Guideline for the Care and Management of Enteral Feeding in Adults

Summary
This guideline will provide guidance on the use of Enteral Feeding in the Trust. It has been written to ensure enteral feeding is delivered in a safe, appropriate and timely manner. All patients who may require feeding via an enteral tube should be referred to the Department of Nutrition & Dietetics via e-referrals on the white board as soon as possible.

This guidance is informed by NICE Clinical Guideline 32: Nutrition support in adults (February 2006) and the British Society of Gastroenterology guidelines by Stroud et al. (2003).

Key Points:

- Enteral tube feeding should be considered in patients who are malnourished or at risk of malnutrition and have:
  
  An inadequate or unsafe oral intake
  AND
  A functional, accessible gastrointestinal tract

- Decisions on route, content, and management of nutritional support are best made by multidisciplinary teams

- Feeding via the Nasogastric route should be considered in short term patients (<4 weeks) and feeding via more invasive routes (PEG/JEJ etc) should be considered in long term patients (longer than 4 weeks).

- All patients who require Enteral feeding should be referred to the Dietetic Team.

- Feed, feed reservoirs and giving sets must not be reused and should be discarded after 24 hours.

- Enteral feeding is regarded as a medical treatment in law and should therefore not be started without considering all related ethical issues.
For more detailed information about enteral feeding please see the enteral feeding information link on IAN.
1. INTRODUCTION

1.1 Healthcare professionals should consider enteral feeding in patients who are malnourished or at risk of malnutrition. Screening for malnutrition should be carried out as per the Trust ‘Food & Nutrition Policy’.

Enteral tube feeding is used to provide nutrition to patients who cannot attain an adequate oral intake from food and/or oral nutritional supplements, or who cannot eat or drink safely. The aim is to optimise nutritional intake to improve or maintain nutritional status. The gastrointestinal tract must be accessible and functioning sufficiently to absorb the feed administered.

Placement and initiation of enteral tube feeding should be delayed if there are insufficient experienced medical or nursing personnel to either place the enteral tube or dietetic personnel to prescribe enteral nutrition safely.

2. BACKGROUND

2.1 Whenever possible, oral food intake is always preferred. Enteral feeding is only indicated when a patient’s nutritional needs cannot be met orally. Common indications for enteral feeding are shown below:

- Swallowing disorders (i.e. motor neurone disease, multiple sclerosis)
- Stroke or head injury
- Head and neck cancer (e.g. due to side effects of chemo/radiotherapy)
- GI dysfunction or malabsorption
- Upper GI obstructions
- Cystic fibrosis
- Psychiatric disease e.g. anorexia nervosa, severe depression

The recommendations included below are based on the British Society of Gastroenterology guidelines by Stroud et al. (2003):

Health care professionals should aim to provide adequate nutrition to every patient unless prolongation of life is not in the patient’s best interests.

Artificial nutrition support is needed when oral intake is absent or likely to be absent for a period of > 5-7 days. Earlier instigation may be needed in malnourished patients. Support may also be needed in patients with inadequate oral intakes over longer periods.

Enteral tube feeding should be considered in patients who are malnourished or at risk of malnutrition and have:

- An inadequate or unsafe oral intake

AND

- A functional, accessible gastrointestinal tract

Decisions on route, content, and management of nutritional support are best made by multidisciplinary teams.

Enteral tube feeding can be used in unconscious patients, those with swallowing disorders and those with partial intestinal failure. It may be appropriate in some cases of anorexia nervosa,
Early post pyloric enteral feeding is generally safe and effective in post-operative patients, even if there is an apparent ileus.

Early enteral feeding after major intestinal gastrointestinal surgery reduces infections and shortens length of stay.

Enteral tube feeding should be stopped when the patient is established on an adequate oral intake.

3. DEFINITIONS

3.1 Enteral feeding is most commonly used to deliver feed into a patient’s stomach. When necessary it is possible to feed directly into the duodenum or jejunum. The route and type of tube used will depend on the individual circumstances of the patient.

