe to practice unsupervised</b>	<b>4. Autonomous Clinical decision making</b>	<b>Negotiated timeframe for successful completion</b>
	<b>Self-assessment At induction</b>	<b>Following Training</b>	<b>Following Assessment</b>	<b>By first 1 year PDR.</b>	
<p><b>Knowledge required</b></p> <ul style="list-style-type: none"> <li>● Knowledge of reasons why an individual may require tube feeding</li> <li>● Knowledge of the different types of tube feeding and the rationale behind using a particular type of feeding tube</li> <li>● Knowledge and anatomy of the gastro-intestinal tract</li> <li>● Know the type of NG tube to use and its limitations eg. how long it can stay in situ for</li> <li>● Know and be able to access the policy for insertion and checking of nasogastric tubes.</li> </ul> <p>Know and be able to access Oxfordshire’s adult tube feeding guidelines</p> <ul style="list-style-type: none"> <li>● Know how to correctly check NG tube position</li> <li>● To make informed decisions on whether a tube is correctly positioned</li> <li>● Know what to try if no aspirate can be obtained</li> <li>● Explain rationale for requesting x-rays with regard to NG position.</li> <li>● Infection control policies</li> </ul>					

<b>Link to KSF dimensions and levels</b>	<b>1. Understands basic principles</b>	<b>2. Consistently able to demonstrate principles and apply to practice</b>	<b>3. Safe to practice unsupervised</b>	<b>4. Autonomous Clinical decision making</b>	<b>Negotiated timeframe for successful completion</b>
	<b>Self-assessment At induction</b>	<b>Following Training</b>	<b>Following Assessment</b>	<b>By first 1 year PDR.</b>	
<ul style="list-style-type: none"> <li>● Understand need to gain consent for the procedure and what to do if the patient does not have the capacity to give consent</li> <li>● Is aware and understands the implications of never events in relation to NG tubes</li> </ul> <a href="#">Never Events - NRLS</a>					
<p><b>Skills required</b></p> <ul style="list-style-type: none"> <li>● To put knowledge acquired into practice</li> <li>● To be able to gather all the necessary equipment</li> <li>● To be able to explain procedure to patient and gain consent</li> <li>● To be able to position patient correctly</li> <li>● To check the position of the tube</li> <li>● To be able to flush the tube with appropriate liquid, syringe and technique</li> <li>● To monitor skin integrity and dressing securing the tube</li> <li>● To share knowledge with colleagues</li> <li>● To be able to reassess/evaluate in a timely fashion</li> <li>● Able to record information and intervention accurately in patient records.</li> </ul>					
<p><b>Attitude/Behaviour required</b></p> <ul style="list-style-type: none"> <li>● To be aware of gaps in knowledge and to act upon it</li> <li>● To demonstrate a sensitive approach to the psychological needs of the patient</li> <li>● To take a responsible attitude to managing finite resources.</li> <li>● To adhere to all relevant infection control policies.</li> </ul>					

<b>Link to KSF dimensions and levels</b>	<b>1. Understands basic principles</b>	<b>2. Consistently able to demonstrate principles and apply to practice</b>	<b>3. Safe to practice unsupervised</b>	<b>4. Autonomous Clinical decision making</b>	<b>Negotiated timeframe for successful completion</b>
	<b>Self-assessment At induction</b>	<b>Following Training</b>	<b>Following Assessment</b>	<b>By first 1 year PDR.</b>	
<a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Infection%20Control/Procedures/Hand%20Hygiene%20Procedure%20Mar2011.pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Infection%20Control/Procedures/Hand%20Hygiene%20Procedure%20Mar2011.pdf</a>					
<p><b>Other resources</b></p> <ul style="list-style-type: none"> <li>•Dietitians / CNS – Enteral feeding at JRH</li> <li>•Colleagues/ ward manager</li> </ul> <p><b>Related Policies :</b></p> <p><b>Incident reporting policy RMHS1:</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Risk%20Management%20(inc%20Health%20and%20Safety)/Incident%20Reporting%20and%20Management%20Policy%20Incident%20Reporting%20SIRI%20Procedure%20(RMHSI).pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Risk%20Management%20(inc%20Health%20and%20Safety)/Incident%20Reporting%20and%20Management%20Policy%20Incident%20Reporting%20SIRI%20Procedure%20(RMHSI).pdf</a></p> <p><b>Infection Control policy IF1:</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Infection%20Control/IF1%20Infection%20Control%20May2011.pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Infection%20Control/IF1%20Infection%20Control%20May2011.pdf</a></p> <p><b>Consent to Treatment CP1:</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Consent%20to%20Treatment%20(CP19)%20Dec2010.pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Consent%20to%20Treatment%20(CP19)%20Dec2010.pdf</a></p> <p><b>Clinical Risk Assessment and Management CP16</b></p>					

