

PEG, PEJ, RIG, RIJ FEEDING TUBES IN ADULTS POLICY (including Feeding Tube Dislodgement Pathway)

(Percutaneous endoscopic/ radiologically placed gastrostomy and percutaneous endoscopic/ radiologically placed gastrojejunostomy feeding tubes)

POLICY

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KEY MESSAGES

- A gastrostomy tube is the 1st choice of feeding tube for a patient requiring long term enteral feeding, who have a functioning GI tract.
- The decision as to whether a feeding tube is appropriate is the responsibility of the parent MDT. The complex nutrition MDT can support where appropriate.
- The complex nutrition MDT will decide whether an endoscopic or radiological insertion is the most appropriate route depending on the patient's clinical condition
- Percutaneous Endoscopic Gastrojejunostomy (PEG-J) and Radiologically Inserted Gastrojejunostomy (RIG-J) would be considered for patients who require enteral feeding, bypassing the stomach and feeding directly into the small intestine (post – pyloric feeding).
- A PEG or PEG-J must not be removed before seeking advice from the gastroenterologist or nutrition nurse specialist.
- A RIG or RIG-J must not be removed before seeking advice from the gastroenterologist, radiologist, or nutrition nurse specialist.
- Water in a balloon gastrostomy feeding tube must only be changed by a trained, competent practitioner 2 weeks post new insertion then every 7 days.
- Balloon gastrostomy feeding tubes must only be changed by a trained competent practitioner.
- All patients with feeding tubes **MUST** be referred to Nutrition CNS and Dietitians on admission. This is done via ICE.

1.0 INTRODUCTION

Enteral nutrition is a method of feeding whereby nutrition is given via a tube into the gastrointestinal tract. Patients who require nutritional support for over 4 weeks should be considered for long term feeding (LTF) tubes.

Patients should be considered for long term enteral feeding when they are unable to safely take adequate oral nutrition, have a functioning gastrointestinal tract and have received a minimum of two weeks enteral feed via a Nasogastric tube (NGT) or Nasojejun tube (NJT).

This policy refers to assessment, insertion and management of PEG, PEG-J, RIG and RIG-J for the purpose of administering feeds, fluids, and medications. This policy also provides guidance on daily care and tube dislodgment. It is intended to provide guidance and safety standards for all clinicians IN ADULT SERVICES.

2.0 POLICY STATEMENT

The scope of this policy is:

- To provide guidance to all health care professionals and trainees who care for patients with PEG, PEG-J, RIG and RIG-J.
- Aimed at standardising the care of patients with LTF tubes to ensure that insertion and ongoing management is safe, effective, and comfortable for patients.
- To specify safe guidelines for dislodged tube management.

3.0 DEFINITIONS/ ABBREVIATIONS

Gastrostomy	A feeding tube that is inserted through an opening in the abdominal wall to the stomach. These can be placed endoscopically or radiologically.
Percutaneous endoscopic gastrostomy (PEG)	An endoscopically inserted gastrostomy tube – the tip sits within the stomach lumen and is secured with an internal disc and external clip.
Percutaneous Endoscopic gastrostomy with jejunal extension (PEG-J)	This is a long fine bore tube that is placed through an existing or newly inserted PEG. The tube tip is endoscopically positioned in the jejunum.
Radiologically Inserted gastrostomy (RIG)	A radiologically inserted gastrostomy tube. The tip sits within the stomach lumen and is secured with an internal and external disc or internal balloon. This type of tube can also be known as a Balloon Gastrostomy Tube (BGT).
Radiologically Inserted gastrostomy with jejunal extension (RIG-J)	This is a single unit feeding tube. It enters the stomach through a gastric stoma and the tip is situated in the jejunum. The tube is held in place by means of a water filled balloon which requires to be changed every 7 days. These tubes are usually changed every 3-6 months.
Surgical jejunostomy	These tubes are usually placed at the time of surgery directly into the jejunum.
LTF	Long term feeding
MDT	Multi-disciplinary team
BIM	Best Interest Meeting
SLT	Speech and Language Therapist
KMH	King's Mill Hospital
MCH	Mansfield Community Hospital
NH	Newark Hospital
ED	Emergency Department
AHP	Allied Health Professionals
COEC	Clinical Outcomes and Effective Care Group

4.0 ROLES AND RESPONSIBILITIES

Responsibly for ensuring the application of this policy lies with the Clinical Chair, Head of Nursing, Divisional Manager and Matron of each division.

Nutrition and Hydration Steering Group

- The Nutrition and Hydration Steering Group is accountable to the Trust Board via the Clinical Outcomes and Effective Care (COEC) group, which will send activity reports to the Nursing, Midwifery, and Allied Health Professionals (AHP) Board.

Medical Staff

- It is the responsibility of the divisional leadership teams to ensure the dissemination and implementation of this policy. Medical staff are responsible for the decision to place long-term feeding tubes and make referrals to the appropriate teams.

Dietitian

- The Dietitian is responsible for completing a nutritional assessment of the patient and designing an appropriate feeding regimen, taking account of any risks.

Matrons/ Sister/Charge Nurses

- Matrons/ Sister/Charge Nurses are responsible for ensuring the dissemination and implementation of this policy within their clinical ward areas and for demonstrating compliance of staff competency through audit.

Registered Nursing Staff

- Registered nursing staff are responsible for ensuring their own compliance with this policy.

5.0 APPROVAL

Following appropriate consultation, this policy has been approved by the trust's Nutrition and Hydration Steering Group Committee.