**Short term feeding (up to 4 weeks)**

- **Naso-gastric tube feeding (NG)**
  A fine bore feeding tube (French gauge 5-8) is inserted via the nose into the stomach. Bolus or pump feeding can be used with an NG tube. Long term fine bore tubes should be replaced every 4-6 weeks, swapping them to the other nostril. Regular checks of NG tube placement are imperative as there is a risk that tubes can be misplaced into the lungs on insertion or move from the stomach at a later stage. (See ‘Insertion and Confirming Position of Naso-Gastric and Oro-Gastric Tubes in Adults, Paediatrics & Neonates’ Policy)

- **Oro-Gastric feeding**
  A feeding tube (French gauge 5-8) is inserted via the mouth into the stomach. As with NG tube placement must be checked regularly and tube replaced every 4-6 weeks. (See ‘Insertion and Confirming Position of Naso-Gastric and Oro-Gastric Tubes in Adults, Paediatrics & Neonates’ Policy).

- **Naso-jejunal feeding**
  A fine bore feeding tube (French gauge 6-10) is inserted via the nose into the jejunum. This tube may also have a lumen of which the distal end allows deflation of the stomach. It is indicated for patients with gastric reflux or delayed gastric emptying.

**Long term feeding (longer than 4 weeks)**

- **Percutaneous Endoscopic Gastrostomy (PEG)**
  A tract is made into the stomach via endoscopy under local anaesthetic and a feeding tube is inserted. It is held in place by an external fixation device and a soft plastic bumper internally.

- **Surgically placed gastrostomy**
  A gastrostomy feeding tube is inserted surgically under general anaesthetic. This is often used when a patient is unable to tolerate an endoscopy or an endoscope cannot be passed. These tubes may or may not be held in place by sutures so check before removing any sutures. A balloon gastrostomy can replace these feeding tubes once the stoma tract is formed.
• Radiologically Inserted Gastrostomy (RIG)
  A gastrostomy tube is inserted under X-ray (fluoroscopy or ultrasound) guidance and is usually indicated if an endoscopic procedure cannot be performed. It can be replaced by balloon gastrostomies once the stoma site has healed.

• Balloon gastrostomy
  The gastrostomy is held in place by a balloon filled with sterile water. The volume of the balloon should be checked weekly to ensure it is inflated sufficiently to prevent tube displacement.

• Low Profile Gastrostomy Device (LPGD)
  LPGD also known as button gastrostomy is a small device that sits close to the skin and is usually held in by a balloon. It has the same function as a PEG but is less cumbersome, easier to conceal, less obtrusive and may be useful for those patients that pull at their gastrostomy. Extension sets are connected onto the “button” part to enable water, feed, or medications to be administered. Once completed, the extension set is removed. LPGDs can be inserted into most patients once a stoma tract is established but are usually used more frequently in children than adults.

• Jejunostomy
  A feeding tube is inserted directly into the jejunum during surgery or endoscopically.

• Gastrojejunostomy (PEG – J)
  This is an endoscopically placed extension of a PEG. The extension is passed through the PEG into the stomach and down past the pylorus into the jejunum. These are used if there is a problem with the stomach or gastric emptying.

4. ETHICAL AND LEGAL CONSIDERATIONS OF ENTERAL FEEDING

Enteral feeding is regarded as a medical treatment in law and should therefore not be started without considering all related ethical issues.

4.1 Consent

Patients have a fundamental legal and ethical right to determine what happens to their own bodies. Valid consent to treatment is therefore absolutely central in all forms of healthcare. Refer to the Trust ‘Consent for Examination or Treatment Policy’.

4.2 Best Interest

Where patients cannot express a wish regarding enteral feeding, they must be treated in their best interests. This includes seeking the views of others close to the patient such as family and all carers.

4.3 Feeding against the will of the patient

Feeding against the will of the patient should be an intervention of the last resort in the care and management of those with severe eating disorders or other mental illness. It should be considered in the context of the Mental Health Act 1983, the Mental Capacity Act 2005 or the Children Act 1989 (and their respective Codes of Practice). Mental Capacity Act 2005
Where the Mental Capacity Act 2005 is used to authorise enteral feeding the patient should be assessed to see if additional authorisation under the Deprivation of Liberty Safeguards apply.

All mental capacity assessments must be Mental Capacity Act compliant.