<b>Link to KSF dimensions and levels</b>	<b>1. Understands basic principles</b>	<b>2. Consistently able to demonstrate principles and apply to practice</b>	<b>3. Safe to practice unsupervised</b>	<b>4. Autonomous Clinical decision making</b>	<b>Negotiated timeframe for successful completion</b>
	<b>Self-assessment At induction</b>	<b>Following Training</b>	<b>Following Assessment</b>	<b>By first 1 year PDR.</b>	
<p> <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Clinical%20Risk%20Assessment%20and%20Management%20(CP16).pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Clinical%20Risk%20Assessment%20and%20Management%20(CP16).pdf</a>  <b>Medical Devices Management Policy and Procedures CP08</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Medical%20Devices%20Policy%20and%20Guidelines%20(CP08).pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Medical%20Devices%20Policy%20and%20Guidelines%20(CP08).pdf</a>  <b>Privacy and Dignity CP51:</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Privacy%20and%20Dignity%20(CP51).pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Privacy%20and%20Dignity%20(CP51).pdf</a>   <b>Related Policies</b>  <b>Incident reporting policy RMHS1:</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Risk%20Management%20(inc%20Health%20and%20Safety)/Incident%20Reporting%20and%20Management%20Policy%20Incident%20Reporting%20SIRI%20Procedure%20(RMHSI).pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Risk%20Management%20(inc%20Health%20and%20Safety)/Incident%20Reporting%20and%20Management%20Policy%20Incident%20Reporting%20SIRI%20Procedure%20(RMHSI).pdf</a>  <b>Infection Control policy IF1:</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide</a> </p>					

<b>Link to KSF dimensions and levels</b>	<b>1. Understands basic principles</b>	<b>2. Consistently able to demonstrate principles and apply to practice</b>	<b>3. Safe to practice unsupervised</b>	<b>4. Autonomous Clinical decision making</b>	<b>Negotiated timeframe for successful completion</b>
	<b>Self-assessment At induction</b>	<b>Following Training</b>	<b>Following Assessment</b>	<b>By first 1 year PDR.</b>	
<p><a href="#">%20Clinical%20Policies/Infection%20Control/IF1%20Infection%20Control%20May2011.pdf</a></p> <p><b>Consent to Treatment CP1:</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Consent%20to%20Treatment%20(CP19)%20Dec2010.pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Consent%20to%20Treatment%20(CP19)%20Dec2010.pdf</a></p> <p><b>Clinical Risk Assessment and Management CP16</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Clinical%20Risk%20Assessment%20and%20Management%20(CP16).pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Clinical%20Risk%20Assessment%20and%20Management%20(CP16).pdf</a></p> <p><b>Medical Devices Management Policy and Procedures CP08</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Medical%20Devices%20Policy%20and%20Guidelines%20(CP08).pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Medical%20Devices%20Policy%20and%20Guidelines%20(CP08).pdf</a></p> <p><b>Privacy and Dignity CP51:</b>  <a href="http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Privacy%20and%20Dignity%20(CP51).pdf">http://obmhintranet.obmh.nhs.uk/pp/Documents/Clinical%20policies%20(from%201st%20April%202011)/Trust%20Wide%20Clinical%20Policies/Privacy%20and%20Dignity%20(CP51).pdf</a></p>					

The policies identified within this competency framework are not exhaustive and clinicians should have a working knowledge of all relevant policies for required competency. [Home - Policies & Procedures](#)

Links to Care Quality Commission Outcomes: [1](#), [2](#), [4](#), [7](#), [8](#), [11](#), [12](#), [14](#), [16](#),

<b>Clinicians Comments</b>	<b>Assessors Comments</b>
<b>Signature</b>	<b>Signature</b>
<b>Date</b>	<b>Date</b>
<b>Date of competency/Training review</b>	

**Subsequent Review Period**

<b>Clinicians Comments</b>	<b>Assessors Comments</b>
<b>Signature</b>	<b>Signature</b>
<b>Date</b>	<b>Date</b>
<b>Date of competency/Training review</b>	

## Full Equality Impact Assessment Form for Adults

This form is an Equality Impact Assessment Form. It is used to review services and policies to ensure fair and consistent services for staff, service users and carers. It is a legal duty to prevent discrimination.

The form consists of two parts. Part 1 is screening to see if the policy or service requires a full assessment. It is through this screening process that you can find out whether the policy or service requires a Part 2.

