

| <b>Standard Operating Procedure</b>                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <b>Title: MEDICINE ADMINISTRATION VIA ENTERAL FEEDING TUBES</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <b>Presented to: Care And Clinical Policy Sub Group</b>         | <b>Date: 1<sup>st</sup> June 2015</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Ratified by: Care &amp; Clinical Policies Sub Group</b>      | <b>Date: 1<sup>st</sup> June 2015</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                                 | <b>Review date: June 2017</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Links to policies:</b>                                       | <p>Torbay and Southern Devon Health and Care NHS Trust:</p> <ul style="list-style-type: none"> <li>• Medicines policy for Registered Professionals Version 2</li> <li>• Medicines policy for Skilled Not Registered Staff Version 1 Supervision, accountability and delegation of activities to skilled not registered staff June 2013</li> <li>• Infection Control Operating Policy Version 3</li> <li>• Adult Gastrostomy Tube Feeding Policy in the Community Setting May 2013 NMC Standards for medicines management 2007</li> <li>• SOP Self Administration of Medication in Community Hospitals Version 2</li> <li>• SOP Use of Patients Own Drugs (PODs) for In-Patient and Day Care Setting Version 2</li> <li>• <u>Consent Policy: Consent to examination, assessment, intervention, treatment and care Version 1</u></li> </ul> |
| <b>Evidence to support procedure</b>                            | <ul style="list-style-type: none"> <li>• Handbook of Drug Administration via Enteral Feeding Tubes (Pharmaceutical Press 2008)</li> <li>• NPSA alert 19 Promoting safer measurement and administration of liquid medicines via oral and other enteral routes</li> <li>• NICE guidelines 2012 - Quality standard for nutrition support in adults</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

### 1. Purpose of this document

To inform healthcare professionals about safe and appropriate procedures for the administering of medicines via enteral feeding tubes

### 2. Scope of this SOP

Applicable to Skilled Not Registered (SNR) level 3 and registered nursing staff.

### 3. Competencies Required

**Level 1 Registered Nurse** employed by Torbay and Southern Devon Health and Care NHS Trust (TSDHCT) within the community setting (including community

hospital), evidence of attendance at annual mandatory training and anaphylaxis training as provided by TSDHCT within previous 2 yrs

**Skilled not registered staff** must have received patient specific training and the task must be delegated and regularly reviewed by a Healthcare Professional. They must be signed off as competent by the appropriately trained nurse.

Training is currently provided by the Clinical Skills facilitator this does not replace the support and review processes which must be carried out by the professional that delegates the task.

#### 4. Patients covered

All clients over the age of 16 whose medications are administered via enteral feeding tubes

#### 5. Different Enteral Tubes

Different enteral tubes e.g. Nasogastric (NG), Nasojejunal (NJ) Percutaneous Endoscopic Gastrostomy (PEG) or Percutaneous Endoscopic Jejunostomy (PEJ) may lead to different approaches in medication review.

#### 6. Legal Considerations

Medication administered via enteral feeding tubes will generally be outside of the medicines marketing authorisation i.e. an unlicensed indication. Doctors, pharmacists and nurses accept liability for the drug use outside of the marketing authorisation. It is therefore essential that Registered Healthcare Professionals and SNR staff follow this standard operating procedure.

#### 7. Ensure medication has been appropriately reviewed prior to administration via enteral feeding tubes by the Medical Practitioner or Non Medical Prescriber.

The prescriber should discontinue any unnecessary medication. Ideally changes in therapy should be made whilst the service user is in hospital or other care environment where they can be closely monitored as changes in therapy can result in increased side effects or loss of therapeutic response. Consideration should be given to the use of alternative routes of administration. Some service users with enteral tubes may be able to take some medication via the oral route.

- 7.1 All changes in medication should prompt a review by the prescriber of whether the drug and dose form are appropriate to be administered via an enteral tube. Expert opinion may be necessary and documented in the care plan.
- 7.2 Upon transfer of care into TSDHCT, documented evidence of consent (in the care plan) is required by TSDHCT staff to enable non registered staff to administer medicines via an enteral feeding tube following appropriate training and delegation.
- 7.3 South Devon Healthcare Foundation Trust and TSDHCT will provide the following upon discharge to the patient and the GP:
  - Medication strength (liquids - amount /ml) and dosage

- Where medications are to be manipulated in some way – crushed or dispersed - details will be given on volumes and fluid to be used.
- Dieticians will specify the volumes of fluid to be administered in addition to feeds.

#### **8. Obtain appropriate pharmaceutical guidance prior to medicine administration via enteral feeding tubes.**

The prescriber should contact Medicines Optimisation Team for advice if required.. During out of hours, the on-call pharmacist at South Devon Healthcare foundation Trust (SDHFT) can also help; contactable via Torbay Hospital switchboard.