5. RECORD KEEPING AND DOCUMENTATION

Medical staff must ensure that following discussion with the patient/carer, multi professional team and the dietitian; they document the rationale for when a patient requires enteral feeding. Equally since enteral feeding is not always appropriate, decisions on withholding or withdrawing it must be fully documented in the clinical record (including the decision making process and rationale).

The insertion of enteral feeding tubes and any further or subsequent information (e.g. tube changes) must be documented in the clinical records. Where appropriate the NG tube insertion care bundle part 1 and on-going NG tube care bundle part 2 must also be completed (See ‘Insertion and Confirming Position of Naso Gastric and Oro Gastric Tubes in Adults, Paediatrics & Neonates Policy’).

6. INFECTION PREVENTION AND CONTROL

There are potential hazards associated with enteral feeding which can make it a source for the growth of micro-organisms. Liquid nutrients provide an ideal medium for bacteria and can cause cross contamination to the feeding system during setting up and handling the equipment.

It is important to always wash hands thoroughly according to the Trust ‘Hand Hygiene policy’ before handling feeds and components of the feeding system. Preparing the equipment and opening of feed must be done in a clean environment and a no-touch technique should be adopted when preparing the feed during priming and connecting to the administration set/feeding tube.

Enteral feeding tubes should be flushed regularly with at least 30 ml tap water using a 50 ml syringe and flushing should be documented. For immuno-compromised patients or those fed directly into the jejunum, sterile bottled water should be used. Recommendations for flushes are as follow:

- every 4 to 6 hours during the day
- before and after feeding
- before and after drug administration.

Feed, feed reservoirs and giving sets must not be reused and should be discarded after 24 hours. Ready to hang systems can hang for up to 24 hours. Single patient use syringes should be discarded after 24 hours.

Commercially produced, pre-filled ready to hang feeds must be used wherever possible as these are least likely to become contaminated during preparation and use. Decanting into separate containers should be avoided (except in bolus feeding), as there is increased risk of contamination. Feed that has been decanted or reconstituted from powder and hung must be discarded after 4 hours.
7. **METHOD OF DELIVERY**

7.1 **Factors to consider**

The dietitian, in consultation with doctors and other health professionals, will decide on method of delivery. Factors considered are:

- Patient's current and past nutritional status
- Feeding environment
- Reason for feeding enterally
- Proposed time period of enteral feeding
- Any complications present
- Patient wishes

A written regimen specifying feed, rate of feeding, and additional water flushes will be provided by the dietitian. A starter regimen is available on the intranet for the wards to commence feeding at the weekend (see the Trust ‘Guidelines for Initiating Enteral Feeding Out of Hours’).

7.2 **Infusion (feed delivered by pump)**

Pumps can be set to deliver feed at rates between 5 and 600 ml per hour. Feeds are usually commenced at a low rate (about 25-50 ml/hr) and increased in stages to about 100 to 150 ml/hour after tolerance is demonstrated.

7.3 **Continuous**

Continuous feeding usually refers to feeding over 16-20 hours. Continuous feeding is used if a patient is unable to tolerate large volumes of feed. It can be used initially and the patient may progress onto an intermittent infusion regime. The feed may be delivered overnight or during the day depending on the individual patient's needs and tolerance. Continuous feeding usually includes a break of at least 4 hours in 24 hours to allow the stomach to re-acidify. 24 hour feeding is used in critical care or patients on sliding scale insulin.

7.4 **Intermittent**

This involves periods of feeding using the pump with breaks.

7.5 **Bolus feeding (without pump)**

Bolus feeding involves the delivery of 100mls to 300mls of feed over a period of 10-30 minutes and can be given 4-6 times a day depending on patient's individual feeding regime. Administration can be with a syringe using only the barrel as a funnel to allow the feed to infuse using gravity. The plunger from the syringe should not be used to forcibly push feed through. Bolus feeding can also be administered with bolus feed gravity sets. If there are any signs of intolerance then another feeding method should be sought.

8. **ADMINISTRATION OF FEED**
DO NOT PUT ANYTHING DOWN THE TUBE THAT HAS NOT BEEN RECOMMENDED BY OR DISCUSSED THE DIETITIAN (APART FROM MEDICATIONS WITH APPROVAL FROM PHARMACY).