Part 1

Equality Impact Assessment	
<b>Service Area:</b> Oxford Health NHS Trust	<b>Date:</b>
<b>Title of policy, strategy or service :</b> Policy and procedure for the Insertion, Use and Care of Fine Bore Nasogastric Feeding Tubes	

<b>Short description of policy, strategy or service:</b> Describe how adult patients in the Oxford Health NHS Foundation Trust will receive safe and effective Nasogastric (NG) feeding. It sets staff roles and responsibilities and describes correct insertion technique, correct confirmation of NG tube position, continued monitoring, documentation and care of patients with fine bore nasogastric tubes.
--

<b>What is the likely positive or negative impact on people in the following groups?</b>
Older or younger people The policy does not include paediatrics. For adults, the policy does not distinguish between individual's ages. This policy will ensure safe and effective fine bore Nasogastric tube use and therefore reduce the likelihood of harm
People with disabilities This will ensure safe and effective fine bore Nasogastric tube use and therefore reduce the likelihood of harm
People from different ethnic/cultural backgrounds (including those who do not speak English as a first language) This will ensure safe and effective fine bore Nasogastric tube use and therefore reduce the likelihood of harm
Men, women or transgender people The policy does not distinguish between individuals relating in gender. This policy will ensure safe and effective fine bore Nasogastric tube use and therefore reduce the likelihood of harm
People with different religious beliefs or no religious beliefs The policy does not distinguish between individuals with differing religious beliefs. This policy will ensure safe and effective fine bore Nasogastric tube use and therefore reduce the likelihood of harm

Gay, lesbian, bisexual or heterosexual people

The policy does not distinguish between individuals of differing sexual orientation. This policy will ensure safe and effective fine bore Nasogastric tube use and therefore reduce the likelihood of harm

People from a different socio-economic background

The policy does not distinguish between individuals from differing socio-economic backgrounds. This policy will ensure safe and effective fine bore Nasogastric tube use and therefore reduce the likelihood of harm

### **Evidence**

What is the evidence for your answers above?

The use of fine bore nasogastric tubes pose a significant risk to all service users (Patient Safety Alert NPSA/2011/PSA002) and therefore appropriate guidance in the correct insertion technique, correct confirmation of NG tube position, continued monitoring, documentation and care of patients with fine bore nasogastric tubes are required to be in place.

What does available research say?

Significant risk and likelihood of harm caused by misplaced nasogastric feeding tubes in adults

What further research would be needed to fill the gaps in understanding the potential difficulties or known effects of the policy?

NPSA have reported through the alerts of the dangers and advised of safe systems of work

Have you thought about consulting/researching this gap? What would you need?

This would not be the best use of time in light of the NPSA findings and reports.

Does the policy need a Full Equality Impact Assessment? No

*(Answer yes to this if evidence has shown you that there will be a significant positive or negative impact on certain groups. If the answer is no then please attach this to your policy/document and send it for sign off with at the same time as the policy or document)*

Part 2

**Evidence – please give evidence on how the policy or service is likely to have a significant impact (either or positive or negative) on the below.**

Race & ethnicity

Gender

Age

Disability

Sexual orientation

Religion or belief

Other

**Consult Formally**

Who needs to be consulted

Has there been a consultation which would give the information needed?

Which types of evidence have been gained (qualitative/quantitative)

**Changes to policy/service**

If the evidence shows a likely negative impact will the policy/service still go ahead?

If the policy or service is likely to have a negative impact what changes will be made to minimise this impact?

What impact will the policy/service have on promoting equality and eliminating discrimination?

How will you maximise this impact?

Action Plan

Action to improve equality on policy/service	Person Responsible	Lead responsible	Date of plan

### Full Assessment checklist

- ✓ Screening process indicates that full impact assessment is required
- ✓ Team identified to undertake EIA
- ✓ Full impact assessment undertaken using relevant sources of evidence
- ✓ Draft EIA and policy circulated to stakeholders for further consultation and comment
- ✓ Amendments incorporated in the final policy
- ✓ Action plan from EIA agreed with team
- ✓ Robust reporting and monitoring systems are established to reassure any continuing differential impact
- ✓ Service/policy EIA sent to appropriate committee for validation and ratification
- ✓ Copy of EIA and policy sent to Equality and Diversity Lead for publication
- ✓ Document management systems in place to collate evidence from implementation in preparation for next review date.

