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

Reference	CPG-TW-PEG		
Approving Body	Nutrition Steering Group		
Date Approved	28th September 2021		
For publication to external SFH website	**Positive confirmation received from the approving body that the content does not risk the safety of patients or the public:**		
	YES	**NO**	**N/A**
	X		
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Supersedes	• v1.2, Issued 28th May 2019 to Review Date October 2021 (ext2)		
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Date of Completion of Equality Impact Assessment	22nd September 2021		
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Legal and/or Accreditation Implications	This policy is required by the trust to support implementation and compliance with recognised safe practice in accordance with national guidelines and Patient Safety Alerts		
Target Audience	All clinical Trust staff that treat and care for adult patients		
Review Date	September 2024		
Sponsor (Position)	Chief Nurse		
Author (Position & Name)	Nutrition Nurse Specialist, Jenna Parsons		
Lead Division/ Directorate	Corporate		
Lead Specialty/ Service/ Department	Nursing – Nutrition Team		
Position of Person able to provide Further Guidance/Information	Nutrition Nurse Specialist		

Associated Documents/ Information	Date Associated Documents/ Information was reviewed
• *Enteral Feeding Starter Regimen* • *Enteral Tube Feeding Monitoring Chart*	*July 2021 via Nutrition and Hydration Steering Group*
• *Guideline for Glycaemic Control in Patients with Diabetes Taking Enteral Nutrition*	*Pending approval, Oct-21 via Nutrition and Hydration Steering Group*

CONTENTS

KEY MESSAGES

- Percutaneous Endoscopic Gastrostomy (PEG) is the first choice for patients who require long term enteral feeding i.e. more than 6 weeks and who have a functioning Gastro intestinal tract.
- Radiologically Inserted Gastrostomy (RIG) would be considered for patients who require radiological imaging for the placement of the enteral feeding tube.
- 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 form 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.
- Balloon gastrostomy feeding tubes must only be changed by a trained competent practitioner.

1.0 INTRODUCTION

Maintenance of hydration and nutrition is an important aspect of medical care in patients suffering from severe illnesses affecting oral intake. Thus, enteral tube feeding is an important treatment modality in hospital, long term care settings and in the community. The proper use of enteral feeding ensures the safe delivery of nutrition and hydration to patients via the gastrointestinal tract.

This policy and the supporting procedural information cover the following methods of enteral tube feeding:

- Percutaneous Endoscopic Gastrostomy (PEG)
- Percutaneous Endoscopic Gastrojejunostomy (PEG-J)
- Radiologically Inserted Gastrostomy (RIG)
- Radiologically Inserted Gastrojejunostomy (RIG-J)

2.0 POLICY STATEMENT

The scope of this policy is to provide guidance to all health care professionals who care for patients requiring enteral feeding via one of the above methods. This policy is aimed at standardising the care for patients with enteral feeding tubes to ensure that insertion and ongoing management is safe, effective and comfortable for the patients.

3.0 DEFINITIONS/ ABBREVIATIONS

Percutaneous endoscopic gastrostomy (P.E.G)	An endoscopically inserted gastrostomy tube – the tip sits within the stomach lumen and is secured with an internal and external flange or internal balloon.
Percutaneous Endoscopic gastrostomy with jejunal extension (P.E.G-J)	This is a long fine bore tube that is placed through an existing or newly inserted P.E.G. The tube tip is endoscopically positioned in the jejunum
Radiologically Inserted gastrostomy (R.I.G.)	A radiologically inserted gastrostomy tube. The tip sits within the stomach lumen and is secured with an internal and external flange or internal balloon.
Radiologically Inserted gastrostomy with jejunal extension (R.I.G-J).	This is a long fine bore tube that is placed through an existing or newly inserted RIG. The tube tip is radiologically positioned in the jejunum.
Surgical jejunostomy	These tubes are usually placed at the time of surgery directly into the jejunum.
KMH	King's Mill Hospital
MCH	Mansfield Community Hospital
NH	Newark Hospital
PEG	Percutaneous Endoscopic Gastrostomy
RIG	Radiologically Inserted Gastrostomy
PEG-J	Percutaneous Endoscopic Jejunostomy
RIG-J	Radiologically Inserted Jejunostomy
ED	Emergency Department

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 Patient Safety and Quality Group and will send activity reports to Nursing, Midwifery and AHP Board.

Medical Staff

- Medical staff are responsible for ensuring the dissemination and implementation of this policy within Divisions and for demonstrating compliance of staff competency through audit.

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

6.0 DOCUMENT REQUIREMENTS

6.1. OVERVIEW

Patients should be considered for enteral tube feeding when they are unable to safely and comfortably take adequate nutrition orally, have a functioning gastrointestinal tract and have consented to have the intervention. If capacity is in doubt a two stage test must be undertaken, if the patient is found to lack capacity, a best interest checklist and 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.