8.1 Administration of feed using an enteral feeding pump

Equipment
The following items are required:

- Prescribed enteral feed (at room temperature)
- Pump
- Drip stand
- Giving set
- Clean jug
- Tap water (or sterile water for jejunal feeding or immuno-compromised patients)
- 50 ml syringe
- Gloves and apron
- pH sensitive strips if NG feeding

Procedure:

- Explain procedure to patient.
- Wash hands according to the Trust ‘Hand Hygiene policy’ and put on gloves and apron.
- Take the equipment to the patient’s bedside or appropriate private space. The patient should be encouraged to assist in the procedure if possible.
- Ensure appropriate patient positioning i.e. upper body positioned at a minimum angle of 30 degrees prior to and throughout the feeding period.
- If NG feeding confirm tube position as per the Trust ‘Insertion and Confirming Position of Naso Gastric and Oro Gastric Tubes in Adults, Paediatrics & Neonates Policy’
- Close the clamp on the giving set.
- Check the expiry date on the feed. Shake the bag/bottle, twist off the cap and without touching the spike, tightly screw on the giving set which will break the foil seal.
- Hang the bag on the drip stand and prime the giving set, making sure there are no air bubbles.
- Connect the giving set to the feeding tube.
- Label the giving set with the date and time of use. Change every 24 hours thereafter.
- Set the rate of administration as directed by the dietitian and press start.
- Flush tube pre and post feed as indicated on the feeding regimen sheet and record.
- After each feed record amount of feed and of flushes given.
- Ensure the patient is comfortable observe for signs feeding intolerance.
- Maintain patient’s upper body positioned at a minimum angle of 30 degrees for 1 hour after feeding. Ensure they do not lay flat following feeding period.

8.2 Administration of bolus feed

Equipment:

Clinical Guideline: Guideline for the Care and Management of Enteral Feeding in Adults
Directorate Nutrition and Dietetics, Professional Services
Date Approved: dd/mm/yy
The following items are required:

- Prescribed feed (at room temperature)
- 50 ml syringe
- Alcohol wipes
- Tap water (or sterile water for jejunal feeding or immunocompromised patients)
- Gloves and apron
- Clean jug

Procedure:

- Wash hands according to the Trust ‘Hand Hygiene policy’, put on gloves and plastic apron.
- If NG feeding confirm tube position as per the Trust ‘Insertion and Confirming Position of Naso Gastric and Oro Gastric Tubes in Adults, Paediatrics & Neonates Policy’
- Flush feeding tube with 30-50 ml of sterile water using the 50 ml syringe.
- If feeding is via PEG, ensure clip on PEG is then reclosed.
- Check expiry date of feed and shake container before opening.
- Uncap end of tube/PEG
- Remove plunger from syringe and connect to end of tube
- Fill the syringe with feed using gravity to allow the feed to flow. Open clip on PEG and allow feed to flow through.
- Prior to syringe emptying, top up with feed until all has been given. Hold the syringe so that gravity is used to allow liquid into the stomach. If necessary, lower the syringe to a lower level to decrease rate of delivery. Do not allow the syringe to be completely empty before adding more feed.
- Flush tube with at least 30 ml or as regime of water.
- Close clip on PEG tube, syringe and recap PEG/NG tube end.
- Clean syringe if it is to be reused, otherwise discard in clinical waste.
- Store unused feed in a refrigerator, labelled with patient’s name, date and time of opening, and use with 24 hours.
- Record amount of feed given and flushes.
- Ensure the patient is comfortable observe for signs of feed intolerance
- Maintain patient’s upper body positioned at a minimum angle of 30 degrees for 1 hour. Ensure they do not lay flat.

9. **ENTERAL ADMINISTRATION OF MEDICATION**

Medicines are not specifically formulated for enteral administration therefore use via this route requires careful consideration and caution to ensure safety and effectiveness. A pharmacist must always be consulted if there is any doubt about administering a medicine via the enteral route.

