Reference Number: UHB 114 **Version Number:** 5	**Date of Next Review:** 09 Mar 2021 **Previous Trust/LHB Reference Number:**

Insertion of a nasogastric feeding tube, confirmation of correct position and on-going care (for adults, children, infants and neonates) procedure

Introduction and Aim

The aim of the procedure is to minimise patient risk and harm caused by a mis-placed nasogastric feeding tube in line with patient safety and quality

Objectives

- To standardise the procedure for passing a nasogastric tube
- To standardise the procedure to confirm the correct position of a nasogastric tube
- To standardise the procedure for confirmation of correct tube position on initial insertion and during on-going care

Scope

This procedure applies to all qualified nursing and medical staff in all locations. It also applies to student nurses, nursery nurses and medical students under the supervision of a competent practitioner.

Equality and Health Impact Assessment	An Equality and Health Impact Assessment (EHIA) been completed. This found there to be a positive impact as the procedure applies to all age groups.
Documents to read alongside this Procedure	Insertion, management and removal of nasal bridle fixation device for Naso-Enteral tubes in adults procedure. Consent to treatment policy
Approved by	Nutrition and Catering Steering Group

Accountable Executive or Clinical Board Director	Executive Director of Therapies and Health Sciences
Author(s)	Lead Enteral Nutrition Nurse

Summary of reviews/amendments

Version Number	Date of Review Approved	Date Published	Summary of Amendments
1	November 2005		
2	July 2009		
3	March 2012		Minor amendments
4	August 2015		Minor amendments
5	March 2018	19/04/18	Change in title: Insertion of a nasogastric feeding tube, confirmation of correct position and on-going care for adults, children, infants and neonates procedure. Addition of appendices

Content

1. Introduction

Nasogastric feeding is the most common method of providing artificial nutritional support in hospital. The most prevalent risk associated with the insertion of a nasogastric tube is misplacement of the tube into the bronchus and subsequent pulmonary aspiration when enteral feeding is in progress (1).

Although the risk of tubes being misplaced into the lungs during insertion or moving out of the stomach at a later stage is small, the National Patient Safety Agency (NPSA) is aware of a number of deaths and cases of serious harm due to misplaced nasogastric feeding tubes over recent years (2). Feeding into the lung, through a misplaced nasogastric tube is a ‘Never Event’ in England and Wales (2).

Patients can be discharged into the community with a nasogastric feeding tube in place and tube care or insertion may be delegated to the patient, relative, parent or carer. A full multidisciplinary risk assessment must be made and documented, before a patient with a nasogastric tube is discharged from acute care to community and before delegation of care.

2. Statement

The procedure has been produced to support staff in the correct insertion of a nasogastric feeding tube, confirmation of correct position and ongoing care including delegation of care to relatives.

The procedure for insertion of a fine bore feeding tube is based on the guidelines of the British Association of Parenteral and Enteral Nutrition (3). Confirming correct positioning of nasogastric tubes is based upon recommendations of the National Nurses Nutrition Group (4) and the NPSA (2). The procedure for passing a nasogastric tube can also be used for wide bore tubes.

3. Aim

To maintain patient safety and minimise the risk of patient harm caused by misplaced nasogastric feeding tubes through the provision of evidence based clinical guidance.

4. Objectives

To standardise the procedures for:

- Passing a nasogastric tube
- Confirming the correct position of a nasogastric tube on insertion and during ongoing care
- Delegation of tube insertion or care to relatives, parents or carers
- The safe discharge of patients with nasogastric feeding tubes in-situ

To maintain patient safety and minimise the risk of patient harm caused by misplaced nasogastric feeding tubes through the provision of evidence based clinical guidance.

5. Competence, accountability and responsibility

5.1 Registered Practitioners

All professionals undertaking this procedure must be appropriately trained and competent registered practitioners, that is:

- Registered Adult Nurse, Registered Children's Nurse
- Registered Medical staff

The registered healthcare professional must:

1. Have undertaken training in the insertion of nasogastric feeding tubes which includes tube insertion using a manikin
2. Have undertaken supervised practice with a registered practitioner who is competent in this skill
3. Have been assessed as competent in passing a nasogastric feeding tube with a patient on 3 occasions post training
4. Keep a documented record of their competence
5. Update their practice every 3 years (to include a one off assessment of competence)

The practitioner is accountable for their own practice. Evidence of continuing professional development and maintenance of competence level will be required.

5.2 Students

Student nurses (Child Health only) and medical students can practice this skill under the direct supervision of a competent registered practitioner who meets the above criteria.

5.3 Nursery Nurses

In the Neonatal Unit and Transitional Care Unit a Nursery Nurse who has completed steps 1-5 (above) may pass a nasogastric tube. The Nursery Nurse should have care for these babies delegated and supervised (indirectly) by a Registered Nurse or Midwife who also meets the above criteria.

It is the responsibility of the Senior Nurse for Neonatal Services and In-patient Maternity Services to ensure that training and assessment of competence is undertaken and documented**.**

5.4 Patients and relatives

Other carers - i.e. parents of children, involved in the patient's daily care can undertake this procedure if they have been trained by a competent registered practitioner and have been assessed as competent.

6. Indication

Prior to passing a nasogastric feeding tube a risk assessment must be carried out, balancing the potential risks of tube insertion against the need to feed. The plan for insertion of a nasogastric tube must be documented by the medical team in the medical notes prior to insertion of the nasogastric tube.

Placement should be delayed if there is not sufficient experienced support available to accurately ***place and confirm*** nasogastric tube placement (e.g. at night). Unless clinically urgent, placement should be delayed until that support is available. The rationale for any decisions made must be recorded in the patient's medical notes.

6. Consent

Informed verbal consent for the procedure must be sought under the guidance of the UHB Consent to Examination or Treatment Policy. (Section 8.8, 8.6 deals with treatment of children and *Gillick Competence)*. Consent must be documented in the medical notes.

Please refer to the Mental Capacity Act toolkit (UHB Mental Capacity Act intranet page) for guidance on how to assess mental capacity if you suspect the patient does not have the capacity to provide their consent and the actions to be taken e.g. a best interest decision. Please use the documentation provide in the Mental Capacity Act Toolkit to document mental capacity assessments and best interest decisions.

7. Contraindications

Base of skull fracture is an absolute contraindication and nurses must not pass a nasogastric tube in this instance unless a local policy and training is in place.

The following are possible contra-indications for the insertion of a nasogastric feeding tube:

- unstable cervical spine
- maxillo-facial surgery, trauma or disease
- oesophageal tumours, strictures or surgery
- haematological disorders/abnormal coagulation
- congenital abnormalities

The contraindications are not all absolute, but individual patients must be discussed with the medical team in charge of their care before a tube is passed. Some patients may require tubes placed using direct vision, endoscopic or radiological guidance.

8. Type of tube

Fine bore nasogastric tubes are used for enteral feeding in the UHB and are available in a Variety of sizes (please see specific procedures that follow). These tubes can be used for up to 28 days.

Wide bore (≥12fg) tubes are primarily used for gastric aspiration and decompression. They are associated with the following complications:

- rhinitis
- pharyngitis
- oesophageal strictures
- gastric erosions and bleeding (5)
- increased tendency for reflux (6)
- patient discomfort
- difficulty in swallowing

Wide bore (>12fg) tubes are made from polyurethane and ideally should only be in situ for a maximum of 28 days to maximise comfort and minimise harm. Contact the Nutrition Support Team for advice if the NG tube is required for longer.

Wide-bore tubes can also be used for enteral feeding but should be changed to fine bore tubes when clinically appropriate and feed tolerance is established to maximise patient safety and comfort. The procedure for confirming correct position must be followed before the wide bore tube is used for feeding.

