



**ST. PATRICK'S CENTRE,  
KELLS ROAD, KILKENNY.**

**Policy Document**

**Nasogastric Care and Management**

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**Mission Statement**

To enable people to live a good life, in their own home, with supports and opportunities to become active, valued and inclusive members of their local communities.

To enable a supported self-directed living (SSDL) model of provision which is underpinned by SPC beliefs, values and vision.

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## 1. Introduction

- 1.1. SPC recognize each supported person as an individual, an equal citizen, with equal rights.

## 2. Purpose of this document

- 2.1. To promote a clear, consistent and evidenced based approach to the insertion, care and management of nasogastric tubes.
- 2.2. To promote the safety and well-being of all persons supported who require a nasogastric tube.
- 2.3. To provide guidance regarding scope of professional practice, level of competence and accountability in nasogastric tube insertion, care and management.
- 2.4. To provide a framework for roles and responsibilities in nasogastric tube insertion and care thereafter, (Stirland 2017).

## 3. Scope

- 3.1. This policy applies to all competent healthcare professionals maintaining nasogastric feeding tubes for persons supported in SPC.
- 3.2. A competent practitioner is one who has the appropriate knowledge and skills to monitor use of a nasogastric tube for feeding or drainage.
- 3.3. This policy is applicable to all persons supported in SPC who require feeding via a nasogastric feeding tube, it is expected that the healthcare professionals looking after persons supported with nasogastric tubes understand this policy and follow its guidance including all required documentation.
- 3.4. This policy should be used in conjunction with other relevant SPC Policies:
  - Medication Management
  - Infection Control

## 4. Definitions

**Enteral Feeding** is defined as the administration of nutrients directly into the gastrointestinal tract. The route and amount of enteral feeding will be decided on an individual basis according to the clinical indications, treatment plan and nutritional state of the individual person. Enteral feeding should be considered in people who are malnourished or at risk of malnutrition and have a) Inadequate or unsafe oral intake, and b) a functional, accessible gastrointestinal tract.

**Competent Health Care Professionals** to insert nasogastric tube: Only medically trained staff i.e. Doctors, and nurses must be competent for tube insertion. Nasogastric tubes will only be inserted in an acute setting. SPC personnel will not insert Nasogastric tubes.

**Competence** The attainment and application of knowledge, intellectual capacities, practice skills, integrity and professional and ethical values required for safe, accountable, compassionate and effective practice as a Registered nurse or Registered midwife (NMBI 2020).

**Enteral tube feeding:** the delivery of artificial nutrition, containing protein, carbohydrate, fat, water, minerals and vitamins, prepared for administration into the stomach, duodenum or jejunum.

**Insertion of a nasogastric feeding tube:** The first occasion of a new nasogastric tube placement.

**Maintenance of a nasogastric tube:** Correct checking of tube tip position, and maintaining the patency of that tube. Tube tip positioning must be checked each time the tube is accessed to administer anything via it. On-going management including skin care, checking tube position must be recorded.

**Gastric Aspirate/pH test:** Fluid obtained from the stomach via the NG tube using an enteral syringe. Aspirate is then checked for pH using the recommended pH indicator testing strips. A pH of <5.5 indicates gastric tube tip position and therefore safe to feed.

**Pump feeding:** Use of a feeding pump to deliver feed over a period of time, typically no more than 20hours if fed into the stomach. Occasionally referred to as 'continuous' feeding. May be appropriate for persons support who cannot tolerate large volumes of feed.

**Bolus feed:** Administering a volume of feed at regular Intervals either with gravity, a syringe with plunger, by using a gravity set or can be done using a short period of time and high rate on a feeding pump. Breaks between feeds may be given to suit person supported needs. Always clarify if you are unsure of the appropriate technique.

**Radiology:** Use of medical imaging to identify, diagnose and/or treat conditions in the body. For the purposes of this policy x-ray may be used as a test to confirm the correct placement

of a nasogastric or orogastric feeding tube when position has not been possible to confirm by pH checking.

**X-ray:** An x-ray is a form of radiation that can pass through the body to produce an image that can be 'read' or interpreted to answer a clinical question or investigation. X-rays for confirming position of a nasogastric or orogastric feeding tube should always be carried out as a test if a positive outcome from pH checking cannot be obtained.