6.0 DOCUMENT REQUIREMENTS

6.1. OVERVIEW

In the acute setting, patients unable to swallow safely or take sufficient nutrition and hydration orally should have an initial trial period of nasogastric enteral tube feeding for 2-4 weeks prior to consideration for a long-term feeding tube. In patients with dysphagia, for example following a Stroke, healthcare professionals with relevant skills and training in the diagnosis, assessment and management of swallowing disorders should assess the prognosis and options for future nutrition support. <https://www.nice.org.uk/guidance/cg32/chapter/Recommendations#enteral-tube-feeding-in-hospital-and-the-community>

Long-term feeding tubes such as PEGs and RIGs have their advantages over NGT feeding as they are more comfortable, less unsightly and are less likely to become displaced. However,

NCEPOD (2004) highlighted several factors which are associated with a poor outcome, in particular; early mortality following insertion, and these include age, dementia in particular end-stage, aspiration pneumonia, acute illness of any sort and urinary tract infection.

Agnew and Tham, (2022) indicated that by carefully reviewing each individual patient for their appropriateness for long-term feeding tubes; by considering their comorbidities and the risks associated with the procedures, this can improve patient outcomes especially when a stroke is the indication.

2004 Report of the National Enquiry Into patient outcome and death scoping our practice recommends that the decision to use a PEG feeding tube requires an in-depth assessment of the potential benefits to the individual. All patient in whom PEG feeding is proposed should be reviewed and agreed by the MDT www.ncepod.org.uk

Prior to a referral to the Complex Enteral Nutrition team, an MDT approach must be undertaken involving the Dietetic and SALT team, to determine the appropriateness of long-term nutrition support. Once the joint decision has been made to seek a review by the Complex Enteral Nutrition Team, this outcome must be documented in the medical notes prior to referral – the referral can be found on ICE.

6.2. TYPE OF ENTERAL FEEDING TUBE (PEG; PEG-J; RIG; or RIG-J)

There are different types of long-term feeding tubes which are all indicated where oral feeding is not possible or where extended enteral nutrition is required. The appropriate selection of the route of enteral tube feeding will enable patients to be offered optimal care. At Sherwood Forest Hospitals long-term feeding tubes are usually inserted endoscopically or radiologically.

6.2.1. Percutaneous Endoscopic Gastrostomy (PEG)

Percutaneous Endoscopic Gastrostomy (PEG) this is the most frequently used method of gastrostomy insertion. It is endoscopically inserted, and the tip sits within the stomach lumen, it is secured with an internal disc and external clip.

PEG tube insertion

- A referral must be made on ICE to the 'Complex Enteral Nutrition MDT'.
- Patients will be assessed for appropriateness of a PEG insertion.
- PEGs must not be removed before seeking advice from the Gastroenterologist or Nutrition nurse specialist.
- Follow the post insertion instructions highlighted within the Care Plan for Insertion of Gastrostomy/Gastrojejunostomy feeding tube.

6.2.2. Percutaneous Endoscopic Gastrojejunostomy (PEG-J)

A Percutaneous Endoscopic Gastrojejunostomy tube (PEG-J) is indicated for patients requiring long term enteral post pyloric feeding. This is a long fine bore tube that is placed through an existing or newly inserted PEG in endoscopy. The tube tip is endoscopically positioned in the jejunum.

PEG-J tube feeding is a long-term option for providing enteral nutrients into the gastrointestinal tract, bypassing the stomach, and feeding directly into the small intestine (post – pyloric feeding)

It is suitable for patients with:

- Gastroparesis
- Gastric outlet or duodenal obstruction
- Pancreatitis
- An increased risk of aspiration associated with gastric feeding.

PEG-J tube insertion:

- A referral must be made on ICE to the 'Complex Enteral Nutrition MDT'.
- Patients will be assessed for the appropriateness of a PEG-J.
- PEG-Js must not be removed before seeking advice from the gastroenterologist or nutrition nurse specialist.
- Sterile water **MUST** be used for flushing PEG-J feeding tubes.
- Follow the post insertion instructions for the plan of care of the PEG-J

6.2.3. Radiologically Inserted Gastrostomy (RIG)

The tip sits within the stomach lumen and is secured with a balloon and an external disc. This type of tube can also be known as a Balloon Gastrostomy Tube (BGT).

Patients are screened using similar exclusion criteria as the PEG insertion with the exception of Upper GI obstruction where RIG is the only viable option. The Head and Neck Cancer Service have their own pathway for patients requiring a RIG within NUH.

- Radiologically Inserted Gastrostomy (RIG) is indicated as for a PEG but placement under radiology guidance is required.
- A referral must be made on ICE to the 'Complex Enteral Nutrition MDT'.
- Patients will be assessed for appropriateness of RIG.
- RIGs must not be removed before seeking advice from the gastroenterologist or nutrition nurse specialist.
- Follow the post insertion instructions for the plan of care of the RIG.

6.2.4. Radiologically Inserted Gastro-Jejunostomy (RIG-J)

This is usually a single unit feeding tube. It enters the stomach through the gastric stoma and the tip of the tube sits within the jejunum.

RIG-J is a long-term option for providing enteral nutrients into the gastrointestinal tract, bypassing the stomach, and feeding directly into the small intestine (post – pyloric feeding).

- Radiologically Inserted Gastrojejunostomy (RIG-J) is indicated as for PEG-J but placement under radiology guidance is required.
- A referral must be made on ICE to the 'Complex Enteral Nutrition MDT'.
- Patients will be assessed for appropriateness of RIG-J.
- RIG-Js must not be removed before seeking advice from the gastroenterologist or nutrition nurse specialist.

- Sterile water should be used for flushing RIG-J feeding tubes.
- Follow the post insertion instructions for the plan of care of the RIG-J

6.3. INDICATIONS AND CONTRAINDICATIONS

6.3.1 Indications

Enteral tube feeding may be short-term or long-term depending on a patient's individual circumstances.