9.1 **Key points**

The key points when administering medicines as per BAPEN guide (2003) state:
• Solutions or soluble tablets are the formulations of choice
• Do not crush tablets or open capsules unless an alternative formulation or drug is unavailable. NB Some tablets should not be crushed e.g. modified release, enteric coated, hormonal and cytotoxic drugs
• Never add medicines to enteral feeds as this can affect stability of the feed, increase microbial contamination risk and may affect the bioavailability of the drug.
• Administration of drugs directly in the jejunum will need to be checked with pharmacy as they may not be completely absorbed.
• Drug & feed compatibility and best way of administration will need to be checked with pharmacy
• Each medication has to be given separately (ie not in the same syringe or mortar and pestle) to remove the risk of incompatibility or interactions between the medicines.
• Risks of obstruction of the enteral feeding tube can be due to:
  – Inadequately crushed tablets,
  – Precipitate formation from interaction between feed and drug formulation.
  – Precipitate formation from interaction between drugs
• Ensure feed is stopped prior to drug administration, the line is then flushed with 30ml water to clear the line of any residual feed
• Check to see if there is a specific time interval to be allowed before administering the drug
• Administer the medication (see below for procedure for crushing tablets) then flush the enteral feeding tube with 15-30ml water.
• Re-start feed, unless a specific time interval is needed following the administration of the drug.

9.2 Crushing tablets

Opening a capsule or crushing a tablet before administration will constitute an unlicensed use of medicine. If a licensed liquid preparation or soluble/dispersible formulation is not available contact a pharmacist for advice.

If the medicine can only be administered by either crushing the tablet or opening the capsule the prescriber must be made aware that the medicine is being administered in an unlicensed way and they must authorise the this procedure.

Due to changes in bioavailability caused by crushing tablets (which can lead to 25% reduction of dose due to drug lost on transfer), changing the formulation or a possible interaction with the enteral feed, it is important to monitor clients for both adverse effects of medication and therapeutic failure.

Procedure & equipment

Equipment: Mortar and pestle
        Sterile water
        Syringe of appropriate volume
        Gloves, (apron if required)

Procedure:
1. Stop the enteral feed
2. Flush the enteral feeding tube with 30ml water
3. Check to see if there is a specific time interval to be allowed before administering the drug

4. Place tablets in the mortar

5. Crush the tablets to a fine powder, making sure the powder is contained in the mortar

6. Add 5ml of water and crush further to form a paste

7. Add a further 5-10ml of water and continue to crush and mix the paste; this should form a fine suspension. Ensure there are no visible pieces of coating or fragments of tablet.

8. Draw this suspension into an appropriate size and type of syringe and administer via the enteral feeding tube.

9. A further 10-20ml water should be added to the mortar and stirred with the pestle to ensure that any drug remaining in the mortar and on the pestle is mixed in the water.

10. Draw this water into the syringe and flush it down the enteral feeding tube. This can be repeated to ensure all the powder is administrated

11. The tube should then be finally flushed with 15ml water to ensure the whole dose is administered.

12. Restart the feed, unless a specific time interval is needed following the administration of the drug

**NB**: Care should be taken to when using this method in fluid restricted patients

10. **REFEEDING SYNDROME**

This potentially lethal condition is often not recognised or inappropriately treated especially on general wards.

Refeeding Syndrome is defined as severe and potentially fatal electrolyte and fluid shifts associated with metabolic abnormalities in malnourished patients undergoing refeeding, whether orally, enteraly, or parenterally (Crook, 2001). These shifts can occur in any severely malnourished individuals but are particularly common in those who have had very little or no oral intake, including overweight patients who have eaten nothing for prolonged periods.

10.1 **Identifying adult patients at risk of Refeeding Syndrome**

Patients who will have been identified as refeeding risk by the dietitian will have a sticker inserted in their medical notes stating the reason for suspected refeeding risk (See Appendix A) as well as a sticker recommending suitable vitamins and minerals supplementation (see Appendix B).