**Dietitian:** Dietitians are qualified health professionals that assess, diagnose and treat dietary and nutritional problems at an individual level. The Dietitian will assess and advise on a suitable feeding regime depending on persons supported needs and clinical condition. A dietitian will contribute and make decisions as part of the MDT.

**Speech and Language Therapist:** A qualified health professional that will assess for dysphagia by undertaking a swallowing assessment. They will advise if the person supported is at risk of aspiration or needs to be placed nil by mouth and may require a nasogastric tube. A speech therapist will contribute and make decisions as part of the MDT.

The Nasogastric feeding tube is the most commonly used enteral feeding tube and is suitable for short term use. Fine bore feeding tubes should be used whenever possible as these are more comfortable for the person supported than wide bore tubes. For medium and long term feeding gastrostomy/jejunostomy tubes may be more appropriate.

## 5. Procedure

To be carried out by Qualified doctor or Registered nurse.

## 6. Placing the Tube

Nasogastric tube placement will occur in the acute setting. SPC employees will not insert Nasogastric tubes. If a supported person has a nasogastric tube in situ, that becomes dislodged, or is accidentally removed. The person will be supported to attend St Lukes General hospital to have the tube replaced. A staff member familiar to the person should accompany them to the acute setting, bringing all necessary documentation with the ie hospital passport, feeding regime.

## 7. Aspirating nasogastric tubes to check tube position

- 7.1. Aspirate all fine bore nasogastric tubes to check pH before administering each feed, before giving medication, at least once daily during continuous feeds and following episodes of vomiting, retching or coughing and record on aspirate recording record.
- 7.2. Note: Absence of coughing does not rule out misplacement or

migration, following evidence of tube displacement (for example loose tape or visible tube appears longer).

## **8. Verifying the position of the tube using pH strips**

- 8.1. Position of N.G. tubes should be verified following initial placement, by x-ray and before first and each subsequent daily feed using pH indicator strips. pH should be less than 5.5, (NICE 2006;NPSA 2005).
- 8.2. The reliability of pH strips may be compromised by commonly used medication, such as proton-pump inhibitors, antacids and H<sub>2</sub> antagonists. Persons supported receiving these medications have higher gastric and intestinal pH, potentially Increasing the need for X-ray confirmation of tube position (Duggan 2008)
- 8.3. Always apply the aspirate directly from the syringe onto the pH strip. Do not use any other surface or paper for the aspirate as this can change the pH reading.
- 8.4. To avoid false negative results pH strips should be kept clean during storage and the syringe with gastric aspirate should not be put back into the syringe cover, (NPSA 2007).
- 8.5. The whoosh test and litmus paper should not be used to verify position, (NPSA 2005).

All staff undertaking pH testing must be competent in the technique. It is the staff nurses responsibility to gain competences on this by researching evidence based practices and observing colleagues.

- Nasogastric aspirate unobtainable
- A ph of 6 or above is recorded.
- Clinical judgement indicates that an x-ray is necessary.

## **9. Feed Administration**

### **9.1 Registered nurses only, will administer feeds via Nasogastric tube**

**9.2 SCW & HCA can monitor progress of feed throughout the specified time and highlight any issues to the registered nurse. Issues may include: Alarming of pump, obvious blockages in giving set, Any vomiting, coughing or discomfort from supported person. SCW & HCA will also monitor fluid intake recording/ continence monitoring form and alert registered nurses if extra hydration/flushes are required via Nasogastric tube.**