Short-term feeding:

- Nasogastric or Nasojejunal feeding is the preferred method of feeding – refer to [NGT/NJT feeding policy](#).
- Head and neck cancers.
- UGI surgery
- Poor oral intake/increased nutritional requirements

Long-term feeding:

Assessment should be considered on an individual patient basis for PEG; PEJ; RIG; or RIJ feeding taking the following into account:

- Neuromuscular dysphagia
- Stroke
- Brain injury.
- Parkinson's disease
- Demyelinating disease (e.g. multiple sclerosis)
- Guillain-Barré syndrome (this may be temporary)
- Motor neurone disease
- Polymyositis
- UGI obstruction
- GI dysmotility

6.3.2 Contraindications:

Patients are screened for the following exclusion criteria before considering Long-term feeding tube insertion:

- Severe kyphosis
- Major Gastrointestinal problems e.g. malignancy/gastric ulceration
- Acute medical conditions (e.g. pneumonia or heart failure. A mild or moderate Stroke would not be a contra-indication)
- Uncorrected coagulopathy
- Haemodynamic instability
- Ascites
- End stage dementia with co-morbidities.
- Low albumin is associated with increased risk of complications and mortality. Serum albumin <28g/l is a relative contra-indication to PEG, and the risks and benefits should be carefully considered.

- Altered Anatomy
- Upper GI obstruction.

6.4 CONSIDERATIONS FOR PEG, PEG-J, RIG, RIG-J

In the acute setting, patients unable to swallow safely or take sufficient energy and nutrients orally should have an initial 2–4-week trial of nasogastric tube feeding, before considering a longer-term method of enteral feeding. Refer to [NGT/NJT policy](#).

The decision to start enteral tube feeding should be made following a risk assessment. Where possible this will include a Dietitian, a senior doctor responsible for the patient's care, a senior ward nurse familiar with the patient and if appropriate the patient themselves should be involved in the decision. A decision must be made that balances the risks of feeding with the need to feed. The rationale for inserting an enteral feeding tube must be recorded in the patient's medical notes.

Following this trial of NGT feeding healthcare professionals with relevant skills and training in the diagnosis, assessment and management of swallowing disorders should assess the prognosis and options for future nutrition support. If it is recommended that the patient be considered for LTF, then each patient should be assessed as an individual both medically and ethically and an insertion of a LTF tube be considered in its own merit. Prior to making a request for a LTF tube to be inserted, the patient must be assessed/reviewed by the Dietitian, SALT and the referring medical team.

Once the rationale to place any long-term feeding tube has been documented a referral must be sent via ICE to the Complex Enteral Nutrition MDT. This will prompt an initial review by the Nutrition nurse specialists, which will include a full assessment of the suitability of the patient for long term feeding. When deemed appropriate the patient will be reviewed on the Complex Enteral Nutrition round as per [Appendix A](#).

Following assessment and decision for the insertion of a long-term feeding tube, patients' consent must be obtained. If capacity is in doubt a two-stage test must be undertaken, if the patient is found to lack capacity, a plan of care in their best interest must be completed. Please see the Trusts Consent Policy and Mental Capacity Act (MCA) Policy for further information.

Review advance directives If the patient has advance directives stating they do not wish to be tube fed or has communicated this to the family, at a time when they were competent, the family should be encouraged to follow their wishes.

Once a date for the procedure has been given, please refer to [Appendix B](#) **Guidance for patients undergoing the insertion of a long-term feeding tube (PEG/RIG)** for essential pre-procedure requirements, that must be completed.

6.5. POST PROCEDURE CARE FOLLOWING THE PLACEMENT OF A PEG, PEG-J, RIG, RIG-J TUBE.

Following the procedure the patient must be fully conscious and monitored on transfer back to the ward.

Following the Insertion of a PEG, a high visibility warning sticker with the following information will be in the patient's medical notes:

IF THERE IS PAIN ON FEEDING, OR PROLONGED OR SEVERE PAIN POST-PROCEDURE, OR EXTERNAL LEAKAGE OF GASTRIC CONTENTS, STOP FEED/ MEDICATION DELIVERY IMMEDIATELY. OBTAIN SENIOR ADVICE URGENTLY AND CONSIDER CT SCAN, CONTRAST STUDY OR SURGICAL REVIEW.

- Monitor and record a full set of observations every half hour for 4 hours, then every hour for 4 hours. If the patients NEWS remains stable monitor as per the Observation and Escalation Policy for Adult Inpatients.
- Nothing should be administered via a newly inserted feeding tube until 4 hours post-procedure. The doctor must then listen for bowel sounds and document in the medical notes their assessment and outcomes. If no bowel sounds are present do not use the feeding tube and follow the above guidance.
- If bowel sounds are present, sterile water must be administered at 25ml/hr for 4 hours.
- The patients feeding regime can then be commenced as per the Dietitians plan. The [Enteral Feeding starter regimen](#) is available on the intranet if there is no plan in place.
- Post-operative discomfort is common and can be managed with soluble paracetamol via the feeding tube (or IV if within the 1st 4 hours).
- PEGs will be required to be advanced, rotated and retracted by a trained professional, 14 days after initial insertion. Thereafter, this will need to be performed at a minimum of every 7 days.
- RIGs are secured in place with an internal balloon filled with sterile water. This needs to be changed at a minimum of every 7 days. The first balloon water change is performed 14 days after initial insertion. See [Appendix D](#) for guidance on how to check the balloon, integrity. This must only be performed by a trained professional.

6.6. DOCUMENTATION / RECORD KEEPING

Patients who require a PEG/RIG/PEG-J/RIG-J must have their pre and post procedure and ongoing care documented:

- Care Plan for Insertion of Gastrostomy/Gastrojejunostomy feeding tube – available to order from the trust's forms management system using reference FKIN030370 (see [Appendix A](#) for a representational copy)
- Continuation sheets for the following are available to print from the intranet: [Enteral Tube Feeding Monitoring Chart](#)
- All patients who are nil by mouth must receive regular mouthcare and will require 'Care for patients requiring assistance with Oral Care Plan'

6.7. MEDICATIONS ADMINISTRATION VIA AN ENTERAL FEEDING TUBE

- Give medication orally if the patient can take it safely.
- Review all medications and change the administration route; is all medication necessary?