6.2. CONSIDERATIONS FOR PEG, PEG-J, RIG, RIG-J

Eating experience
For most people, eating is an enjoyable and social experience as well as a physiological necessity. A patient who is tube fed may no longer be able to eat and drink orally and enjoy his/her food. If this is so, nurses have a responsibility to help the patient come to terms with this situation and endeavour to help the patient not feel isolated.

Routine mouth care is vitally important for the patient unable to eat or drink; mouthwashes and oral mouth care should be offered.

The decision to start enteral tube feeding should be made following a risk assessment. Where possible this will include a Nutrition Nurse Specialist or Dietitian, a senior doctor responsible for the patients 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.

6.3. INDICATIONS AND SELECTION

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

6.3.1 Short-term feeding:

- Nasogastric or nasojejunal feeding is the preferred method of feeding – refer to NGT/NJT feeding policy
- Head and neck cancers

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 e.g.
  - stroke
  - brain injury
  - Parkinson's disease
  - demyelinating disease (e.g. multiple sclerosis)
  - Guillain-Barré syndrome (this may be temporary)
  - Motor neurone disease
  - Polymyositis

6.4. TIMING OF ADMINISTRATION OF ENTERAL TUBE FEEDING

1. In most instances, enteral feeding should be started as soon as possible when indicated.

2. In the acute setting, for example following stroke, people 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 FOR A LONGER TERM METHOD OF ENTERAL FEEDING. Refer to NGT/NJT policy

3. 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.

6.5. ENTERAL FEEDING FORUMLA/ NUTRITIONAL REQUIREMENT

Enteral Feeding starter regimen is available on the intranet.

Patient's nutritional requirements will be calculated on an individual basis by the Dietitians, taking into account: age, weight, medical conditions, mobility and any special nutritional requirements.

Once the assessment and selection of the correct enteral feeding tube has been determined, the management of patients thereafter should be carried out in conjunction with the associated information in section 6.7 as below.

In addition, guidance for Glycaemic control in patients with diabetes taking enteral nutrition can be found on the intranet.

6.6. DOCUMENTATION / RECORD KEEPING

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

- 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

Patients who require a RIG, PEG-J or RIG-J should have their pre and post procedure and ongoing care documented in their nursing and medical records.

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

6.7.1. Percutaneous Endoscopic Gastrostomy (PEG)

Percutaneous Endoscopic Gastrostomy (PEG) is indicated where nasogastric or 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. This is the most frequently used method of gastrostomy insertion.

The decision to place a PEG should involve all members of the multidisciplinary team, the patient where possible, carers, patient advocate. Ultimately the decision to perform a procedure rests with the endoscopist and the patient.

Patients are screened for the following exclusion criteria before considering PEG 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 – and could be considered at 14 days[21])

- 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.

Preparation of patient for consent for PEG insertion

Following assessment and decision for PEG insertion consent must be obtained.

The gastroenterologist or nurse specialist will confirm the physical condition of patient to be fit for the procedure. The gastroenterologist, nurse specialist and/or Dietitians will prepare patient and family psychologically so that they can cope with the PEG tube and its daily care (in particular the administration of feed).
The preparation of PEG insertion is summarised as follows:

Items	*Optimal time for preparation*
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 nutrition nurse specialist (who will liaise with gastroenterologist)	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**
• **Prescribe medication** Prophylactic antibiotics[16,17,18] Refer to **Antibiotic Prophylaxis in Adult Gastrointestinal Endoscopy Guidelines** • NBM for 6 hours before procedure and insert peripheral intravenous cannula • Review oral medications.	1 hour pre-procedure
Consent – either patient or 2 doctors.	Date of procedure.
Endoscopy Checklist must be completed prior to the patient leaving the ward.	Date of procedure

For additional information see:

- **Appendix B – Guidance for the assessment of a patient regarding the appropriateness of PEG feeding tube placement**
- **Appendix C – Percutaneous Endoscopic Gastrostomy (PEG) tube procedural information**

If a PEG tube becomes dislodged follow the pathway at Appendix D

6.7.2. Percutaneous Endoscopic Gastrojejunostomy (PEG-J)

Percutaneous Endoscopic Gastrojejunostomy (PEG-J) is indicated for patients requiring long term enteral post pyloric feeding.

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
- Pancreatitis
- An increased risk of aspiration associated with gastric feeding

PEG-J tube insertion:

- At Sherwood Forest Hospitals, these are inserted radiologically, in theatre or endoscopically.
- Sterile water should be used for flushing PEG-J feeding tubes.
- Follow the post insertion instructions for the plan of care of the PEG-J

6.7.3. Radiologically Inserted Gastrostomy (RIG)

- Radiologically Inserted Gastrostomy (RIG) is indicated as for a PEG but placement under radiology guidance is required.
- Assessment as for PEG but must be placed radiologically.
- A referral must be made on ICE
- 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

6.7.4. Radiologically Inserted Gastrojejunostomy (RIG-J)

- Radiologically Inserted Gastrojejunostomy (RIG-J) is indicated as for PEG-J but placement under radiology guidance is required.
- Assessment as for PEG-J but must be placed radiologically.
- A referral must be made on ICE
- 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