9. Insertion of the tube

The correct procedure for passing a nasogastric tube must be followed. Refer to:

Appendix 1- Adults
Appendix 2- Children
Appendix 3- Neonates

10. Confirming tube position

The correct position of the nasogastric tube **must** be confirmed following insertion and documented before feeding is commenced. **Nothing** must be introduced down the tube before gastric placement is confirmed i.e. do not flush with water.

The correct position of the nasogastric tube must also be confirmed and documented:

- Before each bolus feed, administration of medicines or after rest periods
- Following vomiting, violent coughing or retching episodes
- At least once during continuous 24 hour feeding
- Following evidence of tube displacement (change in external tube length, loose tape)

11.1 Methods recommended following insertion

a. Aspiration and testing with pH indicator strips:

This is the preferred method to confirm tube position (1)

- A pH of **5.5 or below** is acceptable as indicating gastric placement in most patients. There is evidence to suggest that a pH reading of between 1 and 5.5, can reliably exclude *pulmonary* placement of the nasogastric tube

- If pH of 5 – 5.5 is obtained but the procedure was difficult e.g. patient was coughing or vomiting during the procedure, a chest x-ray is also recommended.

- The procedure for confirming correct position of a nasogastric tube must be followed by referring to the relevant Appendix.

- Medication may affect gastric acidity (11) including proton pump inhibitors**,** H_2-antagonists and antacids**,** although the desired pH can usually be obtained (12). The pH of aspirate obtained on initial placement, even if above pH 5.5, must be documented for future reference.

- The pH indicator paper used must be intended by the manufacturer to test human gastric aspirate (2). The pH strips used in the UHB are available from pharmacy.

b. Radiography:

- A chest x-ray must be requested if unable to obtain gastric aspirate or the pH is greater than (>) 5.5 following insertion. The x-ray request form must be marked as ***urgent*** and the film reviewed as soon as possible. The time of tube insertion must be documented on the x-ray request form as this will assist Radiology to prioritise investigations to be undertaken. An urgent x-ray should be undertaken within 4 hours of the request.

- X-rays must be interpreted and nasogastric tube position confirmed by a Healthcare professional assessed as competent to do so. If there is any difficulty in interpretation of the x-ray, the advice of a radiologist must be sought.

- Remote reviewing of an x-ray must be followed up by a review of the patient and appropriate documentation in the medical notes before the tube is used for feeding.

- A nasogastric tube identified to be in the lung must be removed immediately. ***Note*** an x-ray only confirms the position at the time the image was taken.

A flowchart for the procedure for confirming correct position of a nasogastric tube can be found on page 17 (adults), page 23 (child) and page 26 (neonates). A summary of the rationale for can be found in appendix 4 for adults and children and appendix 5 for neonates.

11.2 Confirming correct position during ongoing care

Radiography **should not** be used routinely for daily confirmation of tube position due to increased exposure to radiation, impracticality, costs and disruptions to feeding (1). The following should be considered:

- If unable to aspirate and the patient is able to drink, ask the patient to drink an easily identifiable fluid. If this is then aspirated from the feeding tube, correct positioning is confirmed

- Aspiration of partially digested food or feed in the alert patient with an intact cough and swallow reflex is indicative of gastric placement

- If the measurement of the tube length remains unchanged and the patient's clinical condition is unchanged then this would support the view that the tube is still correctly positioned

- Avoid testing pH after administration of medication or while feed is in progress

The practitioner should apply clinical judgement and expertise combined with these considerations in deciding if the tube is correctly positioned, particularly when the correct pH cannot be obtained. If there is no reason to suspect tube displacement since initial insertion, i.e. no vomiting, retching or coughing or unexplained respiratory symptoms, the only practical way of determining if the tube remains correctly placed prior to each administration of feeds or medications, is confirmation that the external tube length remains the same and that the fixation plasters have not become loose.
NB: An individual risk assessment should be carried out for each patient. For example, if the pH is constantly higher than 5.5 on each occasion the tube is aspirated, but on x-ray the tube is found to be correctly positioned, then it could be accepted that for this patient a pH of >5.5 is 'normal' and feeding can continue. This should be clearly documented.

11. Securing the tube

The tube must be well secured to the patients' nose and cheek. In children the tape should be at least three times the diameter of the tube and long enough to cover at least two thirds of the child's cheek.

Allergies and sensitivities to the tape may require a hydrocolloid dressing to provide a protective layer between the skin and tape. Additional fixation devices including Statlock nose plasters and nasal bridles are available for use in Adults from the Nutrition Support Team. The use of hand mittens can also be considered in adults, refer to 'Restraint in the care management of adults with impaired mental capacity policy and procedure'.

12. Documentation

The pre-printed sticker provided by the manufacturer must be used to standardise documentation.

The result of pH testing must be documented on the daily care record (page 29) and must include:

- date and time
- whether aspirate was obtained
- what is the pH of the aspirate
- who checked the aspirate pH

Documentation following x-ray must include:

- date and time
- patient ID
- who authorised the x-ray
- who confirmed the position of the tube
- confirmation that the x-ray viewed was the most current for the patient
- rationale for the confirmation of position of the nasogastric tube i.e. how placement was interpreted. This must be documented in the medical notes

13. Resources

This procedure is a revision of existing guidelines within the UHB. There are minimal resources required for implementation. All nasogastric tubes are available through CSSD. pH indicator strips are available from pharmacy.

14. Training

The adult Nutrition Support Team provide an education and training programme “Passing a fine bore nasogastric tube” and “ Nasogastric Tube Assessor Workshops”. This is open to qualified nursing staff and is booked through the Learning, Education and Development department.

The Child Health Nasogastric Feeding Working Group provide training for “Insertion of nasogastric tube” and "Nasogastric Tube Assessors Workshop”

Training to Doctors is provided by the Medical and Dental Education Centre.

15. Arranging the discharge of patients with nasogastric feeding and delegation of care to patients, relatives and carers

Patients in both adult and child health areas can be discharged home with enteral feeding via a nasogastric tube in place and elements of care can be delegated to the patient or a relative/carer.

16.1 The Discharge Process

The decision to feed at home is made by the multidisciplinary team and will need to be documented in the patient’s medical notes and the discharge pathway completed. The discharge will be co-ordinated by the Dietitian and the ward nurses responsible for the patient’s care. Copies of the discharge pathways can be ordered by the wards or obtained from the discharging Dietitian.

16.2 Delegation of Care

In both adult and paediatric areas the following aspects of care can be delegated to the patient / relative / parent / carer:

a. confirmation of tube position

b. setting up and administration of feed
c. administration of medicines

In Child Health and the Adult Cystic Fibrosis Unit, the insertion of a fine bore nasogastric feeding tube may also be delegated to a patient / parent / relative / carer.

Standard 11 of the Nursing and Midwifery Council (NMC) 'The Code' states that in order to practice effectively Registered Nurses and Midwives must:

Be accountable for your decisions to delegate tasks and duties to other people

To achieve this, you must:

11.1 only delegate tasks and duties that are within the other person's scope of competence, making sure that they fully understand your instructions

11.2 make sure that everyone you delegate tasks to is adequately supervised and supported so they can provide safe and compassionate care, and

11.3 confirm that the outcome of any task you have delegated to someone else meets the required standard

Standard 17 of the NMC Standards for Medicines Management (NMC 2015) also states that:

'A registrant is responsible for the delegation of any aspects of the administration of medicinal products and they are accountable to ensure that the patient, carer or care assistant is competent to carry out the task.'

'This will require education training and assessment of the patient, carer or care assistant and further support if necessary. The competence of the person to whom the task has been delegated should be assessed and reviewed periodically. Records of the training received and outcome of any assessment should be clearly made and be available.'

For this reason registered Nurses will be responsible for ensuring that the person to whom they are delegating nasogastric feeding care:

a. is clear about their role and responsibilities
b. receives the training that they require
c. demonstrates their competence through a documented assessment
d. receives the support that they require at home

16. Responsibilities

Healthcare professionals must ensure that have undertaken the required training and assessment of competence prior to them being involved with nasogastric tube placement and confirmation of position.