- Medications administered via the feeding tube should be in liquid (elixir) form or in the form of soluble tablets and administered individually. Flush the tube with 30mls water before and after each medication. If the patient is on fluid restriction, consult the Dietitian and/or Pharmacist about the quantity of water to be given before and after each medication.
- Do not mix medications with enteral feeds as it may impact on drug absorption. Clinically significant interactions: Warfarin, Phenytoin, Theophylline, Digoxin, Ciprofloxacin, Antacids, MST, Tetracycline, Rifampicin, Penicillin's (**this list is not exhaustive**)
- Always use a 60ml enteral syringe to administer the medications.
- Notify doctor if medication is not available in liquid form. Consult pharmacist whenever appropriate
- If medication is in a crushable pill/ tablet form, crush the pills separately using a pill/ tablet crusher, then mix with 10 ml of water until they become a suspension. Rinse the pill/ tablet crusher with 10mls of water, draw up the water up into a 60ml enteral syringe and administer through the tube
- Where appropriate open capsules and dissolve contents in 10mls of water.
- Modified release products, enteric coated medications, sublingual and bulk-forming agents should not be crushed. Consult pharmacist for updated information, hormone preparations and cytotoxics.
- Dilute hypertonic and concentrated drugs with water (e.g. syrup potassium chloride (KCL), Sodium Chloride (NaCl), Sodium Phosphate (multivitamins) before giving via tube
- Do not mix multiple medications together and deliver them simultaneously. Ensure the tube is flushed with water before and after each medication
- These details above conform to BAPEN guidelines. (British Association for Parenteral and Enteral Nutrition).
- **Please seek further advice from your ward/department Pharmacist, medicines information line (3163) or on-call Pharmacist (via switchboard).**

6.8. COMMON PROBLEMS RELATED TO TUBE FEEDING

6.8.1. Brown or dark aspirate

- If the amount of brown or dark aspirate material is less than 50 ml, withhold feeding and reassess 1 hour later.
- If initial aspiration or subsequent assessment is greater than 50 ml, seek medical advice to consider whether there may be ileus or obstruction.

6.8.2. Tube Blockage

- If the tube blocks, massage it, particularly if you can see a blockage.
- Flush tube with 50ml warm water or bicarbonate water. If unsuccessful refer to the trust guidance on 'unblocking enteral tubes' [Unblocking enteral tubes](#)
- Do not attempt to flush the tube forcefully if resistance is felt.
- Consider for tube replacement if failed unblocking.
- How to prevent tube blockage
 - Flush the tube with water before and after each feeding
 - Discuss with pharmacy medications suitable for administration via an enteral feeding tube (refer to medication administration)

6.8.3. Vomiting

- Make sure the patient is sat at a minimum of 30-degree angle whilst the feed is in progress and for 30 minutes afterwards
- Withhold feeding and identify possible cause of vomiting.
- Ensure the patient is adequately hydrated.
- Seek advice from the dietitian, gastroenterologist or nutrition nurse specialist.
- Reduce feeding rate and gradually increase to the desired rate if feeding is resumed. Refer to Dietitians for advice on the feeding rate.
- Seek medical advice if vomiting persists.

6.8.4 Abdominal pain

- Consult the dietitian to review and amend the feeding regime, considering a reduced rate or length of time on the feed
- Liaise with the medical team to rule out any abdominal pathology and to consider pain relief if appropriate

6.8.5 PEG/RIG Tube displacement

For displaced feeding tubes less than 21 days old (Immature tract)

- Stop feeding immediately
- Do not use the tube until the position has been confirmed
- Inform ward Doctors or out of hours team
- Cover site with a dressing and refer to Interventional Radiology on ICE and follow this up with an urgent phone call on extension 2500. Please note this is not a 24hour service.
- Inform Nutrition Nurse Specialists x4459

N: B - Patients are at a significant risk of peritonitis and perforation due to spillage of gastric contents through the immature tract. If this is suspected, please refer for a Surgical review.

For displaced feeding tubes greater than 21days old (Mature tract)

- Contact the Nutrition nurse specialist OR on call Gastroenterologist (Please refer on ICE and back this up with a phone call via switchboard) for an urgent review.
- If the tube has completely dislodged only reattempt reinsertion of a balloon gastrostomy tube if trained to do so.
- For staff NOT trained in this procedure attempt to place a 12fr Foley catheter in the tract and secure to abdominal skin. **Do not Inflate the balloon or feed through it.** This is to prevent tract closure which starts occurring anytime from as little as 20minutes.

6.8.6 Gastrostomy site infection

- Swab the site and send for bacterial and fungal cultures and sensitivities
- Clean the area daily with normal saline and apply a non-adhesive foam dressing
- Take a photo and upload to Nervecentre

- If there is gastric leakage protect the surrounding skin with a barrier cream
- Reinforce good personal hygiene with the patient
- Inform the medical team, to consider antibiotics in line with the trust guidance
- For chronic or severe wounds consider a referral to Tissue Viability Nurses and Nutrition Nurse Specialist via ICE.
- Refer to NNNG guidance for Gastrostomy-Exit-site-guidelines-3rd-edition-March-2020-sc-Final-2020-v3.pdf [Care of a gastrostomy tube and stoma site](#)

7.0 DISCHARGE PLANNING

Before discharge from hospital, the patient and/or carers will be trained:

- how to administer the feed (including the use of a feeding pump if being used)
- how to flush the feeding tube
- how to clean the feeding tube
- how to administer medications
- how to care for the feeding tube and gastrostomy site.

Please refer to the Nutrition CNS or Dietitians via ICE to arrange training.