6.8. MEDICATIONS ADMINISTRATION VIA AN ENTERAL FEEDING TUBE

- Give medication orally if patient is able to take it
- Review medication; is all medication really necessary?
- Medications administered via the feeding tube should be in liquid (elixir) form or in the form of soluble tablets and administered separately. Flush the tube with 30 mls 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 delay drug response. Clinically significant interactions: Warfarin, Phenytoin, Theophylline, Digoxin, Ciprofloxacin, Antacids, MST, Tetracycline, Rifampicin, Penicillin's **(this list is not exhaustive)**
- Always use an 60ml enteral syringe to administer the medications.
- Notify doctor if medication is not available in liquid form. Consult pharmacist whenever appropriate
- **Please seek further advice from your ward/department Pharmacist, medicines information line (3163) or on-call Pharmacist (via switchboard).**
- If medication is in pill/ tablet form, crush the pills 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
- Open capsules and dissolve contents in 10mls of water.
- Modified release products, enteric coated medications, sublingual, 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 unless their compatibility is known. Ensure the tube is flushed with water before and after each medication
- **These details 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).**

6.9. COMMON PROBLEMS RELATED TO TUBE FEEDING

6.9.1. 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.

6.9.2. Tube Blockage

- If the tube blocks, massage it, particularly if you can see a blockage.
- Flush tube with 50ml warm water. If unsuccessful try 50 mls carbonated water or 1or 2 Creon 10000 capsules in 10 -20 mls water containing 1g sodium bicarbonate powder. Allow the flushed liquid to rest in the tube. Massage tube gently; try to reflush, in pulsatile fashion.
- Do not attempt to flush the tube forcefully if resistance is felt.
- Consider for tube replacement if failed unblocking.
- Prevention of 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)

6.9.3. Vomiting

- 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.
- Seek medical advice if vomiting persists.

7.0 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	Six monthly	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	Harms Free Group and Nutrition and Hydration Steering Group.

8.0 TRAINING AND IMPLEMENTATION

All registered doctor and nurses who care for enteral feeding tubes must have been trained to do so. Competency assessment documents are available through the Nutrition Nurse Specialist who will also support arrangements for competency assessment to be undertaken. 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:

- Attendance at a recognised face-to-face classroom based theory session
- Complete and pass a theory assessment
- Complete a period of supervised practice

9.0 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

10.0 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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- 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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- Mackie SB, PEGs and ethics; Gastroenterology Nursing; may 2001; vol. 24; p. 138-142

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- Monturo C, The artificial nutrition debate: still an issue… after all these years; Nutrition in Clinical Practice; Apr 2009, vol. 24; p.206-213

- NICE (2006) Nutrition Support in Adults: Oral nutrition support, enteral tube feeding and parenteral nutrition. Last accessed 11/11/08 http://www.nice.org.uk/Guidance/CG32

- Pearce CB, Duncan HD. Enteral feeding. Nasogastric, nasojejunal, percutaneous endoscopic gastrostomy, or jejunostomy: its indications and limitations. Postgrad Med J 2002; 78: 198-204.

- Rabeneck L, McCullough LB, Wray NP. Ethically justified clinically comprehensive guidelines for percutaneous endoscopic gastrostomy tube placement. Lancet 1997; 349: 496-98.

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

11.0 KEYWORDS

percutaneous endoscopic gastrostomy; gastrojejunostomy; radiological; radiologically inserted; NGT; NJ; placed; enteral; nutrition;

12.0 APPENDICES

- Appendix A – Care Plan for Insertion of Gastrostomy/Gastrojejunostomy feeding tube (Representational copy). ***Documents for use in practice to be ordered via the Forms Management System using reference FKIN030370***

- Appendix B – Guidance for the assessment of a patient regarding the appropriateness of PEG feeding tube placement

- Appendix C – Percutaneous Endoscopic Gastrostomy (PEG) tube procedural information

- Appendix D – Feeding tube dislodgement pathway

- Appendix E – Equality Impact Assessment

- Appendix F – Environment Impact Assessment

Appendix A – Representational Copy of Care of 'Preparation for and Following Insertion of Percutaneous Endoscopic Gastrostomy (PEG)' – available to order from the trust's forms management system using reference FKIN030370

Image to follow

Appendix B – Guidance for the assessment of a patient regarding the appropriateness of PEG feeding tube placement

Introduction

Percutaneous endoscopic gastrostomy (PEG) for enteral feeding has been used since 1980.[1] it is indicated in those patients where enteral feeding is likely to be needed for more than 4 weeks. The indications for the procedure can be seen in the Practical Guidelines document. The procedure of inserting a PEG is straightforward for most patients and it has advantages over nasogastric feeding in that it is more comfortable, less unsightly and less prone to become displaced. However, it is invasive, may result in complications and has been associated with early death, therefore the appropriateness of its use needs to be carefully considered in every case.