Practitioners, Assessors and ward managers are responsible for recording this in local records. Training provided via the Learning, Education and Development Clinical Skills prospectus will be recorded on the ESR system and completed competencies must be sent to LED.

Individual directorates are responsible for implementing the procedure. The Nutrition Support Team will continue to provide the training and support of staff undertaking the procedure in adults.

Incident forms must be completed for misplaced nasogastric feeding tubes or other adverse events associated with their use and the incident escalated through the appropriate directorate channels. Serious clinical incidences must be escalated to the Patient Safety and Quality Department e.g. feeding via a misplaced NG tube, pneumothorax, and perforated oesophagus.

17. Implementation

The procedure will be circulated to all clinical areas and will be available on the UHB Intranet site. Adherence to the procedure will be audited on an ad hoc basis by the Nutrition Support Team. It is encouraged that directorates include this to their audit calendars as appropriate.

18. Equality Impact Assessment

An Equality Impact Assessment has been undertaken to assess the relevance of this procedure to equality and potential impact on different groups, specifically in relation to the General Duty of the Race Relations (Amendment) Act 2000 and the Disability Discrimination Act 2005 and including other equality legislation. The assessment identified that the procedure presented a low risk to the UHB.

19. References

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2. National Patient Safety Agency (2005 and update 2011, 2012) Patient Safety Alert 05: Reducing the harm caused by misplaced nasogastric tubes. NPSA, London.

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8. Metheny N, & Meert K. (2004). Monitoring feeding tube placement. *Nutrition in Clinical Practice*; 19 487-495.

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10. Medical and Healthcare products Regulatory Agency (MHRA) Safety Alert – Enteral Feeding Tubes (nasogastric) June 2004 *MDA/2004/MHRA,* DoH, London.

11. Mensforth A, Nightingale J. (2001). Insertion and Care of Enteral Feeding Tubes In. Nightingale J (Ed) *Intestinal Failure*. Greenwich Medical Media, London.

12. Metheny N, Stewart B. (2002). Testing feeding tube placement during continuous tube feedings; *Applied Nursing Research:* 15 (4) 254-258.

Appendix 1: Process for passing a nasogastric feeding tube and confirming the correct position in Adults

Equipment:

Fine bore tube of appropriate size
pH indicator paper
Nose plaster or appropriate tape/scissors
Non-sterile gloves
Apron
60ml enteral syringe
Glass of water (if appropriate)
Tissues
Receiver
An assistant

Procedure:

1. Wash hands according to UHB policy and assemble the equipment.

2. Prepare the patient for the procedure:
   - Screen bed are
   - Explain procedure and rational
   - Where appropriate obtain verbal consent and document
   - Clean/clear nostrils and provide oral care
   - Position patient (semi-recumbent, head tilted slightly forward unless contraindicated)
   - Agree signal to pause/stop the procedure

3. Wash hands, put on gloves and apron

4. Examine tube, check expiry date, size and integrity – ensure the guide-wire moves freely

5. Measure the length of the tube required; Nose, Ear Xiphisternum (NEX) and mark with an indelible pan. In adults – NEX is usually 50 – 65cm.

6. Do not lubricate the tube with water or any lubricating agents.

7. If able to swallow, provide the patient with a glass of water of a coloured drink

8. Insert the tip of the tube into the nostril, along the floor of the nasal passage into the oropharynx (throat), ask the patient to swallow and tilt chin down slightly unless this is clinically contraindicated.

9. Advance the tube gently and encourage the patient to swallow until the tube reaches the NEX measurement.

   If the patient shows signs of distress e.g. excessive coughing, gasping or cyanosis, the tube must be removed immediately. Referral must be made to a senior member of the medical

team who will review the situation and determine what action is necessary. This may include referral for assistance from the Nutrition Support Team or other appropriate clinical team. Out of hours, the responsible clinical team must risk assess further attempts at insertion versus delay in provision of enteral nutrition.

10. Confirm correct position of nasogastric tube

Procedure to confirm correct position following insertion:

- Use a 60ml enteral syringe and aspirate a small amount of fluid
- Place aspirate on pH strip and leave for 10 seconds
- A reading of 5.5 or below indicates gastric placement

If aspirate is greater than 5.5:

- Wait 30 minutes and retry
- If pH remains greater than 5.5 a chest x-ray must be requested
- X-ray on initial placement is also advisable in patients in whom the procedure was difficult i.e. coughing/vomiting or if there is any doubt regarding the pH obtained.

If aspirate is difficult to obtain try some of all of the following:

- Check the syringe size - must be ≥ 20 ml
- Check the tube is inserted to correct length as measured (NEX)
- Try advancing or withdrawing tube 5 -10 cm (adults)
- Flush tube with air. Use 10-20 ml of air in adults DO NOT use water
- Give the patient a drink if appropriate (i.e. safe swallow)
- Position the patient on their left side- unless clinically contraindicated
- Wait up to 30 minutes and retry

If all attempts to obtain gastric aspirate fail on initial placement, a chest x-ray must be requested

Following confirmation of position:

11. Remove the guide-wire. Flush 5ml of water through the tube using a 20ml or 60ml enteral syringe. Hold the tube firmly at the nose and carefully remove the guide-wire. Never re-insert the guide-wire whilst the tube is in the patient.

12. Secure the tube by taping around the tube and across the nose. Position the tube to the corner of the nostril. Additional tape should be used to secure the tube to the patient's cheek.

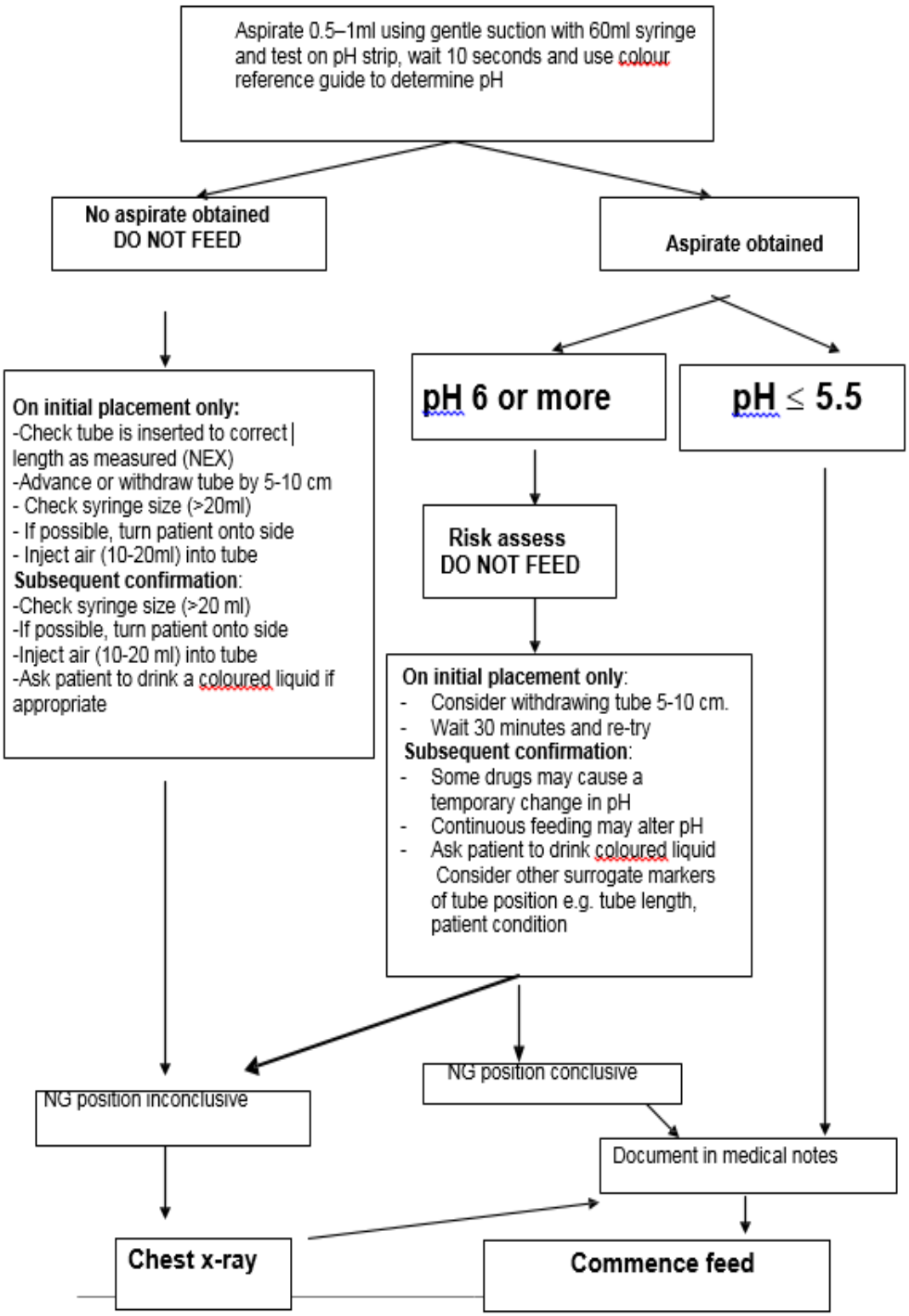
13. Dispose of waste according to UHB policy.

