Leicestershire Partnership NHS Trust

Parenteral Fluids Administration in Adults Policy (excluding parenteral nutrition)

This policy outlines the process for the administration of Fluids via the Intravenous and Subcutaneous routes.

Key Words:	IV, S/C, Fluids, Intravenous, Subcutaneous, Hypodermoclysis	
Version:	5.1	
Approved by:	Nutrition and Hydration Steering Group	
Ratified by:	Quality Forum	
Date this version was Ratified:	14th March 2024	
Please state if there is a reason for not publishing on website	N/A	
Review date:	1st August 2026	
Expiry date:	29th February 2027	
Type of Policy	Clinical ✓	Non Clinical

Contents

1.0 Quick Look Summary

This policy in conjunction with the below guidelines provides a structured approach to assessment, administration, and monitoring of parenteral fluids through intravenous and subcutaneous routes in community and the community hospitals. It specifies the training requirement and monitoring of compliance and effectiveness. 4 key supporting documents to guide practice in this area are:

- Guideline for the administration of sub-cutaneous fluids for adults
- Guidelines for the administration of intra-venous fluids for adults within the community hospitals
- The policy and procedure for the administration of intravenous medications to adults and children within community and community hospitals
- NICE Guidance CG174 (last updated 2017)
- Peripheral Cannulation. Procedural guidelines for use with adult patients in community and community hospital settings (2023).

This policy excludes parenteral nutrition.

PLEASE NOTE THAT THIS LIST IS DESIGNED TO ACT AS A QUICK REFERENCE GUIDE ONLY AND IS NOT INTENDED TO REPLACE THE NEED TO READ THE FULL POLICY

1.1 Version Control and Summary of Changes

Version number	Date	Comments
1.0	Sept 2014	New
2.0	11/06/15	Added in Community ICS Service
3.0	15/12/16	Policy review, Distribution list updated, references updated
4.0	15/-1/19	Policy review, Distribution list updated, Inclusion of End of Life patients, References Updated
5.0 5.1	20.02.2024	Policy review. Distribution list updated. References updated. Section added on Subcutaneous fluid administration

1.2 Key individuals involved in developing and consulting on the document

Name	Designation
Professor Sudip Ghosh	Deputy Executive Medical Director/Consultant Physician
Emma Wallis	Deputy Director of Nursing and Professional Practice
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Joanne Charles	CHS Pharmacy Lead
Leon Ratcliffe	Head Of Medical Service CHS.
Joanne Szymkowiak	Advanced Nurse Practitioner.
Victoria Scutts	Advanced Nurse Practitioner
Patsy Huband	Practice Development Sister

1.3 Governance

Level 2 or 3 approving delivery group	Level 1 Committee to ratify policy
Nutrition and Hydration Steering group	Quality Forum

1.4 Equality Statement

Leicestershire Partnership NHS Trust (LPT) aims to design and implement policy documents that meet the diverse needs of our service, population and workforce, ensuring that none are placed at a disadvantage over others. It takes into account the provisions of the Equality Act 2010 and promotes equal opportunities for all. This document has been assessed to ensure that no one receives less favourable treatment on the protected characteristics of their age, disability, sex (gender), gender reassignment, sexual orientation, marriage and civil partnership, race, religion or belief, pregnancy and maternity. If you require this policy in any other format please contact the Corporate Assurance Team.

1.5 Due Regard

LPT will ensure that Due regard for equality is taken and as such will undertake an analysis of equality (assessment of impact) on existing and new policies in line with the Equality Act 2010. This process will help to ensure that:

- Strategies, policies and procedures and services are free from discrimination.
- LPT complies with current equality legislation.
- Due regard is given to equality in decision making and subsequent processes.
- Opportunities for promoting equality are identified.

Please refer to due regard assessment (Appendix 4) of this policy

1.5 Definitions that apply to this Policy

Parenteral Administration	Administration by breach of the skin or mucous membrane
Hypodermoclysis	Administration of drug/fluid into the subcutaneous tissue
IV	Intravenous – directly into a vein
S/C	Sub-cutaneous – into the subcutaneous tissue of the skin
Nasogastric	Via the nose, into the oesophagus and stomach
Percutaneous endoscopic gastrostomy (PEG)	This is a type of feeding tube which is inserted through the skin (percutaneous) of the abdomen into the stomach during an endoscopy (endoscopic). Gastrostomy refers to the hole created (stoma) in the stomach (gastro) to accommodate the tube.
Radiologically Inserted Gastrostomy (RIG)	A RIG is a narrow tube that is inserted through the abdominal wall into the stomach. This is similar to a PEG, but the procedure for placement of the tube is different - The Radiologist uses X-rays to guide the tube into the correct position, instead of an endoscopy.