**High risk of Refeeding Syndrome**

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<tr>
<th>Patient has one or more of the following:</th>
<th>Patient has two or more of the following:</th>
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<tr>
<td>• Body Mass Index less than 16kg/m²</td>
<td>• Body Mass Index less than 18.5kg/m²</td>
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<tr>
<td>• Unintentional weight loss greater than 15% within previous 3-6 months</td>
<td>• Unintentional weight loss greater than 10% within previous 3-6 months</td>
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</table>
Very high risk of Refeeding Syndrome

Patients with very low Body Mass Index (less than 14kg/m2) and/or negligible food intake for more than 15 days should have monitoring of their cardiac rhythm during initiation of their enteral tube feeding regimen.

At risk patients’ groups

In addition to those patients mentioned above there are further patients’ groups which are known to be at high risk:

- Patients with Chronic alcoholism
- Chronic malnutrition
- Oncology patients on chemotherapy
- Patients with Anorexia Nervosa
- Elderly patients (co morbidities, decreased physiological reserve)
- Patients with uncontrolled diabetes mellitus (electrolyte depletion, diuresis)
- Patients with chronic malnutrition
- Marasmus
- Prolonged fasting or low energy diet
- Morbid obesity with profound weight loss
- High stress patients unfed for > 7 days
- Malabsorptive symptoms (such as inflammatory bowel disease, chronic pancreatitis, cystic fibrosis, short bowel syndrome)
- Chronic antacid user – these bind minerals, therefore levels of minerals may be low
- Chronic diuretics (loss of electrolytes)

10.2 Clinical management of adult patients at risk of Refeeding Syndrome

Feed prescription

The feed prescription for people at high risk of developing refeeding problems should consider:

- Starting nutrition support at maximum of 50% of requirements, increasing levels slowly to meet full needs by 4-7 days.
- Restoring circulatory volume and monitoring fluid balance and clinical status.
- Closely monitor pulse rate, fluid intake and output.
- Pre-feeding correction of low plasma levels is unnecessary.
- If oral/enteral route available, providing vitamins immediately before and during the first 10 days of feeding (see section 16.3.2 below)
- Patients at extremely high risk (e.g. BMI less than 14kg/m2 or negligible intake for more than 15 days) consider using only 5kcal-10kcal/kg/day, and monitor for cardiac arrhythmias continually. Those patients must be cared for by health professionals trained to deal with such cases – Consider liaison with the nutrition support team.
A written regimen specifying feed, rate of feeding, and additional water flushes will be provided by the Dietitian.

10.3 Prescribing of vitamins in those at high risk of Refeeding Syndrome

Patients at high risk of Refeeding Syndrome should commence feeding at very low levels of energy and protein. Provision of thiamine and other B group vitamins, along with a balanced multi-vitamin and trace element supplement are important as patients are likely to have multiple deficits that cannot be met by low level oral, parenteral or enteral intake. Levels can then be increased over the next few days if careful monitoring reveals no problems.

It is the responsibility of the doctor to prescribe the appropriate vitamins, trace elements and electrolytes on the patient’s drug chart.

|Immediately before and during the first 10 days of feeding prescribe and administer |
|-------------------|------------------|-------------------|
|                     | For Oral Administration | For Enteral-Tube Administration |
|Thiamine (Vitamin B1)| Thiamine Tablets 50mg - ONE QDS | Thiamine Tablets 50mg - ONE QDS |
|Vitamin B Complex    | Vitamin B Co Strong tablets - TWO TDS | Vitamin B Co Strong tablets - TWO TDS (crushed) |
|Balanced Multivitamin & trace element | Forceval® Capsules - ONE DAILY | Forceval soluble requires 125-200ml water to dissolve the tablet therefore needs to be included in the fluid balance or IV Pabrinex when Forceval not available or very high refeeding risk |

Review vitamin and micronutrient prescription after 10 days treatment.

10.4 Potassium, magnesium and phosphate

For further information please see full Trust guidelines ‘Treatment of Hypomagnesaemia in adult patients’, ‘Treatment of Hypophosphataemia in adults’ and ‘Treatment of hypokalaemia in adults’ available on the IaN.

Feeding should not be withheld in patients with low levels of potassium, magnesium or phosphate until these have been corrected. Since the vast majority of these deficits are intracellular, they cannot be corrected without commencing low energy provision.