14. Document consent, the procedure and method of confirming correct tube position including the person undertaking the procedure in the medical notes.

Procedure for ongoing care of a patient with a nasogastric tube

- Check tube position prior to giving feeds/drugs as per previous instructions. Record daily NG checks on the nasogastric daily care record (page 32).
- If on continuous feeding, stop feed and flush tube with 10-20ml of air prior to aspiration, use clinical judgement and surrogate measures (tube length etc.) to decide if tube is correctly positioned if pH>5.5.
- If unable to aspirate / obtain correct pH use clinical judgement and surrogate measures (tube length etc.) to decide if tube is correctly positioned.
- Flush the tube with water before and after feeding, before and after medication and between each medication.
- Adults that are immuno-compromised, critically ill or who have a tracheostomy and are nil by mouth should have sterile water to flush the NG tube. Freshly drawn drinking water is suitable for other adults.
- Check the securing device on each shift and renew regularly.
- Check both nostrils daily and clean with water as needed.
- Consider changing the tube after 28 days.

Procedure flowchart for confirming correct positioning of nasogastric feeding tubes in ADULTS



APPENDIX 2: Process for passing a nasogastric feeding tube and confirming the correct tube position in Children

Equipment

Within a clinical environment working oxygen and suction must be available
Nasogastric tube of appropriate size
Enteral syringe 20ml x 2
pH indicator strips
Hydrocolloid dressing, cut to size
Adhesive tape, cut to size
Apron
Non-sterile gloves
Scissors
Glass of water and drinking straw/dummy (if appropriate)
Tissues
Receiver
Sterile water for flushing
An assistant (Two people are required to pass a nasogastric tube; one to comfort and support the child, one to pass the tube. If appropriate consider distraction therapies during the procedure.)

Procedure

1. Wash hands according to UHB policy and assemble the equipment.

2. Prepare the patient for the procedure:

   - Screen bed area or take the child into the treatment room
   - Explain procedure and rationale, it is good practice to involve the child in the discussion; a hospital play specialist can help to facilitate this process using pictures to explain the procedure to the child.
   - Where appropriate obtain verbal consent and document
   - Clean/clear nostrils and provide oral care
   - Position patient depending on the child's age and ability to cooperate
   - If age appropriate agree a signal with the child to pause/stop the procedure

3. Wash hands, put on gloves and apron.

4. Examine the nasogastric tube, check the expiry date, size and integrity. Ensure the guide-wire moves freely and graduating markings are present.

5. Measure the length of the nasogastric tube required: from the tip of the **N**ose to the **E**arlobe to the **X**iphisternum (**NEX** measurement) and note required length.

6. Do not use lubricating agents with fine-bore nasogastric tubes as these may affect the pH reading or occlude the tube. Do not lubricate the tube with water.

7. Insert the tip of the nasogastric tube into the nostril, pass the tube along the floor of the nasal

passage into the oropharynx (throat), encourage the child to swallow by encouraging them to take a drink or using a dummy if able as this will aid the passing of the tube down the oesophagus.

8. Advance the nasogastric tube gently and encourage the child to swallow until the nasogastric tube reaches the measured length. If the child shows signs of distress e.g. excessive coughing, gasping or cyanosis, the tube must be removed immediately. Never try to advance a nasogastric tube against resistance. Comfort and reassure the child and their family, retry passing the nasogastric tube.

9. If continued attempts to insert the nasogastric tube are unsuccessful, a referral should be made to a senior member of the medical team who will review the situation and determine what action is necessary. This may include referral for assistance from the Paediatric Nurse Specialists or other appropriate clinical team. Out of hours, the responsible clinical team must risk assess further attempts at insertion versus delay in drug administration, provision of enteral nutrition or decompression.

10. Confirm the correct position of the nasogastric tube:

Procedure to confirm correct position following insertion:

- Use a 20 ml enteral syringe and aspirate fluid. Only a small amount (1 ml) is needed.
- Place aspirate on pH strip and leave for 10 seconds. A reading of **5.5 or below** indicates gastric placement.

If aspirate is difficult to obtain or the child showed signs of distress (excessive coughing, gasping or cyanosis)

Try the following:

- Check the size of the enteral syringe - must be ≥ 20 ml
- Check the nasogastric tube is inserted to the correct length as measured (NEX measurement)
- Try advancing or withdrawing the nasogastric tube by 1-2 cm (infants and children) and 5-10 cm (adolescents) and aspirate.
- Flush the nasogastric tube with 1-2 ml of air (infants and children) or 10-20 ml (adolescents). Do **NOT** use water
- If the child has a safe swallow offer them a drink of water or an easily identifiable liquid
- Position the child on their left side for up to 30 minutes and retry aspirating
- Consider removing the nasogastric tube and repassing a new nasogastric tube

If all attempts to obtain gastric aspirate fail, a chest x-ray must be requested

If the aspirate is greater than pH 5.5 on initial placement:

Try the following:

- If appropriate, ask the child to drink an easily identifiable, coloured liquid and then aspirate the nasogastric tube
- If the child is unable to drink a chest x-ray must be performed

- Do not use the nasogastric tube until it is confirmed to be in the stomach either by pH testing, aspiration of the identifiable, coloured liquid or X-ray, and it is clearly documented that it is safe for use.

If all attempts to obtain gastric aspirate fail, a chest x-ray must be requested.

- In addition to pH measurement, x-ray on initial placement is advisable in patients in whom the procedure was difficult (coughing, gasping or cyanosis) or if there is any doubt regarding the pH obtained.
- If a child is sedated and ventilated on the Paediatric Critical Care Unit then an x-ray is always performed to check the position of the nasogastric tube.
- The X-ray must only be interpreted by someone assessed as competent to do so. They are responsible for documenting in the child's medical notes:
  - The position of the nasogastric tube
  - If the nasogastric tube is safe to be used

If the nasogastric tube is identified to be in the lung it must be immediately removed. Do not use the nasogastric tube until the correct position is confirmed and it is clearly documented that it is safe for use.

Following confirmation of position:

11. To remove the guide-wire, flush 5 ml of water through the tube using a 20 ml or 60 ml enteral syringe. Hold the tube firmly at the nose and carefully remove the guide-wire. **Never re-insert the guide-wire whilst the tube is in the patient.**

12. Place the hydrocolloid dressing on the child's cheek, and then secure the tube using an appropriate adhesive tape. The tape should be at least three times the diameter of the tube and long enough to cover at least two thirds of the child's cheek.