The Home Enteral Feeding (HEF) Dietitians provide dietetic follow up for all patients with enteral feeding tubes. Nutricia, provide ongoing supplies of feed and equipment as well as ongoing nursing support. The hospital dietitians will refer to the HEF Dietitians on discharge for follow up care.

8.0 MONITORING COMPLIANCE AND EFFECTIVENESS

Minimum Requirement to be Monitored (WHAT – element of compliance or effectiveness within the document will be monitored)	Responsible Individual (WHO – is going to monitor this element)	Process for Monitoring e.g. Audit (HOW – will this element be monitored (method used))	Frequency of Monitoring (WHEN – will this element be monitored (frequency/ how often))	Responsible Individual or Committee/ Group for Review of Results (WHERE – Which individual/ committee or group will this be reported to, in what format (eg verbal, formal report etc) and by who)
Trust-wide audit to assess compliance with Policy for the care and management of Percutaneous Endoscopic/ Radiologically placed Gastrostomy, Percutaneous Endoscopic/Radiologically placed Gastrojejunostomy feeding tubes. PEG,RIG,PEG-J, RIG-J	Nutrition Nurse Specialist	Audit	Annually	Nutrition and Hydration Steering Group
All incidents involving enteral feeding tubes reported will be categorised according to level of risk. Datix reports will be analysed for any themes and trends.	Nutrition Nurse Specialist	Review of Datix reports	Monthly	Nutrition & Hydration Steering Group and then escalated to the Clinical Outcomes and Effective Care (COEC) Group.

9.0 TRAINING AND IMPLEMENTATION

All registered doctor and nurses who care for enteral long-term feeding tubes must have been trained to do so. Competency assessment documents are available through the SHERWOOD E-Academy upon request to the Nutrition Nurse Specialist or Stroke Nurse Specialist. For registered nurses this must be used as documentary evidence of competency to practice. Competency should be recorded on the Trust's centrally held training registers.

Trust Registered Nursing and AHP staff seeking competency should be compliant with the following standards of training:

- Complete and pass a theory assessment on the online Sherwood E-Academy
- Complete a period of supervised practice by a competent trained staff member. The overall competency pack on Sherwood E-Academy will be signed off by the Nutrition Nurse Specialist or Stroke Nurse Specialist.

10.0 IMPACT ASSESSMENTS

Delete/ amend as applicable:

- This document has been subject to an Equality Impact Assessment, see completed form at [Appendix E](#)
- This document has been subject to an Environmental Impact Assessment, see completed form at [Appendix F](#)

11.0 EVIDENCE BASE (Relevant Legislation/ National Guidance) AND RELATED SFHFT DOCUMENTS

Evidence Base:

- Akkersdijk WL, van Bergeijk JD, van Egmond T et al. Percutaneous gastrostomy; comparison of push and pull methods and evaluation of antibiotic prophylaxis endoscopy; 1998; 27: 313-6.
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- Clarke, G; Galbraith, S; Woodward, J. Should they have a percutaneous endoscopic gastrostomy? the importance of assessing decision-making capacity and the central role of a multidisciplinary team. 2014; Clinical Medicine; vol 12; p. 245-249

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- Frigal-Ruiz AB, Lucendo AJ, Percutaneous Endoscopic Gastrostomy: A Practical Overview on Its Indications, Placement Conditions, Management and Nursing Care; 2015; *Gastroenterology Nursing*; vol. 38; p.354-366
- Gauderer, MWL; Percutaneous endoscopic gastrostomy and the evolution of contemporary long-term enteral access. *Clinical Nutrition* (Edinburgh, Scotland); Apr 2002; vol. 21; p.103-110
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Related SFHFT Documents:

- [Policy for consent to examination, treatment and care](#)
- [SFH Mental Capacity Act Policy](#)
- [Guideline for the Prevention and Management of Refeeding Syndrome in Adults](#)
- [Nasogastric \(NG\) & Nasojejunal \(NJ\) Feeding Tubes – Policy For Insertion and Management in Adult Patients. \(excludes Paediatrics & Neonates\)](#)
- [Antibiotic Prophylaxis in Adult Gastrointestinal Endoscopy Guidelines](#)
- [Anticoagulation and Antiplatelet Guidelines for Patients Undergoing Endoscopic Procedures](#)

12.0 KEYWORDS

Percutaneous endoscopic gastrostomy; gastrojejunostomy; radiological; radiologically inserted; NGT; NJ; placed; enteral; nutrition; PEG; RIG; PEG-J; RIG-J: Long term feeding tube; Balloon gastrostomy tube; BGT.

13.0 APPENDICES

- [Appendix A](#) – Standard Operation Procedure: The Complex Enteral Nutrition MDT
- [Appendix B](#) – Guidance for Patients Undergoing the Insertion of a Feeding Tube (PEG/RIG)
- [Appendix C](#) – Feeding Tube Dislodgement Pathway
- [Appendix D](#) – Checking the Balloon Integrity of the Balloon gastrostomy Tubes
- [Appendix E](#) – Equality Impact Assessment (EQIA)
- [Appendix F](#) – Environment Impact Assessment

Appendix A - Standard Operation Procedure: The Complex Enteral Nutrition MDT

PURPOSE

- This service exists for the referral of inpatients requiring assessment for long term tube feeding. This includes PEG (Percutaneous endoscopic gastrostomy) PEG-J (Percutaneous endoscopic gastrostomy - Jejunostomy), RIG (Radiological inserted gastrostomy) and RIG-J (Radiological inserted gastrostomy - jejunostomy) or home NJ (Nasojejunal) tube feeding.

The purpose of the service is as follows:

- To provide an assessment and offer support for patients requiring long-term feeding tubes.
- To facilitate conversations with patients and their families to support decision making around whether to have a feeding tube.
- To participate in meetings where patients lack the capacity to decide on tube feeding.
- To support teams and patients in deciding on the most appropriate tube type
- To help to arrange tube insertion when it is considered appropriate.
- To arrange training and community support.

