Royal Cornwall Hospitals
NHS Trust

Safer Measurement and Administration of Liquid Medicines via Oral and Other Enteral Routes Clinical Guideline.

Version 1.1

October 2024.

Summary

In 2007, the National Patient Safety Agency issued a patient safety alert relating to safer measurement and administration of liquid medicines via oral and other enteral routes[1] following a number of incidents where oral liquid medications were administered via the intravenous (IV) route.

This NPSA alert has now been archived as the recommendations made within it are now generally embedded in routine practice in the United Kingdom. However, it is still relevant to routinely consider the recommendations as part of clinical governance and to reinforce these to ensure that they are embedded in local clinical practice with the aim to prevent Never Events from occurring.

Oral/enteral syringes **must** be used when a syringe is required to measure and / or administer oral/enteral medications. These syringes are labelled 'Oral syringe' or 'For enteral feeding/meds' and have different tips that are designed to be incompatible with IV equipment reducing the risk of inadvertent parenteral administration.

Oral/enteral syringes are however compatible with enteral feeding tubes and the purple plunger provides a visual reminder that the medication in the syringe must be administered via the oral or enteral route.

Do not use intravenous syringes to measure and administer oral liquid medicines.

1. NPSA, 28 March 2007, Patient Safety Alert 19: Promoting safer measurement and administration of liquid medicines via oral and other enteral routes. [ARCHIVED CONTENT] Promoting safer measurement and administration of liquid medicines via oral and other enteral routes (nationalarchives.gov.uk)

1. Aim/Purpose of this Guideline

1.1. To reduce the risk of oral liquid medication being administered via the parenteral route.

1.2. The scope of this policy extends to all Trust staff that supply or administer medicines.

1.3. This version supersedes any previous versions of this document.

Data Protection Act 2018 (UK General Data Protection Regulation – GDPR) Legislation.

The Trust has a duty under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team.

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2. The Guidance

2.1 . Intravenous (IV) syringes MUST NEVER be used to measure or administer oral liquid medicines either orally or through an enteral feeding tube.

2.2 . Oral liquid medicines should be measured using a 5ml spoon, a graduated medicine measure or a purple oral/enteral syringe. A medicine cup or 5ml measuring spoon should be used to measure and administer liquid oral medication except in the following situations where a purple oral/enteral syringe is appropriate:

- The dose cannot be accurately measured using a medicine cup or 5ml measuring spoon, i.e. the dose is not 5ml or a multiple of 5ml.
- Administration via an enteral feeding tube (e.g. nasogastric, gastrostomy or jejunostomy tubes).
- Administration from a medicine cup or 5ml measuring spoon is unsuitable e.g. babies

and young children.

- Administration of Controlled Drug liquid oral medicines (e.g. morphine oral liquid solution, oxycodone oral liquid solution).
- If not administering the drug immediately, or if more than one drug is being given via purple oral/enteral syringe, each syringe should be labelled to indicate both the name of the medicine contained within the syringe, and the route of administration (i.e. PO or enteral).

2.3. Where an oral/enteral syringe is used, it should have a both a purple plunger *and* be marked with the words 'Oral' and/or 'Enteral' or, 'For enteral feeding/med only' to aid differentiation from other syringes.

2.4. The following oral/enteral syringes and equipment are routinely stocked at the Royal Cornwall Hospitals NHS Trust and are available for wards and other clinical departments and units to order via Stores Department:

- 1mL or 3mL low dose oral/enteral syringes with an ENFit® tip.
- 5mL, 10mL, 20mL and 60mL oral/enteral syringes with an ENFit® tip.
- 5mL, 10mL and 20mL oral/enteral syringes with a catheter tip.
- 'Male' press-in bungs to allow removal of the dose from a medicine bottle using an oral/enteral syringe with an ENFit® tip.
- 'Female' press-in-bungs to allow removal of the dose from a medicine bottle using an oral/enteral syringe with a catheter tip.

An enteral syringe which features the ENFit® tip are designed to fit enteral feeding tube connectors and should be used for administering oral liquid medications via an enteral tube. They can however, also be used to administer oral liquid medications directly in to the oral cavity.

Figure 1: An oral/enteral syringe which features the ‘female’ ENFit® connection.



Figure 2: An oral/enteral syringe which features the catheter tip.



2.5. Smaller (less than 50ml) oral/enteral syringes exert a higher pressure, which can split feeding tubes. Oral/enteral syringes, particularly smaller oral/enteral syringes, must not be used to administer medicines until tube patency has been established.

2.6. To avoid potential contamination of medication and cross infection, oral/enteral syringes are **single patient use only**.

2.7. In hospital, once an oral/enteral syringe has been used to administer medication to a patient, the used oral/enteral syringe must not come into contact with an original container of medicine again.

2.8. Controlled drug oral liquid medication should be measured directly from the original container using a single use oral/enteral syringe which should be discarded after administration.

2.9. A patient may be taking more than one liquid medicine at the same time of day. Where each dose can be measured accurately using a medicine cup (i.e. non Controlled drug oral liquid medications) and the oral/enteral syringe is only required for administration, the same syringe can be used to draw up and administer each dose from a medicine cup, provided each dose is administered separately.

2.10. In Trust facilities, used oral/enteral syringes should be discarded according to the Trust waste disposal policy.

2.11. Following discharge, oral/enteral syringes may be reused in an individual patient's home in accordance with manufacturers' guidance for washing and re-use.

2.12. Adequate supplies of oral/enteral syringes must be supplied if required to administer the quantity of medication supplied on discharge or to outpatients.

3. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	Oral/enteral syringes are routinely used for the administration of oral liquid medications as set out in this policy and as per the Royal Cornwall Hospitals NHS Trust Medicines Policy.
Lead	Ward / clinical unit managers.
Tool	Individual ward based audits monitored as part of the ongoing audit process within the department on a Word or Excel template.
Frequency	Annually and after any clinical incident involving inadvertent administration of an oral liquid medication via parenteral route (or near miss incidents).
Reporting arrangements	Ward manager to report audit findings to Medication Safety Group as requested.
Acting on recommendations and Lead(s)	Medication Safety Group may request audit results from clinical areas after a clinical incident (or near miss) regarding oral liquid medications and administration via parenteral route and make additional recommendations regarding training and/or practice on that ward / clinical unit.
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned within one week. The Medication Safety Group will notify a lead member of the ward / clinical unit to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders via ward safety briefs and Trust wide missives such as the Pharmacy Newsletter.

4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the 'Equality, Inclusion & Human Rights Policy' or the Equality and Diversity website.

4.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	Safer Measurement and Administration of Liquid Medicines via Oral and Other Enteral Routes Clinical Guideline V1.1
This document replaces (exact title of previous version):	Safer Measurement and Administration of Liquid Medicines via Oral and Other Enteral Routes Clinical Guideline V1.0
Date Issued/Approved:	
Date Valid From:	October 2024
Date Valid To:	October 2027
Directorate / Department responsible (author/owner):	Robin Parsons, Lead Pharmacist Emergency Medicine. Pharmacy Department.
Contact details:	01872 253531
Brief summary of contents:	Clinical guideline on the use of oral or enteral syringes within the Trust.
Suggested Keywords:	Oral – Enteral – Purple – Syringe – Administration – Liquid – Medication – Oramorph – Morphine - Oxycodone
Target Audience:	**RCHT:** Yes **CFT:** No **CIOS ICB:** No
Executive Director responsible for Policy:	Chief Medical Officer
Approval route for consultation and ratification:	Medicine Practice Committee.

Information Category	Detailed Information
Manager confirming approval processes:	Richard Andrzejuk
Name of Governance Lead confirming consultation and ratification:	Kevin Wright
Links to key external standards:	None.
Related Documents:	The Medicines Policy Chapter 5: Preparation and Administration. V6.0 June 2023
Training Need Identified?	No
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet and Intranet
Document Library Folder/Sub Folder:	Clinical / Pharmacy

Version Control Table

Date	Version No	Summary of Changes	Changes Made by *(Name and Job Title)*
March 2021	V1.0	Initial issue.	Robin Parsons, Lead Pharmacist Emergency Medicine.

October 2024	V1.1	Page 2 i) Additional paragraph in Summary section about the archiving of the 2007 NPSA alert, but explaining that the guidance is still required locally to help further embed the recommendations into practice. ii) Addition of the sentence '**Do not** use intravenous syringes to measure and administer oral liquid medicines.' iii)Added the words 'or, 'For enteral feeding/med only'. iv) Updated hyperlink to reference.	Robin Parsons, Lead Pharmacist Emergency Medicine.

All or part of this document can be released under the Freedom of Information Act 2000.

All Policies, Strategies and Operating Procedures, including Business Plans, are to be kept for the lifetime of the organisation plus 6 years.

This document is only valid on the day of printing.

Controlled Document.

This document has been created following the Royal Cornwall Hospitals NHS Trust The Policy on Policies (Development and Management of Knowledge Procedural and Web Documents Policy). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Equality Impact Assessment

Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity, and Inclusion Team rcht.inclusion@nhs.net

Information Category	Detailed Information
Name of the strategy / policy / proposal / service function to be assessed:	Safer Measurement and Administration of Liquid Medicines via Oral and Other Enteral Routes Clinical Guideline V1.1
Directorate and service area:	Pharmacy
Is this a new or existing Policy?	Existing
Name of individual completing EIA (Should be completed by an individual with a good understanding of the Service/Policy):	Robin Parsons, Lead Pharmacist Emergency Medicine
Contact details:	01872 253531

Information Category	Detailed Information
1. Policy Aim - Who is the Policy aimed at? (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	The scope of this guideline extends to all Trust staff that supply or administer medicines.
2. Policy Objectives	To reduce the possibility of oral medication being administered via the parenteral route.

Information Category	Detailed Information
3. Policy Intended Outcomes	To reduce the possibility of oral medication being administered via the parenteral route.
4. How will you measure each outcome?	Ward managers responsible to enact and monitor compliance.
5. Who is intended to benefit from the policy?	Staff and patients. Clear guidelines on the use of oral/enteral syringes is intended to reduce risk of inadvertent administration of oral liquid medications via a parenteral route thereby reducing risk of serious harm (or death) to patients. Staff will benefit from having clear guidance as set out in this document.
6a. Who did you consult with? (Please select Yes or No for each category)	• Workforce: No • Patients/ visitors: No • Local groups/ system partners: Yes • External organisations: No • Other: No
6b. Please list the individuals/groups who have been consulted about this policy.	**Please record specific names of individuals/ groups:** Incident Review Learning Group Medicine Practice Committee
6c. What was the outcome of the consultation?	Agreed.
6d. Have you used any of the following to assist your assessment?	**National or local statistics, audits, activity reports, process maps, complaints, staff, or patient surveys:**

7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
Age	No	
Sex (male or female)	No	
Gender reassignment (Transgender, non-binary, gender fluid etc.)	No	
Race	No	
Disability (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	
Religion or belief	No	
Marriage and civil partnership	No	
Pregnancy and maternity	No	
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	

A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment: Robin Parsons, Lead Pharmacist Emergency Medicine.

If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:
Section 2. Full Equality Analysis