13. Comfort and reassure the child and their family at the end of the procedure.

14. Dispose of clinical waste according to Cardiff and Vale UHB policy.

15. Remove gloves and apron and wash hands according to Cardiff and Vale UHB policy.

16. Document the procedure in the child's medical notes using the 'NG Feeding Tube Insertion' label in the packaging:
    - Date and time
    - Size and length of nasogastric tube
    - Placement depth (actual measurement at nose)
    - Nose-ear-xiphisternum measurement
    - pH of aspirate
    - Guidewire removed
    - Feeding to commence

- Signature

Procedure for ongoing care of a patient with a nasogastric tube

The Nasogastric Daily Checklist must be completed every shift and up-dated as necessary (e.g. if nasogastric tube is replaced). It is important to document the external tube length at least once per shift. The position of the nasogastric tube must be checked by pH testing:

- Prior to administering feed or drugs
- In the event of retching, vomiting, excessive coughing
- If the tube appears to be partially dislodged externally, for example if the tape appears loose
- At the beginning of every shift

Record all nasogastric tube position checks on the nasogastric daily care record.

If the pH is > 5.5 and the child is fed continuously, treated with acid-reducing medications, and/or nasogastric medications are frequently administered clinical judgment may be used:

- There must be no reason to suspect displacement (i.e. no vomiting, retching or coughing spasms and no unexplained respiratory symptoms)
- Confirmation that the length of the external tube remains identical to that recorded initially in the child's notes, and that fixation tapes have not moved or worked loose
- The securing device should be checked every shift and renewed if soiled or loose
- The nasogastric tube should be flushed with sterile water unless there is a clinical reason not to:
  - before and after the administration of feeds
  - before and after the administration of medication
  - between each medication

The size of the child and any fluid restrictions will determine how much water should be used for the flushes.

Only enteral syringes must be used to measure and administer medication. In the hospital setting enteral syringes are single use. In the community reusable syringes are available.

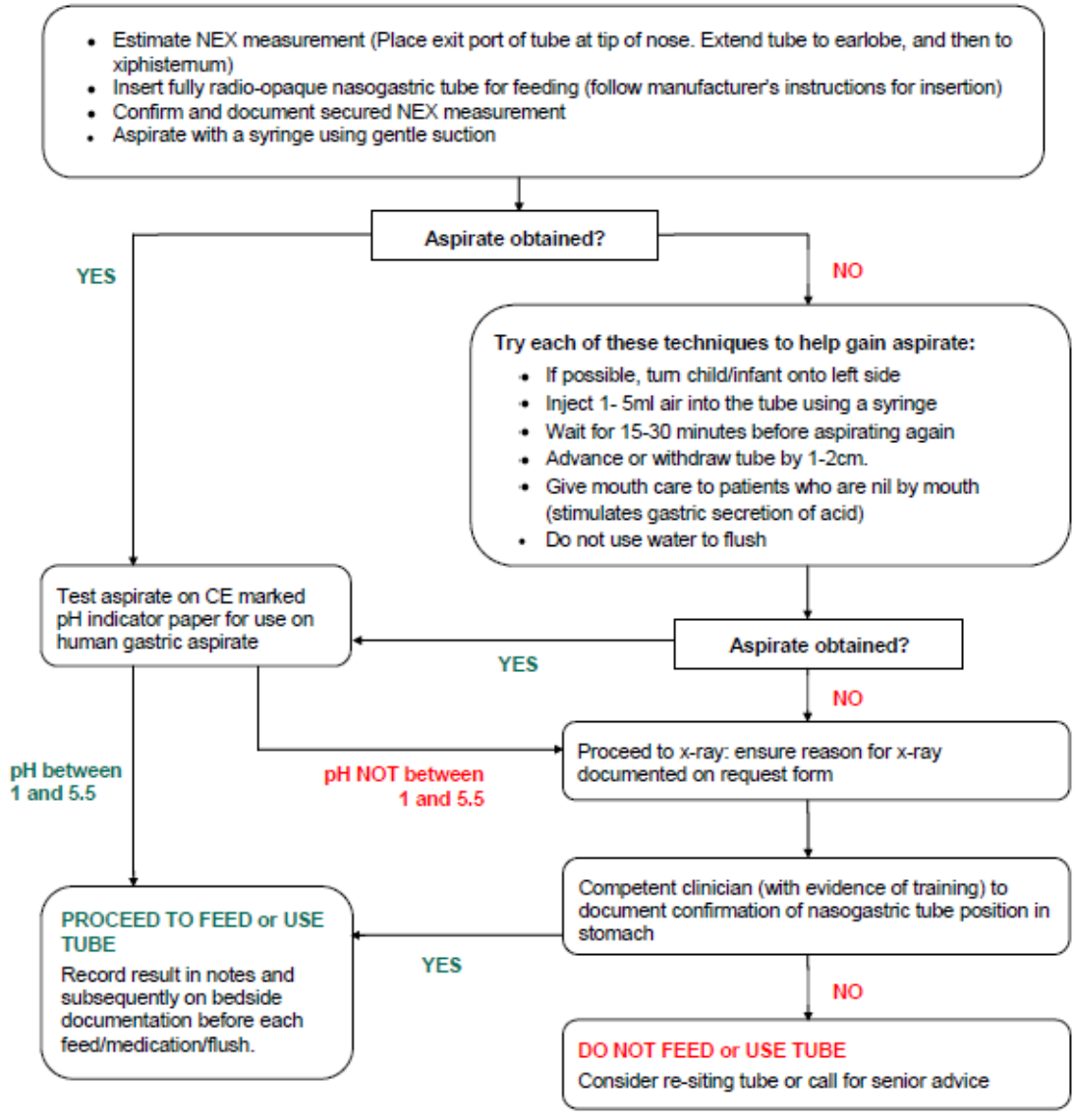
Staff and carers should be vigilant to the potential for entanglement in the nasogastric tube and/or feed administration set as a result of child movement.

The child's nostrils and cheek should be checked daily and cleaned appropriately. The integrity of the child's skin should be documented.

Change the nasogastric tube in accordance with the manufacturers' guidelines.

NHS
National Patient Safety Agency

Decision tree for nasogastric tube placement checks in CHILDREN and INFANTS (NOT NEONATES)



A pH of between 1 and 5.5 is reliable confirmation that the tube is not in the lung, however it does not confirm gastric placement as there is a small chance the tube tip may sit in the oesophagus where it carries a higher risk of aspiration. If this is any concern, the patient should proceed to x-ray in order to confirm tube position.

Where pH readings fall between 5 and 6 it is recommended that a second competent person checks the reading or retests.

www.npsa.nhs.uk/alerts

APPENDIX 3: Process for passing a nasogastric feeding tube and confirming the correct tube position in Neonates

Equipment

Nasogastric tube of appropriate size
Enteral syringe 2.5ml/5ml
pH indicator strips
Hydrocolloid dressing, cut to size
Adhesive tape, cut to size
Apron
Non-sterile gloves
Scissors
Dummy (if appropriate)
An assistant (Two people are required to pass a nasogastric tube; one to comfort and support the child, one to pass the tube)

Procedure

Ensure appropriate timing of procedure (risk of vomiting if tube passed midway or immediately following a feed)

1. Wash hands according to UHB policy and assemble equipment.

2. Prepare baby for the procedure
   - Screen bed area
   - Explain procedure and rationale if parent/carer present.
   - Where appropriate obtain verbal consent and document
   - Clean/clear nostrils and provide oral care
   - Ensure infant is secure, warm, and comfortably positioned, consider swaddling.