2.0. Purpose and Introduction

Most fluid administration in the community setting is via oral, nasogastric, or percutaneous endoscopic gastrostomy (PEG) administration. However, in certain clinical circumstances administration of fluids via Intravenous or Subcutaneous (Hypodermoclysis) route is required. The administration of Intravenous fluids c applies to community hospitals and patients receiving community health services at home. It does not apply to End of Life. The subcutaneous route applies to all settings – inpatients and community, including End of Life patients.

This policy sets out the duties of key staff members in assessing, prescribing, administering, and reviewing fluid requirements.

This policy should be used in conjunction with the Intravenous fluids guidance and Sub-cutaneous fluids guidance referenced within this document. Where relevant the NICE Clinical Guideline 174 should be adhered to. The policy and procedure for the administration of Intravenous Medication to Adults and Children within the Community and Community Hospital should be utilised as the underpinning document for intravenous administration.

The principal purpose of the policy is to provide a structured process to the assessment, administration, and monitoring of parenteral fluids in the community and community in-patient hospital setting specifically relating to the:

- Intravenous route
- Sub-cutaneous route

3.0 Policy requirements

Parenteral fluid administration can be via one of two routes:

- Intravenous – please refer to Intravenous Fluid Guideline
- Subcutaneous – please refer to Subcutaneous Fluid Administration Guideline and Appendix 1 (Addendum for the use of SC fluids at End of Life (LOROS and Leicestershire Partnership NHS Trust).

There is a need for training identified within this policy. In accordance with the classification of training outlined in the Trust Learning and Development Strategy this training has been identified as role development training.

Training sessions are available via u-Learn for subcutaneous fluid administration and Intravenous fluid administration if required by individual Registered Nurses. These are once only e-learning packages with associated assessments.

A record of the training will be recorded on U learn, monitoring of training will be via the Ward Sisters/ Charge Nurses, Matrons and the operational/ clinical lead for each service.

Intravenous Administration – all staff must be compliant and in date with the training outlined in the Intravenous Medication administration within the community hospitals and community policy.

Subcutaneous – all staff must be compliant with and in date with the training outlined in the guidelines for the administration of subcutaneous fluids for Adults guideline.

Staff can be responsible for delivering one or both of these fluid administration avenues.

4.0 Duties within the Organisation

Lead Director has a legal responsibility for Trust policies and for ensuring that they are carried out safely and effectively.

Directors, Heads of Service are responsible for ensuring that there are appropriate resources provided within their Services to implement and adhere to the policy.

Senior Managers, Matrons and Team Leads will be responsible for ensuring the policy is implemented by their relevant staff.

Responsibility of Clinical Staff will be responsible for ensuring they are familiar with the policy in relation to their field of practice with parenteral fluid administration.

Consent

- *Clinical staff must ensure that consent has been sought and obtained before any care, intervention or treatment described in this policy is delivered. Consent can be given orally and/ or in writing. Someone could also give non-verbal consent as long as they understand the treatment or care about to take place. Consent must be voluntary and informed, and the person consenting must have the capacity to make the decision.*
- *In the event that the patient's capacity to consent is in doubt, clinical staff must ensure that a mental capacity assessment is completed and recorded. Someone with an impairment of or a disturbance in the functioning of the mind or brain is thought to lack the mental capacity to give informed consent if they cannot do one of the following:*

  - *Understand information about the decision*
  - *Remember that information*
  - *Use the information to make the decision*
  - *Communicate the decision*

5.0 Monitoring Compliance and Effectiveness

Incidents related to any aspect of fluid administration must be reported via the Trust Incident reporting process. The Divisional Patient Safety and Experience Subgroups or equivalent group will monitor adverse incidents across all service areas of their Division including aggregate analysis and identify any trends and themes. This includes advising the Divisional Management Team of significant areas of risk through their local governance reporting mechanisms.