Other registered professionals may contact Medicines Optimisation Team for confirmation of appropriate enteral tube medicines administration.

Pharmaceutical advice may alter the prescription – this must be discussed with the prescriber.

Health professionals involved in the administration of medicines via enteral feeding tubes must ensure they retain full records of all medicines guidance received and record the guidance in the clinical notes or the service users home care plan, duplicated in base as necessary.

#### **9. Liaise with the dietetics department**

All service users receiving feed, water and/or medication via an enteral tube should be known to the Dietetic Department and the Nutrition Specialist Nurses.

The dietitian will calculate the service user's individual nutritional and fluid requirements and devise an appropriate feeding regime. A copy of the feeding regime, including total daily fluid requirement should be available within the clients care plan.

The feeding regime will include details of the feed the service users should be having and the amount of additional water they will need within 24hours. Pre and post feed flush volumes will be stated. Any outstanding volume of water required will be stated and can be used when giving medication or can be given as additional water flushes to ensure the total daily fluid requirement is met.

#### **10. Obtain informed consent**

Consent is required upon transfer of care and when alterations are made to the care plan. Refer to the TSDHCT Consent Policy for further details.

#### **11. Equipment**

All necessary equipment should be gathered together including:

- a. The relevant Patient Medicines Administration Record (PMAR) chart, ensuring full details are recorded including the route of administration. The PMAR chart will be supplied by the community pharmacy.
- b. The service users care plan, ensuring the flush volume is clearly documented if there is a clinical change in the clients condition or there is a change in the prescribed medication
- c. The appropriate clean purple barrelled 60ml (Baxa) enteral syringe and measuring pots or smaller oral syringes for measuring only if required

- d. Water for flushes (see section 9). In the community this should be boiled and cooled water, in hospitals bottled water for irrigation should be used
- e. Medication to be administered- following instruction on patient's medication chart.
- f. Sterile dressing pack (only for PEJ or immunocompromised service users).
- g. Purple or orange sphygots.
- h. Clinical clean sheets if no clean area is available.

## 12. Syringes to be used for administration of flushes or medication via enteral feeding tube

**Specific purple oral syringes used to measure volumes of medicines /enteral syringes should be used for administration of flushes or medication via enteral feeding tubes; these will be purple barrelled, catheter tip or female luer syringes to reduce the risk of wrong route errors.**

The largest functional syringe should be used, a 60ml purple oral/enteral syringe is therefore recommended. The syringes issued into the community (BAXA brand) are service user specific and for a maximum of 30 uses (i.e. 30 depressions of the plunger). Between uses, syringes should be washed with warm soapy water and left to air dry and then stored in an air tight container. Further information can be found on the following website link <http://www.baxa.com/choosepurple>

**Community Hospitals** - follow guidance issued by SDHFT – These 60ml purple syringes (MEDICINA brand) must be used for one drug round only per individual patient.

Ensuring syringes are appropriately disposed of after 24 hours from the time they were first taken out of the manufacturers packaging (any advice given to the service user on storage of syringes must be recorded in the care plan.)

Never use syringes that allow connection to intravenous (or other parenteral) catheters or ports

## 13. Water for flushes via an enteral tube

It is essential that enteral feeding tubes are flushed with water before and after medication administration as this helps prevent blockages of the tube and potential interactions between the feed and the medicines.

Where medication is administered via an enteral tube, the tube should be flushed with at least 30ml of water before any medication is administered. If more than one medication is to be administered, each must be given separately with at least 10ml flush of water between each one. The tube should be flushed with at least 30ml of water after all the medications have been administered. (Caution may be needed in patients with a fluid restriction)

Unless otherwise stated by the dietitian previously boiled, cooled water should be used to flush percutaneous endoscopic gastrostomy (PEG) tubes.

*To flush tubes that exit beyond the pylorus such as jejunostomy (PEJ) tubes, the dietetics department should be contacted for advice, because sterile water flushes will be required and must be documented in the care plan*

Within the hospital setting 1 litre bottles for irrigation ('pour bottles') should be used for flushing. The service users name should be written on it as well as the date and time that the bottle was opened. This bottle must then be discarded after 24 hours.

In the immunocompromised and / or critically ill service user sterile water from ampoules may be recommended. This will be addressed on an individual basis. In the community setting (i.e. the service users own home, nursing or residential setting) cooled, boiled water should be used for flushing. The cooled, boiled water (boiled in the morning) can be used throughout the day and can be discarded at the end of the day.