3. Wash hands, put on gloves and apron
   .
4. Examine tube's integrity, expiry date, ensure graduating markings are present.

5. Measure length of tube to be inserted

6. Nasogastric tube - nose to ear to midpoint between xipheisternum (bottom of breast bone) and umbilicus

7. Orogastric tube-corner of mouth to ear to mid point between xipheisternum and umbilicus

8. Insert tube via nostril/mouth, aiming downwards and towards the back of the throat. Continue passing until the desired length is met. Sucking a dummy may facilitate advancement of the tube.

9. Hold in position and observe for any signs of distress or malposition of the tube. Remove immediately if baby shows colour change, vomiting, and respiratory distress or if any resistance is felt.

10. Confirm position of tube.

Procedure to confirm correct position following insertion:

- Use a 2.5/5 ml enteral syringe and using gentle pressure aspirate fluid. Only a small amount (0.2-1ml) is needed.
- Place aspirate on pH strip and leave for 10 seconds. A reading of **5.5 or below** indicates gastric placement.

If aspirate is difficult to obtain try the following:

- Check for signs of tube displacement and ensure the nasogastric tube is inserted to the correct length as measured
- If possible, turn baby onto his/her side.
- Try advancing or withdrawing the nasogastric tube by 1-2 cm and re-aspirate.
- Flush the nasogastric tube with 1-2 ml of air. Do **NOT** use water
- Consider removing the nasogastric tube and re-passing a new nasogastric tube.

If all attempts to obtain gastric aspirate fail, seek senior advice and only consider chest & abdominal x-ray if timely.

If the nasogastric tube is identified to be in the lung it must be immediately removed.

If the aspirate is greater than pH 5.5 on initial placement:

- Consider waiting 15 -30 minutes then re-aspirate
- Consider replacing or re-passing tube and re-aspirate
- Consider prescribed medication
- Consider age of baby < 48hrs old

If attempts to obtain gastric aspirate pH of 5.5 or less fail on, seek senior advice and only consider chest & abdominal x-ray if timely.

Following confirmation of position:

11. Secure gastric tube in position with Tegaderm™ (if appropriate), consider skin integrity (Tube can be attached to the plastic flange of the neobar if in-situ)
12. Comfort and settle the baby as required
13. Dispose of waste and wash hands as per UHB policy
14. Document procedure in the patient's notes, to include:
    - Date, time and route of insertion (which nostril if NG tube passed)
    - Tube size and measurement at mouth/nose
    - pH, volume and type of aspirate, whether aspirate discarded or replaced

- Tolerance of procedure

Ongoing care of the NG/OG Tube

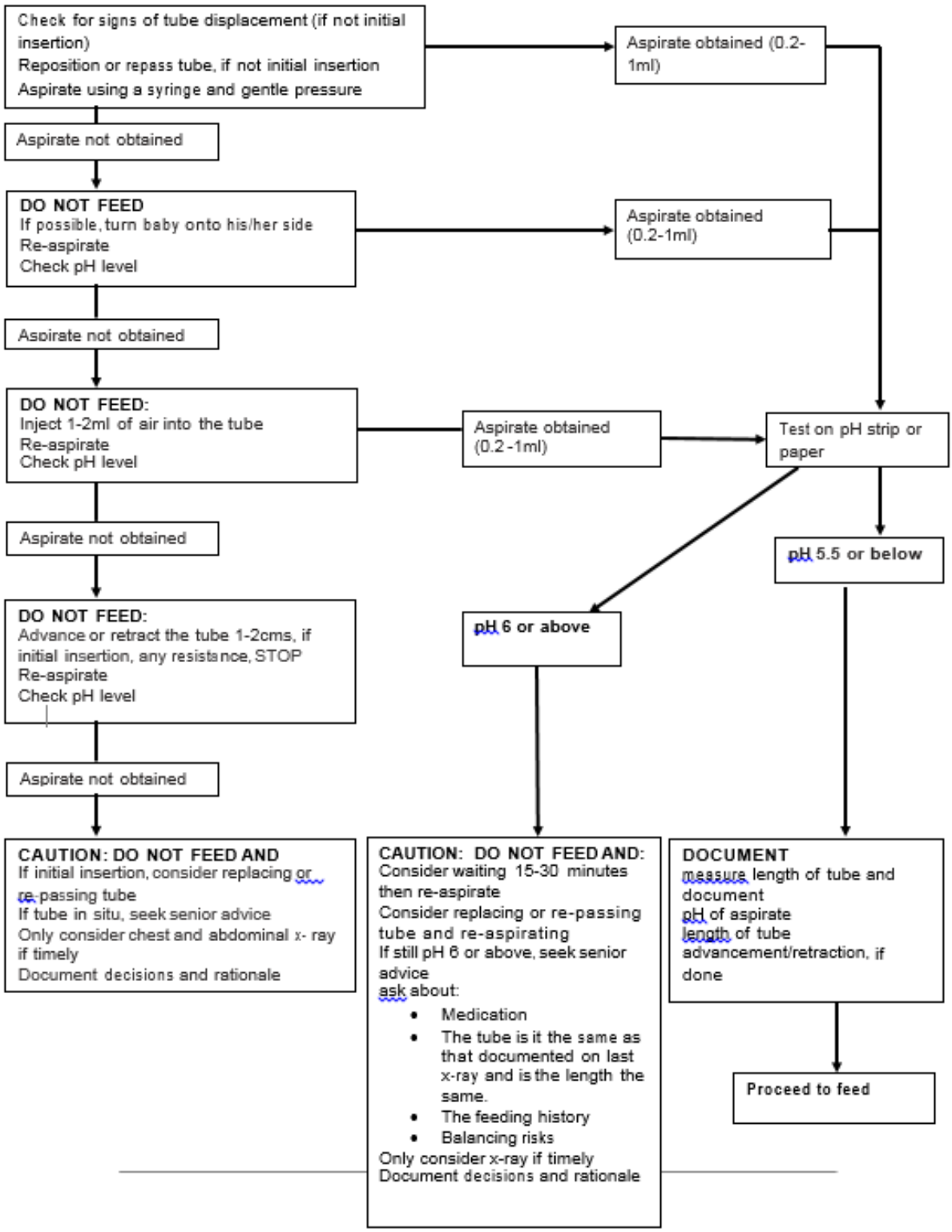
- Initiate relevant care plan and documentation
- Test pH of aspirate as per previous instructions and document
  - Prior to each tube feed
  - Before being used to give medication
  - Following vomiting, retching or coughing
  - If the tube appears to have moved – loose tape, longer/shorter section of tube visible
- Monitor and document skin integrity of the nostril/mouth at insertion site and under the securing tape
- If skin is marked (pressure/redness)
  - Reposition tube and/or tape, consider duoderm
  - Repass tube in opposite nostril/orally
- Only clamp off tube following the administration of a bolus feed
- Replace NG/OG tube every 7 days as per manufacturer's instructions following the above process

N.B. Carry out an individual risk assessment prior to gastric tube feeding and administration of medication

- A pH of 5.5 or under indicates correct placement, however continue to monitor baby condition throughout feed/medicine administration
- If the pH is consistently above 6
  - Work through the neonatal flow charts in appendix
  - Document and record findings
  - Discuss possible actions with the MDT and record how they reached their decision

Actions must be based on balancing the risks of not feeding the baby in the short term with the possibility of the tube being in the lungs

NPSA Recommended procedure for checking the position of naso & oro gastric feeding tube in neonates



Appendix 4: Rationale for procedure for checking the position of nasogastric tubes in adults, children and infants (not neonates)