The National Confidential Enquiry into Patient Outcome and Death (NCEPOD)[2] reported in the autumn of 2004 on deaths of patients occurring within 30 days of therapeutic endoscopy, between 1 April 2002 and 31 March 2003. These data were collected from hospitals in England, Wales and Northern Ireland. Of 1818 deaths, 719 were in patients who had undergone a PEG procedure for enteral feeding. 55% of these deaths following PEG insertion were male and 82% were aged 70 years or more. There is little evidence that PEG insertion in older patients increases survival per se. A meta-analysis by Mitchell et al[3] *between* 1980 and 1998 found that 19% of patients died within one month of PEG insertion. A further 11% within 2 months and a further 14% within 6 months. Only 38% survived one year. An earlier study of American Medicare beneficiaries aged 65 or more and discharged in 1991 found an overall 30 day mortality of 24%.[4] None of the five cohort studies reviewed, that compared survival in nursing homes with or without feeding tubes demonstrated a benefit. There was one study showing increased survival in patients with amyotrophic lateral sclerosis.[5]

Such high mortality figures are a reflection of the underlying condition for which the PEG was inserted rather than necessarily a complication of the PEG insertion itself. The PEG insertion procedure has a risk of mortality of about 1% and a 20% risk of complications such as chest infection or local wound infection. Some of these complications may be minor and easily treated. Nevertheless, consideration should be given to any benefit to the quality of life for patients who have PEG tubes inserted.

The quality of life is probably more important than the question of survival, although there is little evidence in the literature relating to quality of life following PEG insertion at the present time. The patient needs to understand these factors when deciding whether to go ahead with it. Furthermore the relatives of the patient need to be cognisant of these facts.

PEG procedures are often requested for patients who do not have the capacity to give informed consent. Capacity to give consent means that the patient is able to comprehend and retain information about the procedure, the consequences of having or not having the procedure, and they are able to use the information and weigh it up in a balanced way as part of a process or arriving at a decision. In patients who do not have the capacity to give informed consent there needs to be a clear assessment of the risks and benefits to the patient, the family needs to be involved at an early stage and consideration needs to be given to any wishes the patient may have expressed prior to their illness as to how they would like to be treated in the event of a severe and disabling illness. Treatment may be given if it is considered by the clinician in charge of the patient's care to be necessary and in the patient's interest. In English law family members cannot insist on futile treatments being

given to relatives nor can they deny potentially life saving treatment.
Conflict can sometimes arise in this situation but it is rare providing family members are fully informed and time spent on discussion will usually allow for resolution of conflict. If necessary a second consultant opinion can be sought at this stage. Also access to members of the Clinical Ethics Committee is available via the hospital Intranet, and they would be pleased to offer advice and support.

Patient Characteristics Predicting a High Mortality

Previous studies have highlighted certain factors which are associated with a poor outcome, in particular an early mortality following PEG insertion, and these are age,[6,7] end stage dementia,[9,10,11] aspiration pneumonia,[7] low serum albumin,[6,8] do not attempt resuscitation status,[6] acute illness of any sort[10] and urinary tract infection.[7] The NCEPOD report has looked at the following factors:

1. The American Society of Anaesthesiologists (ASA) physical status classification system. They found that of the 719 patients who died 84% had an ASA score of 3 or more. 3 represents a patient with severe systemic disease, 4 a patient with severe systemic disease that is a constant threat to life, 5 a moribund patient who is not expected to survive. The implication is that caution should be employed before inserting a PEG tube into patients with severe acute illness.

2. Urgency. 34 of the deaths occurred when the tube was inserted urgently. The NCEPOD advisors felt that this was never necessary.

3. Aspiration pneumonia. At the time of the PEG insertion 40% of the patients that died had a chest infection. Many had neurological swallowing difficulties. There is a misconception that PEG feeding prevents aspiration but in fact it lends no protection from colonised oral secretions and may also result in aspiration of gastric contents which has been shown experimentally to occur using scintigraphic studies.

4. Dementia. 18% of the deaths occurred in patients who had dementia. All relevant studies have shown that PEG insertion does not improve outcome in advanced dementia patients, it does not prevent aspiration pneumonia, nor does it prolong life and it does not improve overall function or reduce the number of pressure sores in these patients.[8,9,12,13] Additionally the quality of life of a patient with advanced dementia can be adversely affected when a PEG feeding tube is inserted. In America wrist restraints have been used to prevent patients pulling on the tube. Cellulitis at the gastrostomy site may occur as may decubitus ulcers. Patients will be deprived of social interaction and pleasure surrounding meals, and often are placed in nursing homes. The NCEPOD advisors suggest that severe or advanced dementia with co-morbidity, for example bedsores, contractures, patient bed ridden, then a PEG insertion is unlikely to improve the quality of life and may not be the preferred option. They admit, however, that the ethical decision on withholding feeding in a dementia patient with poor nutrition but no co-morbidity is more difficult and would require wide consultation together with evidence of discussion in the case notes which was not the case in their study.