#### **14. Receipt of Medication and checking against the Patient Medicines Administration Record (PMAR) Chart**

When the medicines are received into the service users home or ward, the content of each label (pharmacy label) must be checked as being identical in detail (i.e. dose, dosage details and frequency, volume to be administered) to the PMAR chart. The manufacturer's label should also be checked with PMAR chart to ensure the right drug and strength and expiry date. This responsibility lies with any member of staff who receives medication (SNR or registered professional).

Inaccuracies should be reported and advice sought urgently.

This checking activity should be covered thoroughly as part of the delegation process.

A risk assessment needs to be completed on an individual basis

NB: This is an extremely important step to follow as there can be multiple strengths of an individual liquid medication and this has the potential to lead to significant dosing error:

e.g. furosemide is available in 40mg in 5ml liquid, 50mg in 5ml liquid and 1mg in 1ml liquid. If a patient had been stabilised on 5ml daily of 40mg in 5ml and this became unavailable then 5ml of either of the other two liquid furosemide preparations may lead to error unless clear guidance on dosage and volume was not given.

#### **15. Administration**

- Ensure that all checks are made in accordance with administration of medicines guidelines including checking client identity, allergy status, the medicines name and strength and checking details on the medicines administration record against the pharmacy label, date and expiry
- Only administer medicines via equipment and tubing which has been specifically manufactured and supplied for the purpose of enteral feeding.
- Wash hands in accordance with infection control policy and put on gloves and an apron.
- Prepare a flush of water in a 60ml purple syringe, ensuring the volume is as recommended by the community dietician. Place the prepared syringe containing flush on a clean tray.
- Position the patient in a 30 to 45 degree angle to help prevent regurgitation and possible pulmonary aspiration
- Stop or suspend enteral feeding, if feeding is in process.

- Disconnect giving set, as medicines should not be given via giving sets, because there might be residual feed left in the giving set. The appropriate sphygots must be used to cap off the giving set in the event of stopping the feed in order to give medicines.
- With the tube end open, administer the flush.
- Administer the medication and flush again with the recommended volume of water, cap off or connect further enteral feeding depending on the service user's requirements or if a specific time interval is needed following administration of the medicine as recorded on the medication administration record.

If more than one medicine is to be administered, flush between each medicine to ensure the drug is cleared from the tube. Do not mix different medicines together prior to administration

## 16. Recording of administration

Administration is supported by recording on a PMAR chart. The PMAR chart should be available in advance of medicines being administered.

Care must be afforded in circumstances where more than one PMAR chart is available for a service user.

Fields to be completed:

- Service User details e.g. Name, Address, DOB, Doctor, Allergies, NHS number.
- Drug name
- Formulation: tablet / capsule / oral liquid, etc
- Strength: Complete standard strength as appears on medicine label e.g. 25mg/5ml
- Dose required and dosage frequency : Precise dose and units e.g. 50mg once daily
- Volume or amount to be given / special instructions: e.g. 10ml daily (please avoid latin abbreviations) and / or directions to improve administration e.g. after food / before food etc
- Route: e.g. Via enteral tube (NG, NJ, PEG, PEJ etc)
- Times of administration may be highlighted by imputing the desired details in the first horizontal column.

Administration is recorded by signing the appropriate box on the PMAR chart.

Medicines prescribed 'when required' or PRN may be added to the PMAR chart with the times of administration left blank, however it is essential that all administration of such medicines is recorded on the PMAR chart with a time. Additionally, when dealing with 'when required' medication it is the duty of the delegating professional to ensure the non registered member of staff is given a clear care plan of symptom identification, expected appropriate response and action if treatment review is required.

Omitted doses and the reason for omission should be recorded on the PMAR chart or prescription chart using the codes listed on the PMAR chart and brought to the attention of the registered professional or prescriber ASAP. All actions must be recorded.

**17. Prescribing options for service users unable to take solid oral dosage forms**

A stepwise approach is suggested to choose a suitable alternative.

- If possible, use a licensed medicine in a suitable formulation to meet the service user's needs (e.g. a dispersible tablet or licensed liquid medicine).
- If there is no suitable licensed formulation, consider using a licensed medicine in an unlicensed manner, for example by crushing tablets or opening capsules.
- In circumstances where there is no alternative formulation and medicine cannot be crushed or capsules open, consider switching to a different therapeutic agent in the same class, or to a different route of administration. In most cases a suitable licensed preparation will be available to meet the service user's needs.
- In the few situations where the service user's needs cannot be met by licensed medicines, the use of a special-order product ('special') may be considered.