Action	Rationale
Check whether the patient is on medication that may increase the pH level of gastric contents	Medication that could elevate the pH level of gastric contents are: antacids, H_2 antagonists and proton pump inhibitors. The initial risk assessment should take in this scenario, and be documented in the care plan. The initial pH of the aspirate should also be documented in the case notes.
Check for signs of tube displacement	Documenting the external length of the tube initially and checking external markings prior to feeding will help to determine if the tube has moved. The documentation will also assist radiographers if an x-ray is needed.
Sufficient aspirate obtained (0.5 to 1 ml)	0.5 to 1 ml of aspirate will cover an adequate area on the panel of pH testing strips/paper. Allow 10 seconds for any colour change to occur.
Aspirate is pH 5.5 or below	Commence feed. There are no known reports of pulmonary aspirates at or below this figure.
Aspirate is pH 6 or above	DO NOT FEED. Possible bronchial secretion; leave for up to one hour and try again. The initial risk assessment should identify actions for staff to take in this scenario for each patient. The actions should be documented in the care plan.
Wait up to one hour Before re-aspirating to check pH level	The most likely reason for failure to obtain gastric aspirate below pH 5.5 is the dilution of gastric acid by enteral feed. Waiting for up to one hour will allow time for the stomach to empty and the pH to fall. The time interval will depend on the clinical need of the patient and whether or not they are on continuous or bolus feeding.
Problems obtaining aspirate?	
Turn patient on their side	This will allow the tip of the nasogastric tube to enter the gastric fluid pool.
Inject air (1.5 ml for children, 5-10 ml for adults), using a 20 or 60 ml syringe. Wait for15-30 minutes and try again	Injecting air through the tube will dispel any residual fluid (feed, water or medicine) and may also dislodge the exit port of the nasogastric feeding tube from the gastric mucosa. Using a large syringe allows gentle pressure and suction; smaller syringes may produce too much pressure and split the tube.
Advance/withdraw the tube by 1-2 cm in children or 5-10 cm for	Advancing the tube may allow it to pass into the stomach if it is in the oesophagus. Withdrawing the tube may re-position the tube into the stomach.
Consider x-ray – all radiographs should be read by appropriately trained staff	X-ray should not be used routinely. The radiographer will need to know that this advice has been followed, what the problem has been and the reason for the request. The request form must be marked as urgent and the film reviewed as soon as possible. Fully radio-opaque tubes with markings to enable measurement, identification and documentation of their external length must be used. Document time of tube insertion on the x-ray request form.
Additional tip	If the patient is alert, has an intact swallow and is perhaps only on supplementary feeding and is eating and drinking during the day, ask them to sip a coloured drink and aspirate the tube. If you get the coloured fluid back then you know the tube is in the stomach.

Appendix 5: Rationale for procedure for checking the position of NG tubes in neonates

Action	Rationale
Check for signs of tube displacement (if not initial insertion)	The tube may have coiled up in the mouth or if there is more tube visible than previously documented, the tube may have kinked. Loose tape may indicate movement. If tube has been displaced, it will need repositioning or re-passing before feeding.
Aspirate 0.2–1ml gastric fluid and allow ten to 15 seconds for any colour change	0.2 to 1ml of aspirate will cover an adequate area on single, double or triple reagent panels of pH testing strips or paper.
Aspirate using a syringe	It is safe practice to use gastric tubes and enteral syringes that have non luer lock connectors
Aspirate is pH 5.5 or below **PROCEED TO FEED**	Aspirates testing pH 5.5 and below should indicate correct placement in most babies (including the majority of those receiving acid suppressants) and rule out the possibility of respiratory tract placement. Always match the pH indicator strip or paper colour change with the colour code chart on the booklet or box. If there is ANY doubt about the position and/or clarity of the colour change on the pH indicator strip or paper, particularly between pH5 and 6, DO NOT commence feeding.
Aspirate is pH6 or above **CAUTION – STOP FEED:** if clinically safe, consider waiting 15–30 minutes before aspirating again. Consider replacing and/or re-passing the tube and re-aspirating If still pH 6 or above, seek advice **IT IS IMPORTANT THAT STAFF FOLLOW THE FLOWCHART, RECORD THE OUTCOMES AND MAKE DECISIONS BASED ON THIS INFORMATION**	The most likely reason for failure to obtain gastric aspirate pH 5.5 or below is the dilution of gastric acid by enteral feed. Waiting gives time for the stomach to empty and the pH value to fall. If pH is still 6 and above after waiting and replacing or re-passing the tube, seek advice and consider the following questions: • is the baby on medication? • is the baby only 24 to 48 hours old? • is the tube in the same position as previously documented on an x-ray? • Is the visible length of the tube the same as previously documented? • what is the trend in pH values? • what is the volume of aspirate? It is important that actions and their rationale are documented. Clinical staff should balance the risks of not feeding a baby, in the short term, with feeding when there is the possibility of the tube being in the lungs. Only consider x-ray if timely, e.g. if the baby is due for an x-ray for other reasons, and/or it is clinically safe to do so. If an x-ray is done, the radiographer should know this advice has been followed and the reason for the request should be documented.
Document all information	Documenting helps the clinical decision-making process. The tube size and length should be recorded each time the tube is passed. A record should also be made each time measurements of the pH level of the aspirate and the length of the tube's advancement or retraction, are done.
Problems obtaining aspirate: suggest using larger size tube. Turn baby onto side	This may facilitate the tip of the nasogastric tube entering the gastric fluid pool.
Inject 1–2ml of air using a syringe This is **NOT** a testing procedure	Injecting air through the tube may dislodge the exit-port of the feeding tube from the gastric mucosa. Care must be taken when using large syringes on neonates to ensure that the correct amount of air is inserted, i.e., no more than 2ml.
Advance or retract the tube by 1–2cm Stop if there is any resistance or obstruction	If the tube is in the oesophagus, advancing it may allow it to pass into the stomach. If the tube has been inserted too far, it may be in the duodenum. Consider withdrawing a few centimetres and re-aspirating. The position of the tube at the nose should already have been recorded and marked, if the tube is in situ. If the mark has not moved then advancing or retracting may not make a difference. Document the length of tube if moved.
If you still cannot obtain aspirate	If this is an initial insertion consider replacing or re-passing the tube. If the tube has been in situ already, seek advice. Consider whether the length of the tube has changed and discuss options as outlined under the action point on aspirate of pH 6 and above. Record all decisions and rationale.

Appendix 6: Daily care record for Nasogastric tube

Addressograph

Daily care record for Nasogastric feeding tube

Insertion date:

Tube type: **Size:**

Date	Time	pH	Length at nose (cm)	Secured well	Comments	Signature or initial

Note: Refer to the UHB procedure “Insertion of a nasogastric tube, confirmation of correct position and ongoing care, in adults, children and infants”. Contact the Nutrition Support Team for further information.

Equality & Health Impact Assessment for:

Insertion of a nasogastric feeding tube, confirmation of correct position and on-going care (for adults, children, infants and neonates) procedure

1.	For service change, provide the title of the Project Outline Document or Business Case and Reference Number	Insertion of a nasogastric feeding tube, confirmation of correct position and on-going care (for adults, children, infants and neonates) procedure. Reference no:
2.	Name of Clinical Board / Corporate Directorate and title of lead member of staff, including contact details	Clinical Diagnostics and Therapeutics Lead Enteral Nutrition Nurse : 46393
3.	Objectives of strategy/ policy/ plan/ procedure/ service	To standardise the procedure for passing a nasogastric tube. To standardise the procedure to confirm the correct position of a nasogastric tube. To standardise the procedure for confirmation of correct tube position on initial insertion and during on-going care.
4.	Evidence and background information considered. For example • population data • staff and service users data, as applicable • needs assessment • engagement and involvement findings • research • good practice guidelines • participant knowledge • list of stakeholders and how stakeholders have engaged in the development stages	Over 5000 Nasogastric tubes are inserted annually across the UHB. Nasogastric tubes are inserted by trained nursing and medical staff and occasionally by patients and parents of children/infants. The procedure is based upon the guidelines of the British Association of Enteral and Parenteral Nutrition and includes recommendations from the National Nurses Nutrition Group and the National Patient Safety Agency. The existing procedure has been updated by the Nutrition Support Team with the involvement of stakeholders from Paediatrics and Neonates to include appendices for paediatrics, adults and neonates. The procedure was sent out for consultation and was presented at CSIG and

	• comments from those involved in the designing and development stages Population pyramids are available from Public Health Wales Observatory[1] and the UHB's 'Shaping Our Future Wellbeing' Strategy provides an overview of health need[2].	Nutrition and Catering steering group.
5.	Who will be affected by the strategy/ policy/ plan/ procedure/ service	This procedure applies to all qualified nursing and medical staff in all locations. It also applies to student nurses, nursery nurses and medical students under supervision of a competent practitioner. It also applies to patients and carers who may be inserting and/or caring for a nasogastric feeding tube in the community setting.