5. Acute neurological trauma. 59% of the deaths had acute neurological disease (stroke or trauma) of which 38% died within one week of the procedure. There is evidence that PEG feeding is better than nasogastric feeding post stroke (case fatality 13% with PEG, 57% with N/G).[14] 92% had had the procedure within 60 days of admission.

   Historically PEG tube insertion has usually been deferred for 4-6 weeks to allow recovery of swallowing to occur. However, there is some evidence that if tube feeding is to be used it should be considered at 2 weeks.[15]

   The FOOD Trial (Lancet 2005; 365: 764-72).[17] Timing/method of enteral tube feeding for dysphagic stroke (the largest trial so far). Data suggest NG feeding within the first few days reduces case fatality (at the expense of some decrease in the survival of very disabled stroke patients). Within the first 2-3 weeks NG should be route of choice unless there is a strong practical reason to choose PEG. No excess pneumonia with early tube feeding, excess pressure sores in PEG group (?reason). GI haemorrhage more common NG group.

6. Prophylactic antibiotics are recommended by the British Society of Gastroenterologists,[16] and 42% of patients in the NCEPOD study did not receive prophylactic antibiotics.

7. Operative events. There was a small number of clinical incidents in relation to the PEG insertion, in particular 1 cardiac arrest, 21 cases where the patient became hypoxemic, 2 cases of hypotension, 8 of tachycardia, 1 local haemorrhage and 1 viscus perforation. A recommendation was that oxygen should be administered in all patients. In their study 6% did not receive oxygen. Furthermore the oxygen saturations should be monitored during the procedure in all patients.

8. Sedation and analgesia. Most patients received intravenous Benzodiazepine, a small proportion received intravenous opioid, about a third of patients had oropharyngeal local anaesthetic. The NCEPOD advisors felt that the combination of sedation and local anaesthetic spray could increase the risk of aspiration, particularly in patients who have dysphagia, and either one or the other should be used but not both. 9% of patients required reversal of sedation with either Flumazenil or Naloxone. There was a feeling that many endoscopists were unaware of the increased sensitivity of older patients with neurological disease, to Benzodiazepines and opioids.

9. Post-operative outcome. The systems implicated in these deaths; 76% of them were related to respiratory problems.

   The reasons for the large numbers of respiratory deaths following PEG insertion were felt to be related to patient selection, those patients who had respiratory infections at the time of the PEG insertion were felt to be probably inappropriate. Furthermore the combination of supine position, local anaesthetic spray and sedation may increase the risk of aspiration in these patients.

Other points which need to be mentioned in relation to the NCEPOD report:

Endoscopists who performed the PEG insertion procedure were often not aware of patient outcomes as they were performing the procedure for colleagues working in different parts of the hospital. When the clinician looking after the patient was asked

whether the patient was expected to die or there was a definite risk of death, 63% said yes. The NCEPOD advisors felt that in 19% of the PEG insertion patients that died it could have been predicted as being a futile procedure. PEGs were being used to facilitate discharge to nursing homes in a number of cases.

Conclusion

Before the insertion of a PEG tube consideration should be given to all the patient characteristics described above. It will be clear that in some patients the procedure would be inappropriate; in others, however, there may be uncertainty as to the outcome of PEG insertion.
Where possible these factors should be discussed with the patient and/or their relatives and there should be careful notes kept of these discussions in the patient's case file. In those patients where uncertainty exists, particularly where the patient or their relatives are very enthusiastic about PEG insertion, then they should be given the benefit of the doubt.

PEG TUBE DECISIONS - DOs AND DON'Ts

Do

- Discuss with patient and meet with the family as soon as possible to discuss possible benefits/burdens.
- Ask for help from gastroenterology services – teams experienced in this area (Secretary to Dr Foley and Dr Benfield 3545)
- Advice can also be sought from: Jenna Parsons, Nutrition Nurse Specialist, ext: 4459
- 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.
- Review likely outcomes (see above).
- Review possible complications and negative factors (see above).
- Discuss concerns about thirst and hunger Studies, mainly in terminal cancer patients, have shown that people at the end of their life do not experience distress as a result of hunger or thirst. In fact reduced intake is part of the natural process of dying. Good mouth care, however, is essential.
- Respect cultural and religious differences When families feel that life should be preserved at all costs, even if its quality is poor, it is fair and appropriate to ask the family "is this what the patient would have wanted?"
- Discuss managing PEG feeding at home The nurses on the ward should have some information, also the dietician and speech and language therapists (SALT) will advise and follow up (tel: 3252 and 3320).
- Discuss alternatives to PEG SLT will advise. Medication may be given transdermally or rectally – pharmacist to advise (tel: 3163).