## Appendix 2.1 Procedure for Insertion and after care of a Fine Bore Nasogastric Feeding Tube in Children and Infants

<b>FINE BORE NASOGASTRIC TUBES</b>	
NASOGASTRIC TUBES (NG TUBES) CAN BE PASSED BY QUALIFIED HEALTHCARE PROFESSIONALS, PATIENTS, PARENTS, AND CARERS WHO HAVE RECEIVED SPECIFIC TRAINING AND ARE COMPETENT.	
<b>EQUIPMENT NEEDED FOR INSERTION OF A FINE BORE NASOGASTRIC TUBE</b>	
Fine bore nasogastric tube correct size for patient	
Non sterile gloves	Apron
CE marked pH indicator strips	20-50ml sterile enteral syringe
Pot of sterile water	Tissues or wipes
Hypoallergenic tape	Duoderm
<b>PROCEDURE FOR INSERTION OF A FINE BORE NASOGASTRIC FEEDING TUBE</b>	
1	Explain the procedure to the patient/carer
2	Ensure the patient/carers are in agreement with the procedure and that verbal/informed consent is gained and documented in notes.
3	If possible arrange a signal by which the patient can communicate if they want to stop e.g. raising their hand, if this is not possible look for cues.
4	Assemble the equipment required. Wash hands with soap and water, rinse and dry well. Put on gloves/apron.
5	Support in an upright (semi-recumbent) position on a bed or chair, in the case of a younger child they may be placed on a parents lap, or an infant swaddled in a blanket
6	Tilt the head forwards as tolerated supporting with pillows
7	Examine the nasal passages for any deformity/obstructions.
8	Select the appropriate distance on the tube by measuring. Infants and children: From the bridge of the nose to the earlobe, then from the earlobe to the xiphisternum. Make a marker (NEX measurement)
9	If guidewire present, ensure it moves freely within the tube.
10	<b>DO NOT FLUSH TUBE WITH ANYTHING PRIOR TO CONFIRMING PLACEMENT FOLLOWING NPSA ALERT. NPSA/2011/PSA002</b>
11	Lubricate the proximal end of the tube with sterile/cooled boiled water, <b>do not use KY-Jelly</b>
12	Gently pass the tube into the patient's nostril, advancing it along the floor of the nasopharynx to the oropharynx.
13	Never advance the tube against resistance, if the child shows signs of breathlessness or severe coughing remove immediately.
14	Lightly secure the tube with tape or ask an assistant to hold the tube in place until the position has been checked
15	To check position of tube: Attach a 20 ml enteral syringe to end of tube and draw back to gain a small sample of gastric fluid using CE marked pH indicator strips. Using the colour guide check the aspirate is 5.0 or less. <b>If no aspirate can be obtained see section "If NG aspirate cannot be obtained"</b>
16	If aspirate obtained with pH less than 5.0 flush lumen with 5-10ml of water depending on size of the child and if applicable remove the guide wire and discard.
17	Secure the tube to the cheek using hypoallergenic tape
18	Document: Date inserted, type and size of tube, any problems with insertion, measurement of the tube (NEX measurement), pH reading on indicator paper
<b>DURING THE NG TUBE INSERTION BE AWARE THAT</b>	
1	If any resistance is felt, withdraw the tube and try again in a slightly different direction or use the other nostril. Gentle rotation of the tube can be helpful. If the patient shows signs of distress e.g. gasping,

- 1 coughing or cyanosis, remove the tube immediately.
- 2 If the patient complains of sudden onset of ear pain the tube should be removed immediately. Distress or ear pain may indicate the trachea.
- 3 Signs of respiratory distress may be absent in patients with a poor gag reflex

**CONFIRMING NG TUBE POSITION**

- 1 Aspirate a sample of fluid using a 20ml or 50ml enteral syringe with gentle suction.
- 2 Place aspirate onto pH paper and check for acidic reaction
- 3 Gastric contents should have a pH below 5.0, if pH is below 5.0 proceed to feed

**If pH >5.0, DO NOT FEED. Consider:**

- 1. Try another aspirate. If still greater than 5.0, consider testing tube/x-raying tube at the JR/Horton. If pH's are consistently above 5.0, the Paediatrician will need to write a clear instruction of maximum pH and this instruction needs to be circulated to all teams and this instruction regularly reviewed.

**Follow Gastric Aspirate Decision Tree 2.3**

**IF NO ASPIRATE IS OBTAINED**

Consider the following to obtain aspirate..

- 1. Turn child on to left side
- 2. Gently push 1-5ml air into NG tube by syringe..
- 3. Wait for 15-30 mins before aspirating again.
- 4. Give mouthcare/offer dummy
- 5. Do not give water to flush.

**WHEN TO CHECK AND RECORD THE NG TUBE POSITION**

The positioning of NG tubes should be checked and documented on Feed chart for Infants and Children.

See appendix 2.2

- 1. Following initial tube insertion
- 2. Before starting the feed, each bolus feed or drug administration
- 3. If patient is on continuous feeds every time the container is changed (4-8 hourly) depending on feed
- 4. If the patient complains of discomfort or feed reflux into the throat or mouth or if there is evidence of coughing or SOB whilst feeding
- 5. Following: vomiting or violent retching, severe coughing bouts, endotracheal tube or tracheotomy suctioning
- 6. If the tube appears visibly longer or if measurement on tube is not the same as measurement recorded in the notes.