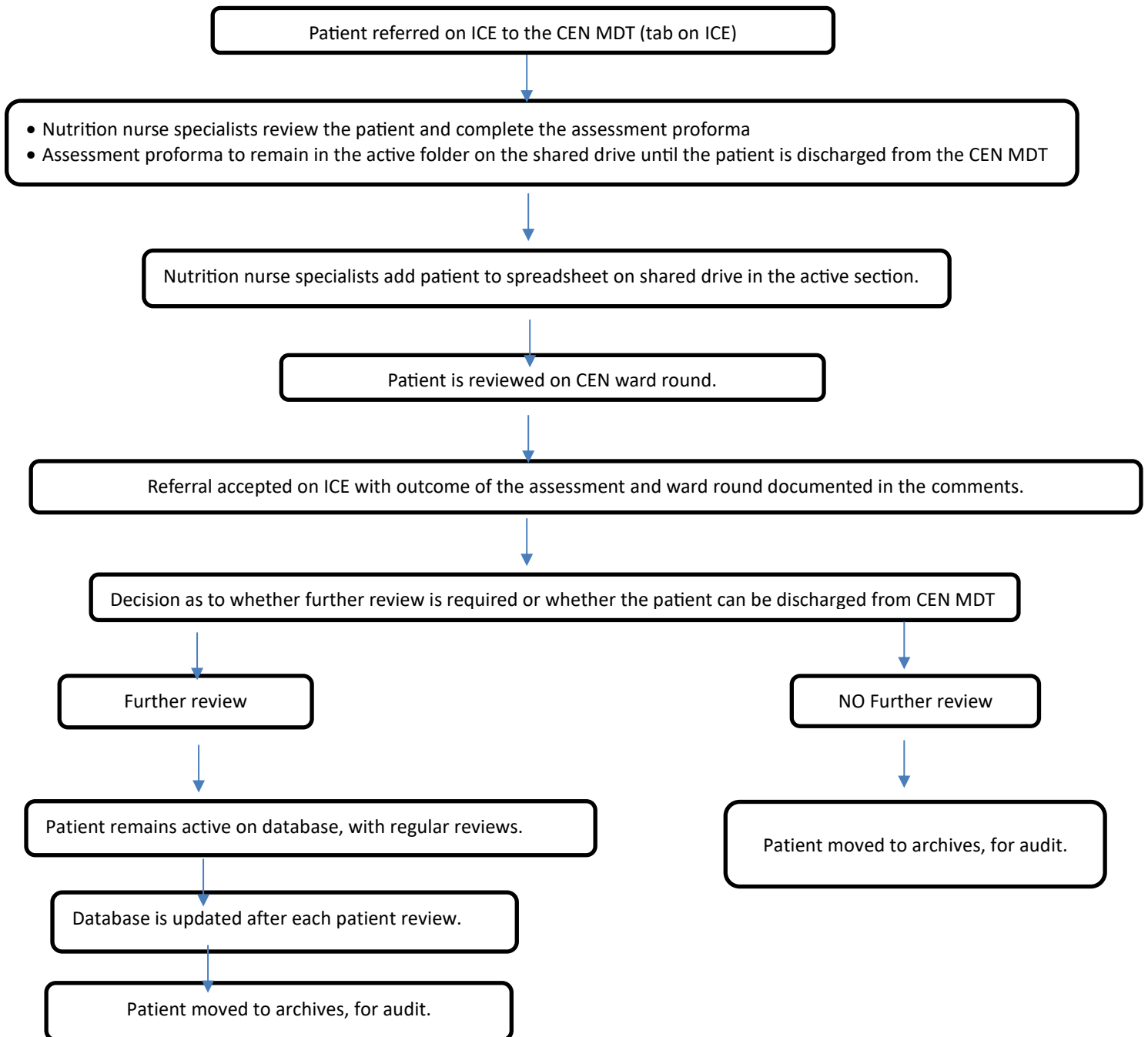
MEMBERSHIP

The team will comprise the specialist nutrition nurses and a gastroenterology consultant with an interest in nutrition. The team will be supported by the Dieticians and Speech and Language teams.

PROCESS

See next page.