Don't

- Ignore the problem until patient is ready for discharge Nutrition should be considered from day one of the illness and the reason for poor nutrition identified early. Advice may be sought from the gastroenterology service (secretary, ext: 3545).
- Suggest "trial" of PEG feeding
- Assume aspiration on a barium swallow is an absolute contra-indication to oral feeding Aspiration does not always result in pneumonitis or pneumonia. It is important to balance benefits and burdens, e.g. someone with advanced dementia

who enjoys eating and has not had pneumonia should be allowed to continue. SALT advice may be useful.

- Arrange PEG in a diabetic patient without considering the possibility of delayed gastric emptying Check for symptoms. Considering isotope gastric emptying study. If the problem is confirmed then a jejunostomy tube may be required.
- Impose your values on patients/families Present patients and families with all the options and recognise that they may make choices that the physician considers ill advised.

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Appendix C – Percutaneous Endoscopic Gastrostomy (PEG) tube procedural information

1. Post Procedure Care of Patient following PEG Insertion

Most patients receive local anaesthetic to the throat and to the skin of the abdomen during PEG insertion. In some cases when the patient is restless for example, a short acting benzodiazepine e.g. midazolam is appropriate. The patient must be fully conscious and monitored on transferring back to the ward. General care of patients following local anaesthetic should apply to this group of patients. The post-operative care of patients following PEG insertion requires:-

1) The monitoring of pulse, blood pressure, respiratory rate, pain score (out of 3). The monitoring of the stoma site for bleeding or leakage of gastric contents or tube displacement. These observations should occur every 30 minutes for the first 4 hours and then hourly for 4 hours, and then, provided these are stable, they could be stopped.

2) The identification and management of post-operative complications. A high visibility warning sticker (see example below) will be placed in the notes to warn about pain on feeding, prolonged or severe pain post procedure, fresh bleeding, the external leakage of gastric contents. If any of these occur stop the feed delivery immediately and obtain senior advice. If the patient has a fever:
    - Check the PEG site for signs of infection
    - If signs of peritoneal irritation occur, keep the patient nil via the PEG and nil by mouth, insert an intravenous line and seek senior advice.
    - Consider other sources of infection (for example chest)

3) Prevent accidental dislodgement (which can occur in restless patients) by securing the PEG tube with the attachment device. Keep the external tube covered/taped to the abdominal wall. If the PEG tube does become dislodged refer to section D below.

4) Simple post-operative discomfort is common and can be managed with soluble paracetamol via the PEG. (This can be given 4 hours after initial insertion once bowel sounds have been heard).

5) PEG site care:- Aseptic technique for wound care until the PEG track has matured (See SFHFT Royal Marsden Procedures –Aseptic Technique)

6) Starting PEG tube feed (see sticker inserted in medical notes – see example below). Assess for bowel sounds after 4 hours, if present commence sterile water at 25 mls/hour over 4 hours and then start the enteral feeding as per the regimen.[21]

7) Instructions for the care of the PEG will be given to the patient and/or carers before and after the procedure. Patients and/or carers MUST be referred to the Nutrition Clinical Nurse Specialist for formal training to care for the PEG.

2. Post Percutaneous Endoscopic Gastrostomy (PEG) Placement

Following placement of a PEG nothing should be administered via the PEG for 4 hours. Then following medical assessment (looking for the presence of bowel sounds), sterile water can be administered via the PEG at 25ml/hr for 4 hours. Enteral feed can be commenced as prescribed by the Dietitian.

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.

3. Management of PEG Tube Dislodgement

1) Immediate care to patient
   - Give reassurance to the patient
   - Cover the wound with gauze
   - Inform the Gastroenterology team or the Nutrition Nurse Specialist

2) Immature subcutaneous track (<2 weeks following new insertion)
   - Do not reinsert any tube
   - Observe any injury of the exit wound
   - Check for any wound pain
   - Clean the exit wound with normal saline and cover with sterile dressing
   - Inform the on call Gastroenterologist or Nutrition Nurse Specialist. If in doubt, or unable to contact (e.g. at weekends/out of hours), speak to the on call medical registrar for advice.
   - If the patient has presented to ED from home, it may be necessary to admit the patient to hospital if a new gastrostomy tube cannot be inserted.
   - Keep Nil By Mouth (NBM) and insert Intravenous (IV) line to maintain hydration
   - Observe for any sign of peritonitis. Record, document, action and evaluate clinical observations.

3) Matured subcutaneous track
   - Obtain an appropriate size of balloon gastrostomy tube and insert into the stoma site. Ideally every patient who has a PEG tube should keep a replacement tube (balloon gastrostomy tube) with them, in case of dislodgement. Confirm position of the tube by using low pH indicator paper (please refer to change of replacement tube for details). Balloon Gastrostomy Tubes are stocked in ED and in Endoscopy at Kings Mill hospital.
   - Resume tube feeding
   - If a replacement balloon gastrostomy tube is not available, insert a similar size of Foley catheter as soon as possible to keep the stoma patent (by trained, competent nurse or physician). This should be a temporary expedient and the Foley catheter should be replaced as soon as possible with a balloon gastrostomy tube.