**Checking the tube after initial insertion only confirms where the tube tip is positioned at that particular time. It is very easy for this tube to become displaced during the course of the day**

**NG TUBE USAGE AND AFTERCARE**

If securing tape should become loose or starts to peel away from the face it should be replaced as soon as possible to prevent the tube from falling out. Hydrocolloid dressing may be used under the NG tube to protect the skin.

Where possible swap nostrils at each replacement.

**TUBE BLOCKAGE**

Gently squeeze the tube between two fingers. Attach an empty 20ml syringe to the end of the tube and gently push and pull on the syringe, then do NOT attempt to push anything down the tube. Remove tube if blockage cannot be resolved.

#### REPLACING NG TUBES

Polyurethane tubes should be changed as per manufacturer's instructions.

#### REMOVAL OF THE NG TUBE

Stop feed 2 hours prior to removal if possible

Ensure patient/carer are appropriately prepared

Collect equipment: Non sterile gloves, kidney dish for dirty tube, tissues, appeal (to remove tape)

Wash hands, put on gloves

Remove tube smoothly and swiftly, reassuring patient throughout

#### FEED HANG TIMES

A hang time of four to eight hours is acceptable for commercially sterile, ready-to-feed products when carefully poured from the packaged container into a tube-feeding setup.

A tube with these types of feed can be disconnected from the patient and left to hang between feeds as long as the dust cap is kept on, and it does not hang for a period longer than 8 hours. The giving set must also be changed every 8 hours.

Any feeds that are reconstituted with water or modified in any way should be prepared using aseptic technique and should hang for no more than four hours. This includes concentrated liquid and powder formulas, fortified human milk, and breast milk. If any additives are added.

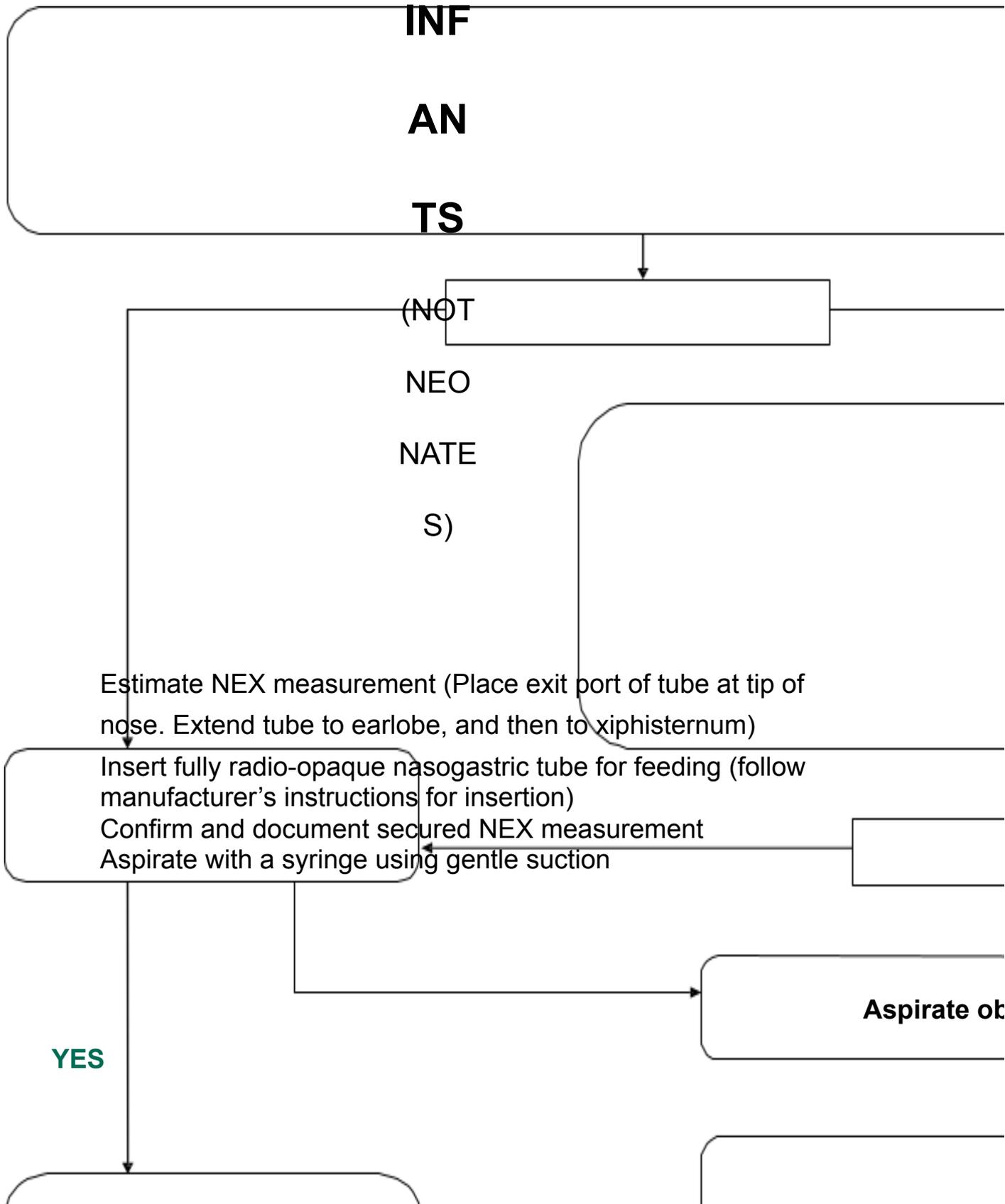
A tube with these type of feeds can be disconnected from the patient and left to hang between feeds as long as the dust cap is kept on, and it does not hang for a period longer than four hours. The giving set must also be changed every 4 hours.