11 Diabetes Monitoring

Please see the Diabetes management in patients having Enteral Feeds Guideline on the Diabetes team home page

12. DISCHARGING PATIENTS ON ENTERAL FEED TO THE COMMUNITY
Once a potential discharge date to the community (be it to their own home or a residential/nursing home or to a community hospital) has been set, the Department of Nutrition & Dietetics should be contacted at once on Ext. 2044.

12.1 Responsibility of Ward Nursing Staff

The nursing staff should arrange for 10 days’ supply of feed, giving sets, syringes and any other ancillaries deemed necessary e.g. pH paper if NG fed. It is also their responsibility to ensure the patient is trained in enteral feeding tube care, skin/site care in addition to administering enteral feed, flushes and medications.

12.2 Responsibility of Hospital Dietitian

The dietitian will provide a feeding pump and drip stand if appropriate. If the patient is being discharged to their own home, they will also ensure the patient and/or carer is trained in the use of the feeding pump before discharge.

The Hospital Dietitian will complete a referral to the Community Dietitian detailing the patient’s requirements and current feeding regimen. They will also arrange for the patient to be registered on a home enteral feeding delivery system within 2 working days of their discharge.

They will write to the patient’s GP on discharge from hospital (or within 2 working days), to inform them that the patient has been discharged on an enteral feed and that a prescription for the feed should be sent to the contracted feed delivery company. Information concerning the type of feed, feeding tube, feed rate and any other information relating to the feeding regimen and proposed dietetic follow up should also be provided.

It is the Hospital Dietitian’s responsibility to complete all the relevant paperwork as per ‘The procedure for discharging patients on HETF’ shown in Appendix C.

Patients to be transferred to another hospital should have an up to date review of the regimen included in the transfer notes. If the patient is to be transferred out-of-area the Hospital Dietitian will be responsible for contacting the relevant dietetic team in the receiving NHS Trust and telephone/fax the dietitians there with the relevant information.

13. MONITORING COMPLIANCE WITH THIS GUIDELINE

The Lead Nutrition Nurse and the Nutrition Team/Acute Team lead Dietitian, will take responsibility for the auditing of this policy. In order to monitor compliance with this policy, the auditable standards will be monitored as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>Minimum Requirements</th>
<th>Evidenced by</th>
<th>NHSLA standard</th>
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<tbody>
<tr>
<td>1.</td>
<td>All healthcare professionals involved with patients requiring enteral feeding must meet essential training criteria, deemed competent in the procedures employed and are working in accordance with their job role’s outlined responsibilities.</td>
<td>Essential training record &amp; evidence of trust competencies. MDT medical record/case notes audit</td>
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<td>2.</td>
<td>Initiating enteral feeding must be highlighted as per indications outlined in national BSG/NICE guidance.</td>
<td>MDT medical record/case notes audit</td>
<td>2.8</td>
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<tr>
<td>3.</td>
<td>All patients receiving enteral feeding are monitored in accordance with national (NICE) guidance.</td>
<td>Annual - In patient Enteral feeding audit and Home Enteral feeding audit</td>
<td>2.8</td>
</tr>
</tbody>
</table>
4. All patients at risk of re-feeding syndrome are identified via screening and managed in accordance with NICE guidance. | Re-feeding Audit | 2.8

5. Enteral feeding should be initiated only with patient consent. If patient lacks capacity/detained under section of MHA, enteral feeding must be in the patient’s best interests. | MDT medical record/case notes audit | 2.8

6. Initiation of enteral feeding (i.e. tube placement and decision-making process) must be documented in the medical notes. | Consent form/NG care bundle audit | 1.8

7. All enteral feeding patients must be safely discharged to the community. Nursing & dietetic staff must ensure they complete all tasks responsible for to facilitate discharge. | HEF audit HEF discharge sticker | 4.9

8. Hospital dietitian must ensure adequate handover is provided to community dietetic staff for ongoing care and monitoring of HEF patients. | HEF audit | 4.9

9. Community HEF patients must be monitored in accordance with national guidance. | Community HEF audit | 2.8

14. ASSOCIATED CLINICAL GUIDELINES OR POLICIES


- Royal Devon & Exeter Hospitals NHS Foundation Trust (2012) Consent for Examination or Treatment Policy; Clinical Governance