- Document the procedure and actions in the patients records
- Review the cause of dislodgement and take appropriate preventative measure to reduce the occurrence of further dislodgement

4. Management of Gastrostomy Tube Site Infection

To manage severe wound infection the removal of the tube and temporarily withholding of the enteral feeding until the gastric wall is healed may be necessary. The consequence of site infection is costly and traumatic. In the community nurses, patients and the carers are the first line of personnel to detect early signs of site infection. Education on the correct care of the site together with early detection of site infection can reduce the impact.

1) Signs of site infection
   - Pain at the site
   - Thick discharge from the site
   - Erythematous of the site
   - Enlarged site with drainage of pus
   - Enlarged site with leakage of feeding formula

2) Nursing management of patient with early signs of site infection
   - Follow the aseptic non-touch technique
   - Clean the area around the site daily with normal saline and apply a dry dressing.
   - Educate the patient and caregiver on the importance of keeping the site clean and dry all the time
   - Protect the skin with barrier cream if there is leaking of gastric content
   - Reinforce to patient and caregiver to keep good personal hygiene. Encourage shower / bath
   - Observe the progress and report to nutrition nurse specialist.

3) Management of severe site infection
   - Consult doctor
   - Inform nutrition nurse specialist
   - Keep patient NBM and set up IV fluids
   - Give antibiotics after seeking advice from consultant microbiologist or according to Trust guidelines
   - If signs of skin irritation (redness, soreness, pain, swelling, unusual drainage) persist, tube may have to be removed and be vigilant for signs of necrotising fasciitis
   - Resume NG tube feeding when the gastric wall is healed.

5. Change of PEG Tube

The initial tube change is carried out by healthcare professional that has been trained and is competent to do so. Subsequent tube changes will be made according to the individual needs of the patient following an assessment by the gastroenterologist or nutrition nurse specialist.

1) Criteria for change of initial/subsequent tube
   - Malfunction: leakage or blocking of tube

- Wear and tear of the tube with deformity of PEG tube.

2) Preparation
   - Consent.
   - Nil By Mouth / tube at least for 6 hours.
   - Omission of medications prior to tube removal as per SFHFT policy (endoscopy)

3) Procedure for the change of tube
   - Refer to the consultant gastroenterologist or nurse specialist for the removal of tube.

4) Care of patient after the change of tube

   a. Exit site care
      - Clean the exit wound and retention disc with sterile water or normal saline at least once per day.

   b. Feeding regime
      - Nil by mouth for 3-4 hours
      - Restart gastrostomy feeding

6. Checking Balloon Integrity of the Balloon Gastrostomy Tubes

This may be carried out 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
   - Water for injection
   - Water soluble lubricant.

3) Timing for checking balloon integrity
   - To prevent gastric irritation and aspiration, the most appropriate time to check balloon integrity is before meal or one hour after meal.

4) 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 gastroenterologist or nutrition nurse specialist for tube replacement
- If deflation of the balloon with a syringe is difficult, it is possible that the inflation channel has occluded. Notify the gastroenterologist or nutrition nurse specialist for further management.

7. Care on discharge

(See also pack given to patients/carers on discharge to the community, produced by the Home Enteral Feeding Dietitians, Nottingham University Hospitals)

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

- how to manage the feeding regimen (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

Ensure the hospital Dietitians are informed of any change of tube prior to discharge.

Continual support of patients after enteral tube insertion is necessary. Community nurses play a significant role in monitoring the care, the functioning of the tube, the general health status of patient and the detection of early complications.

Community nurses after special training may check the balloon integrity in balloon gastrostomy tubes and perform the insertion of replacement tube when necessary.

The Home Enteral Feeding Dietitians (HEF) provide dietetic follow up for all patients with enteral feeding tubes and liaise with hospital dietitians, the gastroenterologist, nutrition nurse specialist and other key professionals about issues relating to feeding. The HEF dietitians also ensure the ongoing provision of supplies.

The focus of enteral feeding tube care in the community are:

- Exit wound care
- Care of tube including checking balloon integrity if indicated.
- Technique of feeding
- Tolerance of tube feeding
- Prevention of tube dislodgment
- Management of tube dislodgement at home
- Patient and caregiver education.

Daily care of the exit wound

- Allow shower/ bath to maintain personal hygiene. No need to cover the PEG site during showering unless the tube has been newly inserted within the last two weeks
- Observe for erythema, tenderness, irritation, pain and pressure around the exit site
- Observe any discharge and leakage from the exit site before and after feeding
- Apply barrier cream to protect the skin if there is leakage of gastric content.

- Management of granuloma of exit wound

Formation of granuloma of exit wound may be related to constantly moist and irritable environment of exit site and it may also be one of the early signs of local exit wound infection.

Management strategies:

- Minimize tube movement and make sure the external disc is properly placed. There should be normally 2-3mm distance between the skin and the external retention device.
- Take shower/ bath daily
- If there is contact bleeding from the granuloma, use Calcium Alginate to encircle the exit site
- Reinforce to the patient/carer the strategies of keeping exit site dry and clean.