When the dust cap is not in use it should be kept in a sealed container

**NEVER TOP UP A FEED THAT HAS BEEN DECANTED OR ADD WATER TO A RESERVOIR THAT HAS CONTAINED FEED**




# Decision tree for nasogastric tube placement checks in CHILDREN and



**Try each of these techniques to help gain aspirate:**

If possible, turn child/infant onto left side. Inject 1- 5ml air into the tube using a syringe. Wait for 15-30 minutes before aspirating again. Advance or withdraw tube by 1-2cm.

Give mouth care  
to patients who  
are nil by mouth

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Test aspirate on CE  
marked pH indicator  
paper for use on  
human gastric  
aspirate

**YES**

**pH between  
1 and 5.0**

**pH NOT between  
1 and 5.0**

**PROCEED TO FEED or  
USE TUBE**

**YES**

Record result in notes  
and subsequently on  
bedside documentation  
before each  
feed/medication/flush.

**A pH of between 1 and 5.0 is reliable confirmation that the tube is not in the stomach. A pH of 5 or greater does not confirm gastric placement as there is a small chance the tube tip may be in the duodenum where it carries a higher risk of aspiration. If this is any concern, the patient should have an x-ray in order to confirm tube position.**

**Where pH readings fall between 5 and 6 it is recommended that a second check is performed to confirm the reading or retests.**

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## 2.4 Guidelines for training : Shared care Protocols 2016

A naso-gastric tube is a tube, which is passed through a nostril, down the oesophagus into the stomach. It is used as a short term measure when a baby or child is unable to take any or sufficient nutrition orally. The tube is secured to the child's face with tape, and the child's face protected by a strip of Duoderm.

### Equipment

- 50ml and 20ml enteral syringe
- pH scale strips and colour guide
- Child's feeding plan
- Cooled boiled water
- Feed – at room temperature
- Gloves (latex free)

### Procedure

1. Prior to commencing feed ensure the child is comfortable and in an upright position.
2. Check the naso-gastric tube is safely secured, and position of tube has not changed by checking cm guide at nose. (number of cm passed to should be clearly documented).
3. Wash hands and put on gloves.
4. Open end of naso-gastric tube. Attach 20ml syringe. Gently pull back plunger and aspirate a small amount of stomach contents. If unable to obtain aspirate, turn child onto left side. Inject 1 to 5 ml air into tube using a syringe. Wait 15 to 30 minutes before aspirating again. For children who are able to swallow safely, offer oral fluid, but if not, offer mouth care which will stimulate gastric secretion of acid.
5. **If unable to obtain any aspirate then contact parent/ relevant professional – DO NOT CONTINUE WITH FEED.**
6. Once some aspirate has been obtained, disconnect syringe from naso-gastric tube and replace end cover.
7. Place aspirate onto testing strip and compare colour. **THE SAFE pH TO FEED IS UP TO AND INCLUDING 5.0.**
8. Follow child specific feeding plan; flush if required with water.
9. Remove plunger from 50ml syringe. Reconnect syringe to naso-gastric tube.
10. Fill syringe with feed, and use gravity to allow feed to run in.
11. As the syringe begins to empty, fill up with more feed – so that the syringe is never empty until the end of the feed.
12. Feeding should be done slowly and the child observed for any coughing, gagging, **changes in colour. If this happens, STOP FEEDING and check with a healthcare professional before continuing.** If breathing becomes laboured, and colour changes **STOP FEEDING AND CALL 999.**
13. If feed will not run, try elevating syringe to increase gravity, or gently applying pressure over the top of the syringe using plunger.
14. When feed is finished, fill syringe with amount of water that is in the child's feeding plan. When this is complete, disconnect syringe and replace end cover.
15. Remove gloves and wash hands thoroughly.
16. Wash syringes in warm soapy water, rinse and leave to air dry. If child is under one or has been advised by a health care professional, sterilise in appropriate solution/steamer.