6. EQIA / How will the strategy, policy, plan, procedure and/or service impact on people?

How will the strategy, policy, plan, procedure and/or service impact on:-	**Potential positive and/or negative impacts**	**Recommendations for improvement/ mitigation**	**Action taken by Clinical Board / Corporate Directorate.** Make reference to where the mitigation is included in the document, as appropriate

[1] http://nww2.nphs.wales.nhs.uk:8080/PubHObservatoryProjDocs.nsf
[2] http://www.cardiffandvaleuhb.wales.nhs.uk/the-challenges-we-face

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
6.1 Age For most purposes, the main categories are: • under 18; • between 18 and 65; and • over 65	Positive impact as the procedure applies to Adults, children, infants and neonates.		
6.2 Persons with a disability as defined in the Equality Act 2010 Those with physical impairments, learning disability, sensory loss or impairment, mental health conditions, long-term medical conditions such as diabetes	No impact as the procedure does not discriminate against patients or carers with a disability. The procedure includes a section on Mental capacity and consent. This includes Best Interests Decisions which would be made in conjunction with relatives/carers if the patient was deemed not to have capacity. There would be an impact if a patient was using British Sign Language as their first language. There may be an		

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
	impact relating to the patient giving consent to undergo the procedure. The interpretation service can be accessed as required to assist with this.		
6.3 People of different genders: Consider men, women, people undergoing gender reassignment **NB** Gender-reassignment is anyone who proposes to, starts, is going through or who has completed a process to change his or her gender with or without going through any medical procedures. Sometimes referred to as Trans or Transgender	There appears to be no impact but staff can access " It's just good care- a guide for health staff caring for people who are trans".		
6.4 People who are married or who have a civil partner.	There appears to not be any impact.		

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
6.5 Women who are expecting a baby, who are on a break from work after having a baby, or who are breastfeeding. They are protected for 26 weeks after having a baby whether or not they are on maternity leave.	There appears to not be any impact.		
6.6 People of a different race, nationality, colour, culture or ethnic origin including non-English speakers, gypsies/travellers, migrant workers	There may be issues with language/communication so interpretation services may need to be accessed.		

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
6.7 People with a religion or belief or with no religion or belief. The term 'religion' includes a religious or philosophical belief	There appears to not be any impact. However, some patients may refuse artificial nutrition on religious grounds.		
6.8 People who are attracted to other people of: • the opposite sex (heterosexual); • the same sex (lesbian or gay); • both sexes (bisexual)	There appears to be no impact.		
6.9 People who communicate using the Welsh language in terms of correspondence, information leaflets, or service plans and design Well-being Goal – A Wales of vibrant culture and thriving Welsh language	The procedure document is not available in Welsh.	If a Welsh Language version is required, staff /patients can access interpretation services	

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate. Make reference to where the mitigation is included in the document, as appropriate
6.10 People according to their income related group: Consider people on low income, economically inactive, unemployed/workless, people who are unable to work due to ill-health	There appears to not be any impact.		
6.11 People according to where they live: Consider people living in areas known to exhibit poor economic and/or health indicators, people unable to access services and facilities	There appears to not be any impact.		
6.12 Consider any other groups and risk factors relevant to this strategy, policy, plan, procedure and/or service	There are no other groups to consider.		

7. HIA / How will the strategy, policy, plan, procedure and/or service impact on the health and well-being of our population and help address inequalities in health?

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts and any particular groups affected	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate Make reference to where the mitigation is included in the document, as appropriate
7.1 People being able to access the service offered: Consider access for those living in areas of deprivation and/or those experiencing health inequalities Well-being Goal - A more equal Wales	The aim of the procedure is to minimise risk to patients. It is based on National Guidelines**.**		
7.2 People being able to improve /maintain healthy lifestyles: Consider the impact on healthy lifestyles, including healthy eating, being active, no smoking /smoking cessation, reducing the harm caused by alcohol and /or non-prescribed drugs plus access to services that support disease prevention (eg immunisation and vaccination, falls prevention). Also consider impact on access to supportive services including	Positive impact as patients will receive nutrition and hydration via the nasogastric feeding tube which will optimise clinical outcomes.		

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts and any particular groups affected	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate Make reference to where the mitigation is included in the document, as appropriate
smoking cessation services, weight management services etc Well-being Goal – A healthier Wales			
7.3 People in terms of their income and employment status: Consider the impact on the availability and accessibility of work, paid/ unpaid employment, wage levels, job security, working conditions Well-being Goal – A prosperous Wales	No impact		
7.4 People in terms of their use of the physical environment: Consider the impact on the availability and accessibility of transport, healthy food, leisure activities, green spaces; of the design of the built environment	No impact		

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts and any particular groups affected	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate Make reference to where the mitigation is included in the document, as appropriate
on the physical and mental health of patients, staff and visitors; on air quality, exposure to pollutants; safety of neighbourhoods, exposure to crime; road safety and preventing injuries/accidents; quality and safety of play areas and open spaces Well-being Goal – A resilient Wales			
7.5 People in terms of social and community influences on their health: Consider the impact on family organisation and roles; social support and social networks; neighbourliness and sense of belonging; social isolation; peer pressure; community identity; cultural and spiritual ethos Well-being Goal – A Wales of cohesive communities	No impact		

How will the strategy, policy, plan, procedure and/or service impact on:-	Potential positive and/or negative impacts and any particular groups affected	Recommendations for improvement/ mitigation	Action taken by Clinical Board / Corporate Directorate Make reference to where the mitigation is included in the document, as appropriate
7.6 People in terms of macro-economic, environmental and sustainability factors: Consider the impact of government policies; gross domestic product; economic development; biological diversity; climate Well-being Goal – A globally responsible Wales	No impact		

8.1 Please summarise the potential positive and/or negative impacts of the strategy, policy, plan or service	Overall, there appears to be very limited impact on the protected characteristics and health inequalities as a result of this procedure.

Action Plan for Mitigation / Improvement and Implementation

	Action	**Lead**	**Timescale**	**Action taken by Clinical Board / Corporate Directorate**
8.2 What are the key actions identified as a result of completing the EHIA?	None			
8.3 Is a more comprehensive Equalities Impact Assessment or Health Impact Assessment required? This means thinking about relevance and proportionality to the Equality Act and asking: is the impact significant enough that a more formal and full consultation is required?	As there has been no impact identified, it is unnecessary to undertake a more detailed assessment and formal consultatic is not required.			

	Action	Lead	Timescale	Action taken by Clinical Board / Corporate Directorate
8.4 What are the next steps? Some suggestions:- • Decide whether the strategy, policy, plan, procedure and/or service proposal: o continues unchanged as there are no significant negative impacts o adjusts to account for the negative impacts o continues despite potential for adverse impact or missed opportunities to advance equality (set out the justifications for doing so) o stops. • Have your strategy, policy, plan, procedure and/or service proposal approved • Publish your report of this impact assessment • Monitor and review	The EQHIA will be reviewed in 3 Years time.			