PROCESS



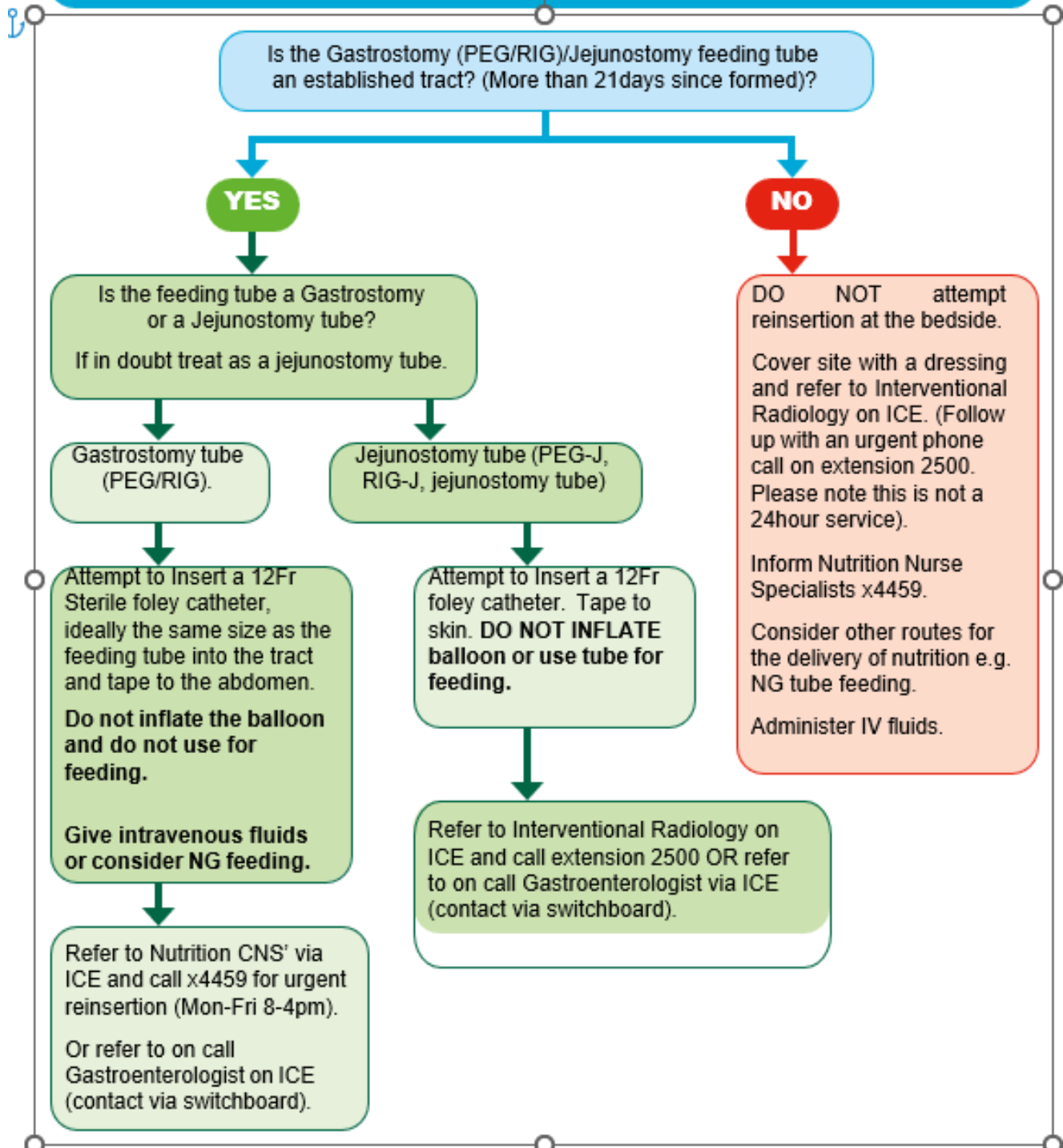
Appendix B

Guidance for Patients Undergoing the Insertion of a Long-Term Feeding Tube (PEG, PEG-J, RIG, RIG-J)

<i>Items</i>	<i>Optimal time for preparation</i>
Psychological preparation • Acquisition of the concept of tube feeding and site care • Acceptance and understanding of the tube and its impact on their lives by patient and caregiver. •	Before consent.
Refer to Dietitians	Before insertion.
Refer to Complex Enteral Nutrition MDT via ICE	Before insertion
Blood test FBC, LFT, INR, APTT and serum albumin must be checked	3 days before insertion.
Ensure the results of the MRSA screen have been reviewed by a doctor	Before insertion
Anticoagulation medications – these may require stopping before the procedure	Refer to Anticoagulation and Antiplatelet Guidelines for Patients Undergoing Endoscopic Procedures
Consent	Before procedure
Endoscopy/Radiology checklist	Date of procedure
NBM for 6 hours before procedure and insert peripheral intravenous cannula	6 hours pre-procedure
For Endoscopic Procedure (PEG/PEG-J) Prescribe Prophylactic antibiotics^{16,17,18} Refer to Antibiotic Prophylaxis in Adult Gastrointestinal Endoscopy Guidelines	1 hour pre-procedure

Appendix C: Feeding Tube Dislodgement Pathway

For healthcare professional not trained in the replacement of a balloon gastrostomy tube



Appendix D

Checking Balloon Integrity of the Balloon Gastrostomy Tubes

This must only to be performed by a trained, competent practitioner.

It is normal for some water in the balloon to diffuse through the balloon membrane. To ensure proper balloon inflation it is necessary to check the balloon integrity and replace the balloon fluid every 7 days or according to manufacturer's recommendations.

- 1) Criteria for checking balloon integrity
 - Routine practice: every 7 days
 - Suspected leakage of the balloon fluid.

- 2) Equipment
 - Apron and gloves
 - Dressing set
 - Saline solution
 - 10ml syringe x 2
 - Sterile Water
 - Water soluble lubricant.

- 3) Procedure – using aseptic non-touch technique
 - a. Explain the procedure to patient and relative
 - b. Arrange patient in supine position
 - c. Wash hands, dry hands thoroughly and glove hands.
 - d. Prepare the 10 ml syringe with the amount of water recommended by manufacturer
 - e. Prepare the dressing pack
 - f. Clean the exit site and tube to check any adhesion
 - g. Rotate the tube to check any adhesion
 - h. Check the positioning of the external retention disc
 - i. Gently rotate the external retention disc for 3-4 cm away from the site
 - j. Apply water soluble lubricant around the tube and site
 - k. Push the tube inward for 2-3 cm
 - l. Holding the tube in place use a 10 ml syringe to withdraw the fluid from the balloon inflation port
 - m. Compare the volume of water withdrawn from the balloon with the original volume
 - n. Top up the volume of water in balloon to the values recommended by manufacturer
 - o. Reposition the external retention disc to the original marking
 - p. Clean the exit site, tube and external retention disc
 - q. Document the amount withdrawn, the amount reinstalled, any adhesion and site condition.

Notes

- Do not inflate the balloon with air as this may puncture it
- Do not inflate the balloon with normal saline as saline crystals block the tube and may result in the tube requiring replacement
- If there is a loss of a water greater than 5 ml within 7 days this is suggestive of balloon leakage, notify the Nutrition nurse specialist for tube replacement or for urgent issues please contact the on-call Gastroenterologist (out of hours or at weekends)
- If deflation of the balloon with a syringe is difficult, it is possible that the inflation channel has occluded. Notify the Nutrition nurse specialist (Monday – Friday 8-4pm) or for urgent issues out of hours or weekends please contact on-call gastroenterologist.