Reference: National Patient Safety agency (NPSA) Decision Tree for nasogastric placement in children and infants. 2011  
Enteral UK Product guidance 2016.

2.5 NG Troubleshoot Guide for home

**NG Troubleshoot Guide for home**  
**Guidelines for infants and children**

**Check tube by aspirating before each feed**

Check tube measurement correct and tube taped and secure

Check pH with a 20ml or 50ml syringe

pH between and including 1-5.0

**SAFE TO USE**

**Trouble Shooting – No Aspirate obtained or PH greater than 5.0**

If child takes oral feeds or dummy offer feed or allow to suck dummy to encourage gastric fluid – recheck after 10 minutes  
Try gently pushing  and gently aspirate

**DO NOT put any food or fluid down the tube until correct position has been confirmed (1)**

Change child's position. Try left side or tummy and re-aspirate

Check whether tube position has moved in nose – try putting down 1cm or pull back 1cm and re-secure and recheck

**Tube out/ No Aspirate/ pH greater than 5.0 or concerned about position**

**DO NOT FEED**

Contact Community Children's Nurses at earliest opportunity on:  
**01865 902700**

Do not use individual nurse's mobile numbers  
as they may not be at work

If no answer, please leave message on answerphone. This is checked at regular intervals during working hours (8am-8pm).

If you have not heard back within 2 hours please call again.

If out of hours please attend John Radcliffe or Horton Hospital for replacement tube – please let the team know if this has happened.

Sometimes we may not be able to visit during working hours due to staffing and/or planned visits to other patients. If this is the case you may be asked to attend the hospital for a replacement tube.

## Reference List for trouble-shooting guide

1. Great Ormond Street Hospital (2015) 'Nasogastric and orogastric tube management Clinical Guidelines' Great Ormond Street, London
2. National Patient Safety Agency (2011) ' National Patient Safety Alert - Reducing the harm caused by misplaced nasogastric feeding tubes in adults, children, and infants' London
3. National Patient Safety Agency (2005) 'How to confirm the correct position of nasogastric feeding tubes in infants, children and adults' London
4. Oxford Health NHS Foundation Trust and Oxfordshire County Council (2012) 'Shared Care Protocol section 4.3 Bolus Naso-gastric feed' Oxfordshire, UK

## Appendix 2.6 Competencies for Insertion and Care of Fine Bore NG Tubes for children

Action – Inserting a nasogastric feeding tube – Nurse Competencies		Theory	Date	Signature	Practical	Date	Signature	Competent	Date	Signature
P r e p a r a t i o n	Able to gather all necessary equipment	Y / N			Y / N			Y / N		
	Informs and reassures patients about what is going to happen	Y / N			Y / N			Y / N		
	Gains patients/carers consent	Y / N			Y / N			Y / N		
	Observes infection control measures	Y / N			Y / N			Y / N		
	Positions patients correctly	Y / N			Y / N			Y / N		
S k i l l	Measures and documents the NEX measurement correctly	Y / N			Y / N			Y / N		
	Inserts tube correctly	Y / N			Y / N			Y / N		
	Confirms and documents placement correctly	Y / N			Y / N			Y / N		
	Secures tube appropriately	Y / N			Y / N			Y / N		
K n o w l e d g e	Understands the reasons why a patient may require tube feeding	Y / N			Y / N			Y / N		
	Knowledge of anatomy of the Gastro-Intestinal tract	Y / N			Y / N			Y / N		
	Know and be able to access the policy for insertion and care of NG feeding tubes	Y / N			Y / N			Y / N		
	Has knowledge of the type nasogastric tube being used, eg how long it can stay in for	Y / N			Y / N			Y / N		
	Understand that consent must be gained and what to do if the patient does not have the capacity to give consent	Y / N			Y / N			Y / N		
	Understands what to do if resistance is felt during insertion	Y / N			Y / N			Y / N		
	Understands what to do if the patient is showing signs of distress	Y / N			Y / N			Y / N		
	Knowledge of appropriate methods of confirming NG tube position after initial placement	Y / N			Y / N			Y / N		



Behaviour										
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## 2.7 Equality Impact Assessment form for infants and children

This form is an Equality Impact Assessment Form. It is used to review services and policies to ensure fair and consistent services for staff, service users and carers. It is a legal duty to prevent discrimination.