- Royal Devon & Exeter Hospitals NHS Foundation Trust (2010) Deprivation of Liberties Policy; Child and Women's Health

- Royal Devon & Exeter Hospitals NHS Foundation Trust (2011) Food & Nutrition Policy; Nutrition & Dietetics

- Royal Devon & Exeter Hospitals NHS Foundation Trust (2011) Hand Hygiene Policy; Infection Control

- Royal Devon & Exeter Hospitals NHS Foundation Trust (2013) Infection Prevention and Control Policy; Infection Control

- Royal Devon & Exeter Hospitals NHS Foundation Trust (2012) Insertion and Confirming Position of Naso Gastric and Oro Gastric Tubes in Adults, Paediatrics & Neonates Policy; Nutrition Nurse
- Royal Devon & Exeter Hospitals NHS Foundation Trust (2011) Guidelines for Enteral Feeding in Patient with Diabetes Requiring Insulin; Medicine
- Royal Devon & Exeter Hospitals NHS Foundation Trust (2011) Guidelines for Initiating Adult Enteral Feeding Out of Hours; Nutrition & Dietetics
- Royal Devon & Exeter Hospitals NHS Foundation Trust (2012) Guidelines for the Treatment of Hypomagnesaemia in Adult Patients; Pharmacy
- Royal Devon & Exeter Hospitals NHS Foundation Trust (2012) Guidelines for the Treatment of Hypophosphataemia in Adult Patients; Pharmacy

15. PUBLICATION DETAILS

<table>
<thead>
<tr>
<th>Author of Clinical Guideline</th>
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<tbody>
<tr>
<td>Directorate/Department responsible for Clinical Guideline</td>
<td>Department of Nutrition and Dietetics – Professional Services</td>
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<td>4635 / <a href="mailto:beth.thompson2@nhs.net">beth.thompson2@nhs.net</a></td>
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<tr>
<td>Version number</td>
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<tr>
<td>Replaces version number</td>
<td>New guideline</td>
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<td>Date written</td>
<td>30/12/13</td>
</tr>
<tr>
<td>Approving body and date approved</td>
<td>Clinical Audit and Guidelines Group</td>
</tr>
<tr>
<td></td>
<td>14/01/14</td>
</tr>
<tr>
<td>Review date</td>
<td>14/07/16</td>
</tr>
<tr>
<td>Expiry date</td>
<td>14/01/16</td>
</tr>
<tr>
<td>Date document becomes live</td>
<td>15/01/14</td>
</tr>
</tbody>
</table>
This patient is at risk of refeeding syndrome as evidenced by one or more of the following:

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI &lt; 16kg/m²</td>
<td></td>
</tr>
<tr>
<td>BMI &lt; 18.5kg/m²</td>
<td></td>
</tr>
<tr>
<td>Unintentional weight loss &gt; 15%</td>
<td></td>
</tr>
<tr>
<td>Unintentional weight loss &gt; 10%</td>
<td></td>
</tr>
<tr>
<td>Little or no nutritional intake &gt; 10 days</td>
<td></td>
</tr>
<tr>
<td>Little or no nutritional intake &gt; 5 days</td>
<td></td>
</tr>
</tbody>
</table>

Please prescribe the following for 10 days:

<table>
<thead>
<tr>
<th>Medication</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiamine Tablets 50mg - ONE QDS</td>
<td></td>
</tr>
<tr>
<td>Vitamin B Co Strong - TWO TDS</td>
<td></td>
</tr>
<tr>
<td>If unable to give oral/enteral B vitamins</td>
<td></td>
</tr>
<tr>
<td>Pabrinex IV (for 3 days only or until normalised)</td>
<td></td>
</tr>
<tr>
<td>Forceval – ONE DAILY (oral)</td>
<td></td>
</tr>
<tr>
<td>Phlexyvits (mixed with water) – ONE DAILY (enteral)</td>
<td></td>
</tr>
</tbody>
</table>

Please monitor Potassium, Magnesium & Phosphate daily
Correct levels if necessary
Note correction of electrolyte before feeding is not necessary

APPENDIX A

Example of “Risk of Refeeding Syndrome” sticker to be used in medical notes