Management of leakage from exit site

- Leakage may occur if the tube has pushed away from the abdominal wall or because the stoma site is enlarged
- If there is leakage of gastric content, check the positioning of the tube, readjust the position if necessary and apply barrier cream to protect the skin
- Check GI residual content before feeding. If necessary, reduce the volume of each feed and assess any GI problems, e.g. gastric emptying, constipation
- If the stoma site has enlarged, the doctor may need to replace the tube. Report to the doctor if the leakage does not stop.

2. Care of PEG / Balloon Gastrostomy Tube (BGT).
   - The tube should be rotated daily and advanced and rotated weekly once the fistula has healed (2 weeks post insertion) this is to prevent adherence of the internal bumper to the epithelial lining of the stomach and to prevent over-granulation at the PEG site.

   To advance and rotate the tube:
   - Release the fixation device.
   - Clean the site and the tube thoroughly.
   - Gently push the tube into the abdomen approximately 1 -2 cm. There should be no resistance. If it feels as though the tube is not moving or is folding in on itself, this should be reported to the Nutritional Nurse Specialist, or a Gastroenterologist.
   - Once the tube has been advanced into the abdomen, rotate the tube 360°.
   - Once the tube has been advanced and rotated, gently pull the tube back out of the abdomen until resistance is felt.
   - Replace the fixation plate
   - The tube should be positioned with a space 2-3mm between the fixation device and abdomen while gently pulling up on the tube
   - Avoid excessive pulling or manipulating of the tube because it may cause the internal bolster to be embedded into the gastric mucosa or peritoneum
   - Do not pinch or clamp the tube
   - Notify nursing staff or dieticians if there is a blockage or wear of the tube.

   Confirmation of Gastrostomy tube placement before feeding:
   a. Check the positioning of the fixation device before feeding and ensure the position making is correct
   b. Hold the tube and slightly push the tube towards the stomach. Normally, there should not be any resistance and this action should not cause any pain.

4. Intolerance of tube feeding.
   - Refer to doctor, nurse specialist or dieticians: assess GI residual contents before each feeding.

5. Prevention of tube dislodgement
   - The tube should be laid across the right shoulder when not in use
   - Take precaution to avoid accidental pulling off of the tube especially during bathing and changing of clothes
   - For balloon gastrostomy tubes, check the balloon volume every 7 days or according to manufacturer's recommendation.

6. Management of tube dislodgment at home
   - Do not reinsert the dislodged tube
   - Carers can be trained to use a Foley catheter or spare balloon gastrostomy tube of similar bore to maintain the stoma tract, i.e. the site will heal within 2 hours if not kept patent.
   - Cover the exit site with a piece of clean and dry gauze

- Bring the patient to the Emergency Department as soon as possible. Bring along with the patient their hand held record and related medical documents. A Foley catheter may be inserted at this point.

7. Patient and carer education
   - Until the feeding tube tract is fully formed (3 weeks post insertion) the patient should not take a bath. 7 days post procedure the patient can shower with the feeding tube covered.
   - Provide a patient held record
   - Check balloon integrity for replacement tube
   - Document follow up and change of tube schedule.

Appendix D: FeedingTube Dislodgement Pathway

To be used in conjunction with the trust's PEG; PEG-J; RIG and RIG-J Policy

If no attempt to pass a tube is made, the tract will start to close within a couple of hours. If trained to do so and the tract is mature (more than 3 weeks) and not closed – insert same sized balloon gastrostomy tube (stocked in ED)
Aspirate the tube and check the pH of the aspirate – it must be 5 or below.
For ED patients - The patient can now be safely discharged home
For ward patients – continue the current feeding regime

For ED patients – the ANPs in ED have been trained to do this so please seek their assistance first.

For ward patients – Monday to Friday 8-4pm contact the Nutrition Nurse Specialist/Clinical Lead Dietitian

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If not trained in balloon gastrostomy tube insertion, insert a sterile foley catheter, the same size as the feeding tube into the tract and tape to the abdomen. Alternately the largest that the tract will permit will suffice

Do not inflate the balloon and do not use for feeding.

Please note for jejunostomy feeding tubes proceed as above but do not use for feeding – refer to interventional radiology or endoscopy for replacement – but please do try and pass a tube to keep the tract open

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If the tract is less than 3 weeks old, or the tract has closed **do not** attempt to insert a tube percutaneously.

Cover the site with a sterile dressing and seek to provide another means of nutrition support e.g. NG tube feeding. Seek advice.

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Nutrition Nurse Specialist ext 4459 or mobile via switchboard

Clinical Lead Dietician – Adult ext 4034 or vocera

Acute Gastroenterology Consultant via switchboard

For Radiologically inserted Gastrostomy contact Interventional Radiologists ext 4057/2500

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:
Jenna Parsons

Signature:
Jenna Parsons

Date:
22nd September 2021

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