The form consists of two parts. Part 1 is screening to see if the policy or service requires a full assessment. It is through this screening process that you can find out whether the policy or service requires a Part 2.

Part 1

Equality Impact Assessment	
	<b>Date:</b>
<b>Title of policy, strategy or service :</b> Policy and procedure for the Insertion, Use and Care of Fine Bore Nasogastric Feeding Tubes	

<b>Short description of policy, strategy or service:</b> Describe how paediatric patients in the Oxford Health NHS Foundation Trust will receive safe and effective Nasogastric (NG) feeding. It sets staff roles and responsibilities and describes correct insertion technique, correct confirmation of NG tube position, continued monitoring, documentation and care of patients with fine bore nasogastric tubes.
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<b>What is the likely positive or negative impact on people in the following groups?</b>
Children under 18 years This policy will ensure safe and effective fine bore Nasogastric tube use and therefore reduce the likelihood of harm
People with disabilities This will ensure safe and effective fine bore Nasogastric tube use and therefore reduce the likelihood of harm
People from different ethnic/cultural backgrounds (including those who do not speak English as a first language) This will ensure safe and effective fine bore Nasogastric tube use and therefore reduce the likelihood of harm
Men, women or transgender people The policy does not distinguish between individuals relating in gender. This policy will ensure safe and effective fine bore Nasogastric tube use and therefore reduce the likelihood of harm
People with different religious beliefs or no religious beliefs The policy does not distinguish between individuals with differing religious beliefs. This policy will ensure safe and effective fine bore Nasogastric tube use and therefore reduce the likelihood of harm

Gay, lesbian, bisexual or heterosexual people

The policy does not distinguish between individuals of differing sexual orientation. This policy will ensure safe and effective fine bore Nasogastric tube use and therefore reduce the likelihood of harm

People from a different socio-economic background

The policy does not distinguish between individuals from differing socio-economic backgrounds. This policy will ensure safe and effective fine bore Nasogastric tube use and therefore reduce the likelihood of harm

### **Evidence**

What is the evidence for your answers above?

The use of fine bore nasogastric tubes pose a significant risk to all service users (Patient Safety Alert NPSA/2011/PSA002) and therefore appropriate guidance in the correct insertion technique, correct confirmation of NG tube position, continued monitoring, documentation and care of patients with fine bore nasogastric tubes are required to be in place.

What does available research say?

Significant risk and likelihood of harm caused by misplaced nasogastric feeding tubes in adults

What further research would be needed to fill the gaps in understanding the potential difficulties or known effects of the policy?

NPSA have reported through the alerts of the dangers and advised of safe systems of work

Have you thought about consulting/researching this gap? What would you need?

This would not be the best use of time in light of the NPSA findings and reports.

Does the policy need a Full Equality Impact Assessment? No

*(Answer yes to this if evidence has shown you that there will be a significant positive or negative impact on certain groups. If the answer is no then please attach this to your policy/document and send it for sign off with at the same time as the policy or document)*

Part 2

<b>Evidence – please give evidence on how the policy or service is likely to have a significant impact (either or positive or negative) on the below.</b>
Race & ethnicity
Gender
Age
Disability
Sexual orientation
Religion or belief
Other

<b>Consult Formally</b>
Who needs to be consulted
Has there been a consultation which would give the information needed?
Which types of evidence have been gained (qualitative/quantitative)

<b>Changes to policy/service</b>			
If the evidence shows a likely negative impact will the policy/service still go ahead?			
If the policy or service is likely to have a negative impact what changes will be made to minimise this impact?			
What impact will the policy/service have on promoting equality and eliminating discrimination?			
How will you maximise this impact?			
<b>Action Plan</b>			
Action to improve equality on policy/service	Person Responsible	Lead responsible	Date of planned completion


**Full Assessment checklist**

- ✓ Screening process indicates that full impact assessment is required
- ✓ Team identified to undertake EIA
- ✓ Full impact assessment undertaken using relevant sources of evidence
- ✓ Draft EIA and policy circulated to stakeholders for further consultation and comment
- ✓ Amendments incorporated in the final policy
- ✓ Action plan from EIA agreed with team
- ✓ Robust reporting and monitoring systems are established to reassure any continuing differential impact
- ✓ Service/policy EIA sent to appropriate committee for validation and ratification
- ✓ Copy of EIA and policy sent to Equality and Diversity Lead for publication
- ✓ Document management systems in place to collate evidence from implementation in preparation for next review date.

## 2.8 NG PATHWAY

### NG Tube Care Pathway