**18. Preparation and checks for different formulations of medicines to be administered in addition to the above steps.**

**All medicines should be prepared, administered and given immediately to maintain their stability and quality and minimise the risk of inadvertent administration by other routes.**

**Preparation of solutions**

- Ensure the prescriber has checked the solution is suitable for administration via the enteral feeding tube, checking if specific time intervals are needed after stopping the feed and administering the medicine. This information should be recorded in the service user's care plan.
- Flush the enteral feeding tube as outlined in the administration section
- Draw the medicine solution into a clean 60ml enteral syringe or alternatively if measuring small volumes, measure the drug solution in a suitable container and then draw up into the 60ml enteral syringe
- Ensure if using a measure, the measure is rinsed and that this rinsing water is administered via the enteral feeding tube.
- Finally flush the enteral feeding tube with the recommended volume of water.
- Re-start the feed if required, unless a specific time interval is needed following the administration of the drug.

**Preparation of suspension**

- Follow the steps as outlined in preparation of solutions, however ensure the medication bottle is thoroughly mixed and dilute with water if necessary.

**Preparation of soluble tablets (must dissolve first)**

Follow the steps as outlined in preparation of solutions, however to dissolve the tablet:

- Select a clean 60ml enteral syringe

- Remove the plunger and place the tablet into the barrel of the syringe OR measure a suitable quantity of water into an appropriately sized clean container (to allow dissolving without spillage) and place the tablet into the water
- Replace the plunger
- Draw 10ml of water into the syringe and allow the tablet to dissolve, shaking as necessary
- Inspect the solution to ensure that there are no visible particles
- Flush the medication dose down the enteral feeding tube
- Draw an equal volume of water into the syringe and also flush this via the enteral feeding tube
- Flush with the recommended volume of water. This will rinse the syringe and ensure the total dose is administered.

### **Preparation of effervescent/dispersible tablets (must allow tablet to dissolve/disperse)**

Follow the steps as outlined in preparation of solutions, however to disperse dissolve the tablet:

- Measure a suitable quantity of water into an appropriately sized clean container (to allow effervescence without spillage)
- Add the effervescent tablet and allow to disperse
- Ensure the tablet is fully dispersed to avoid gas production in the enteral feeding tube
- Draw the contents of the syringe into a clean 60ml enteral syringe
- Inspect the syringe to ensure that there are no particles which might block the tube
- Flush the medication down the enteral feeding tube
- Flush with the recommended volume of water

### **Preparation of orodispersible tablets**

- Follow specific advice from the pharmacist as the administration of these formulations varies depending on the medicine concerned.

### **Preparation of compressed tablets (ordinary tablets)**

- Follow specific advice from a pharmacist.

### **Preparation of all other dosage forms**

- Follow specific advice from the pharmacist as the administration of these formulations varies depending on the medicine concerned.

## **19. Blockage of line**

Refer to policy Adult Enteral Tube Feeding Policy in the Community Setting.

## 20. Training

### Specialist Competencies or qualifications

- All registered staff employed by TSDHCT will work to the Standard Operating Procedure and related policies where relevant to their job descriptions, KSF outline and NMC Code of Conduct and standards of practice.
- SNR's and carers employed by TSDHCT or under direct payments and personalised care packages funded by TSDHCT must adhere to this policy.
- For any personalised care package involving enteral feeding, a risk assessment must be undertaken in line with TSDHCT policy prior to commencement of TSDHCT services and support. Special arrangements for medicines (governance, administration training) must have been considered as part of the risk assessment.
- To be aware of manufacturers instructions for specific medication.

### Continuing education and training

- See the Adult Enteral Tube Feeding Policy

Standards:

| Item                                            | % | Exceptions |
|-------------------------------------------------|---|------------|
| Review incident reports                         |   | None       |
|                                                 |   |            |
| How will monitoring be carried out?             |   |            |
| When will monitoring be carried out?            |   |            |
| Who will monitor compliance with the guideline? |   |            |

### References:

- Mental Capacity Act 2005: Deprivation of liberty safeguards - Code of Practice to supplement the main Mental Capacity Act 2005 Code of Practice.
- South Devon Healthcare T Protocol for Anaphylaxis/Anaphylactic Shock Version 6
- TSDHCT Infection Control Policy Version 3
- Handbook of Drug administration via Enteral feeding Tubes (2008) Rebecca White and Vicky Bradnam
- NICE 2012 – NICE Clinical Guideline 139 - Infection: Prevention and control of healthcare-associated infections in primary and community care

### Amendment History

| Issue | Status   | Date       | Reason for Change                                  | Authorised     |
|-------|----------|------------|----------------------------------------------------|----------------|
| V 1.0 | Ratified |            | SOP Developed for new TSDHCT provider organisation | Paul Humphriss |
| V 1.1 | Draft    | April 2015 | Review                                             | Lynda Price    |
| V 2.0 | Ratified | June 2015  | Two Year Review                                    | Lynda Price    |