APPENDIX E - EQUALITY IMPACT ASSESSMENT FORM (EQIA)

Name of service/policy/procedure being reviewed: 'PEG Policy'			
New or existing service/policy/procedure: Existing			
Date of Assessment: 22/09/2021			
For the service/policy/procedure and its implementation answer the questions a – c below against each characteristic (if relevant consider breaking the policy or implementation down into areas)			
Protected Characteristic	a) Using data and supporting information, what issues, needs or barriers could the protected characteristic groups' experience? For example, are there any known health inequality or access issues to consider?	b) What is already in place in the policy or its implementation to address any inequalities or barriers to access including under representation at clinics, screening?	c) Please state any barriers that still need to be addressed and any proposed actions to eliminate inequality
The area of policy or its implementation being assessed:			
Race and Ethnicity	Individual patient concerns that their dietary requirements may not be met.	Appropriate enteral liquid feed options for enteral feeding are available for patients with different cultural and dietary needs. Dietetic specialist advice is available for all patients with different requirements e.g. vegetarian, vegan, kosher Access to the trust interpretation and translation policy to ensure patients are able to give informed consent where they are able and to ensure that they have appropriate written information.	Not applicable
Gender	No impacts identified.	Not applicable	Not applicable
Age	The Policy covers older adults with cognitive impairment through acute delirium or Dementia. These patients would have their mental capacity assessed and decisions around enteral feeding tube insertion made with the managing consultant and based on	MCA policy	Not applicable

	the best interest of each individual patient with the involvement of family and carers. The Policy promotes mandatory safe practice. Six monthly Trust wide audits demonstrates that every patient who has an enteral feeding tube inserted has a key points of care chart documented, which includes a prompt for consent and best interest documentation.		
Religion	Individual patient concerns that their dietary requirements may not be met.	Any cultural issues would be discussed with the patient and content of feed would be checked to ensure it is suitable for any religious requirements. Specialist dietetic advice is available.	Not applicable
Disability	For people with a disability, reasonable adjustments may need to be made to ensure that the patient/carer has access to relevant information.	The Trust protects patients with learning disabilities by ensuring that advocates are available to assist in best interest decision making. If a patient with learning disabilities lacks the mental capacity to provide informed consent for an enteral feeding tube procedure, a decision will be made in the best interest of each patient along with the managing consultant, with involvement of any family and carers. The Policy promotes mandatory safe practice. Six monthly Trust wide audits will review the Pathway of care documentation which includes a prompt for consent and best interest documentation. Traffic light documents are available for patients with learning disabilities which prompt staff to consider what reasonable adjustments may be required, and facilitate sharing of information in regard to nutritional care and patient preferences.	Not applicable
Sexuality	No impacts identified.		Not applicable

Pregnancy and Maternity	No impacts identified.		Not applicable
Gender Reassignment	No impacts identified.		Not applicable
Marriage and Civil Partnership	No impacts identified.		Not applicable
Socio-Economic Factors (i.e. living in a poorer neighbourhood / social deprivation)	No impacts identified.		Not applicable
What consultation with protected characteristic groups including patient groups have you carried out? • None			
What data or information did you use in support of this EqIA? • Best practice and review of policies and literature			
As far as you are aware are there any Human Rights issues be taken into account such as arising from surveys, questionnaires, comments, concerns, complaints or compliments? • No			
Level of impact From the information provided above and following EQIA guidance document Guidance on how to complete an EIA (click here), please indicate the perceived level of impact: Low Level of Impact For high or medium levels of impact, please forward a copy of this form to the HR Secretaries for inclusion at the next Diversity and Inclusivity meeting.			
Name of Responsible Person undertaking this assessment: Nicole Dudley & Katie Townsend			
Signature: Nicole Dudley & Katie Townsend			
Date: 18 th February 2025			

APPENDIX F – ENVIRONMENTAL IMPACT ASSESSMENT

The purpose of an environmental impact assessment is to identify the environmental impact, assess the significance of the consequences and, if required, reduce and mitigate the effect by either, a) amend the policy b) implement mitigating actions.

Area of impact	Environmental Risk/Impacts to consider	Yes/No	Action Taken (where necessary)
Waste and materials	- Is the policy encouraging using more materials/supplies? - Is the policy likely to increase the waste produced? - Does the policy fail to utilise opportunities for introduction/replacement of materials that can be recycled?	No	N/A
Soil/Land	- Is the policy likely to promote the use of substances dangerous to the land if released? (e.g. lubricants, liquid chemicals) - Does the policy fail to consider the need to provide adequate containment for these substances? (For example bunded containers, etc.)	No	N/A
Water	- Is the policy likely to result in an increase of water usage? (estimate quantities) - Is the policy likely to result in water being polluted? (e.g. dangerous chemicals being introduced in the water) - Does the policy fail to include a mitigating procedure? (e.g. modify procedure to prevent water from being polluted; polluted water containment for adequate disposal)	No	N/A
Air	- Is the policy likely to result in the introduction of procedures and equipment with resulting emissions to air? (For example use of a furnaces; combustion of fuels, emission or particles to the atmosphere, etc.) - Does the policy fail to include a procedure to mitigate the effects? - Does the policy fail to require compliance with the limits of emission imposed by the relevant regulations?	No	N/A
Energy	Does the policy result in an increase in energy consumption levels in the Trust? (estimate quantities)	No	N/A
Nuisances	Would the policy result in the creation of nuisances such as noise or odour (for staff, patients, visitors, neighbours and other relevant stakeholders)?	No	N/A