### **Following confirmation of the position of the tube:**

- 9.3 Use a non-touch technique to connect the feeding tube to the giving set and nutrient container/feed reservoir.
- 9.4 Ensure nutrient container/ feed reservoir is more than 50cm above the persons supported abdomen.
- 9.5 Giving sets should not be used for more than 24 hours.
- 9.6 Administer feeds at room temperature.
- 9.7 Enteral feeds are administered as a bolus or by continuous infusion over 24 hours (with or without a rest period) or by cyclical infusion over variable periods, as per dietitian's instructions.
- 9.8 Commence feeding and increase as per dietitian's instructions.
- 9.9. Never force feed through a feeding tube. Bolus feeds if ordered, should be administered to adults using a 50ml syringe.
- 9.10. Elevate the head of the bed/wheelchair to 30-45° for all persons supported at all times to reduce the risk of regurgitation or pulmonary aspiration of the feed (NICE 2006, Heyland 2003, BDA 2004).
- 9.11. When repositioning persons supported ensure that the feeding pump is placed on HOLD to reduce the risk of aspiration.
- 9.12. Flush the enteral feeding tube with 50mls of sterile water before feeding is commenced and after each change of feed, or as recommended by the dietitian and with at least 10mls sterile water after each drug administration (if administered via the tube). Administer 30mls sterile water after the final medication has been administered, or as recommended by the dietitian. It is important to document all fluids in the fluid balance chart to ensure persons supported are managed appropriately.
- 9.13. If the feeding tube is not in use, it should be flushed daily with 50mls of water for person supported.
- 9.14. Monitor the hydration of the person supported by recording intake on fluid intake document.
- 9.15. Sterile feeds (ready to hang) can be hung for a maximum of 24 hours. Non-sterile feeds (including modular, diluted and modified sterile feeds) should not hang for more than 12 hours.

## **10. Administering Drugs via enteral feeding tubes**

- 10.1. Medicines should only be administered via an enteral feeding tube when prescribed for administration via that route. Administering medication via enteral feeding tubes generally falls outside a drug's product authorisation ie, administration in this way is 'unlicensed'.
- 10.2. Do not add medication directly to feed
- 10.3. Review the need for prescribed medications after enteral feeding tube insertion
- 10.4. All routes of administration of the necessary medications should be considered. For medications for administration via the tube consideration should be given to the use of liquid or soluble tablets. Crushing Tablets and opening capsules should be considered as a last resort. Pharmacist should be contacted for advice.
- 10.5. SPC's management of medicines policy states that registered nurses only, may administer medication via NG tube.

## **11. Monitoring required for persons receiving enteral feeding**

All staff members supporting the person will monitor the following:

- 11.1. Weigh the person supported prior to commencing enteral feeding and weekly/monthly thereafter if possible. Consult with dietician as required.
- 11.2. Monitor and record daily records of fluid intake and output.
- 11.3. Record bowel movements and stool consistency.
- 11.4. Observe for possible Intolerance to feed e.g. vomiting or abdominal pain.
- 11.5. Record additional dietary intake if requested by the dietitian.
- 11.6. For persons supported with a nasogastric feeding tube in situ, care should include mouth care, keeping nostrils clean and replacing nasogastric tape as necessary.
- 11.7. Monitor skin condition to ensure it is not excoriated and to prevent



skin damage from the pressure of the tube especially on the nostril.

## **12. Blockage of Tube**

- 12.1. Blockage of the tube may be caused by coagulation of feed/medication, or inadequate flushing.
- 12.2. If blockage occurs flush tube with tepid previously boiled water using a 50ml syringe and leave for 20 minutes. Then flush again. Tepid water can assist the removal of the blockage. Avoid using excessive force. Milk the tube if necessary.
- 12.3. When tube is unblocked flush again with 50mls of sterile water.
- 12.4. Never attempt to unblock any tube with a guide wire, (Woodland and Richardson 2010).

## **13. Tips to help aspirate gastric secretions via fine-bore nasogastric tube**

Common problems associated with not being able to obtain aspirate include:

- 13.1. One of the tube's ports remains open
- 13.2. The tube is not situated in a pocket
- 13.3. Ensure the side port is closed
- 13.4. Turn the person supported onto their side or support into wheelchair to allow the tip of the naso-gastric tube to enter the gastric fluid pool
- 13.5. Use a half drawn back 50ml syringe, and pull back on it gently to gain aspirate
- 13.6. Air but no aspirate: try inserting tube slightly further then aspirating. Inject 10mls (Adults only) of air into tube. If the person supported belches the tubes is in the oesophagus. NOTE: This is NOT a testing procedure. Do NOT carry out auscultation of air (whoosh test') to test tube position (NHS, 2005)
- 13.7. Cannot obtain air or aspirate: try pulling the tube back slightly and then aspirating

- 13.8. The tip of the tube may be silting against the gastric mucosa. Inject 10mls (Adults only) of air into the stomach to push the port away from the gastric mucosa. Repeat the aspirate test.

## 14. Documentation

Feeding regime

Fluid intake recording document

Aspirate recording

## 15. References

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