Page/Section	Minimum Requirements to monitor	Process for Monitoring	Responsible Individual /Group	Frequency of monitoring
	Registered nurses or other relevant healthcare professionals	Via u- learn or evidence of previous training	Line Managers	As required

Page/Section	Minimum Requirements to monitor	Process for Monitoring	Responsible Individual /Group	Frequency of monitoring
	must have undertaken appropriate training to administer Intravenous medications			
	Untoward Incidents reported regarding any issues with administration	Incident forms received and investigations logged	Divisional Governance groups	As required

6.0 References and Bibliography

- NMC Code – Professional, Staff, quality, services (2018)
- NICE Clinical Guidance 174NICE guidance CG174, Intravenous fluid therapy in adults in hospital, https://www.nice.org.uk/guidance/cg174 issued December 2013 updated May 2017.
- National Institute for Health and Care Excellence (2023) Palliative care general issues. Scenario: terminal phase. https://cks.nice.org.uk/topics/palliative-care-general-issues/management/terminal-phase/ [date retrieved 20.2.2024]
- Guidelines for the administration of subcutaneous fluids, Leicestershire Partnership NHS Trust 2019
- Guidelines for the administration of Intravenous fluids (UHL Guideline 2023)
- The Policy and Procedure for the Administration of Intravenous Medication to Adults and Children within the Community and Community Hospital (2021).
- Leadership Alliance for the care of the Dying People (2014) NHS England

7.0 Fraud, Bribery and Corruption consideration

The Trust has a zero-tolerance approach to fraud, bribery and corruption in all areas of our work and it is important that this is reflected through all policies and procedures to mitigate these risks.

- Fraud relates to a dishonest representation, failure to disclose information or abuse of position in order to make a gain or cause a loss. Bribery involves the giving or receiving of gifts or money in return for improper performance. Corruption relates to dishonest or fraudulent conduct by those in power.
- Any procedure incurring costs or fees or involving the procurement or provision of goods or service, may be susceptible to fraud, bribery, or corruption so provision should be made within the policy to safeguard against these.

- If there is a potential that the policy being written, amended or updated controls a procedure for which there is a potential of fraud, bribery, or corruption to occur you should contact the Trusts Local Counter Fraud Specialist (LCFS) for assistance.

Appendix 1 Addendum for the use of SC fluids at End of Life

This document sets out the LOROS guideline for the safe preparation and administration of Subcutaneous (SC) fluids in adult patients and is based primarily on the guidance in the Royal Marsden Manual of Clinical Procedures.

It is common for palliative care patients to have reduced fluid intake during their illness (Good, P, Cavenagh, J, Mather, M and Ravenscroft 2010). Decisions about the use of subcutaneous fluids in patients at the end of life should be made in consultation with families/carers and medical staff, giving consideration to the fact that 'It is the underlying disease which is bringing about the death of the patient, not the withholding or withdrawing of a particular treatment (e.g. subcutaneous fluids); and that all care which will enhance comfort of the patient will continue.' (Twycross, Wilcock and Toller 2009)

If a patient is unable to swallow, or there is another reason to consider (such as symptomatic thirst not relieved by mouth care), the potential benefits and burdens of artificial hydration and nutrition should be considered. If the person has capacity, this should be discussed with the patient. When the patient lacks capacity, decisions should be made in their best interests, considering any known prior wishes and in consultation with person's family and carers and other members of the team. All decisions should be made in line with GMC Guidance.

All discussions and decisions about food and fluid should be clearly documented.

INDICATIONS

Applicable to all adults in Community Hospitals, Community Services and MHSOP.

- For patients with poor venous access, for example elderly or terminally ill. (UKMi 2010)
- For patients who are unable to sustain adequate oral fluids to maintain hydration
- For patients suffering from delirium (agitation)(NCGC 2010:92&369) who are unable to maintain adequate oral intake of fluids. Subcutaneous fluid replacement can significantly reduce patients experiencing agitation compared with other methods of fluid replacement (eg Intravenous fluids)

CONTRAINDICATIONS

- Severe dehydration, shock or poor tissue perfusion (eg oedema)
- Fluid replacement of more than 2 litres of fluid in 24 hours.
- Where precise control of fluid balance is required, for example patients with renal or cardiac failure.
- Presence of oedema or lymphoedema
- In advanced dementia it is rarely considered beneficial to give fluids artificially (unless acute illness present – causing delirium) (The AM; Pasman, R; Onwuteaka-Philipsen,B; Ribbe, M & van der Wal, G 2002)

SIDE EFFECTS

- Potential for development of pleural effusion, peripheral oedema and ascites (Good et al 2010)
- Increased pulmonary and salivary secretions with an increased risk in cough, death rattle and vomiting (in palliative care), and the increased risk for interventions such as oropharyngeal suctioning (Good et al, 2010)

FLUIDS THAT CAN BE ADMINISTERED BY SUBCUTANEOUS INFUSION

- 0.9% Sodium Chloride for infusion

• 0.18% Sodium Chloride & Glucose 4% for infusion

Fluids to be given careful consideration
• 5% Glucose does not distribute readily through the tissue and therefore may lead to oedema and irritation at the site of infusion. However, consideration should be given to administering 5% Glucose for those patients who are dehydrated but hypernatremia (high sodium levels).

Subcutaneous fluids can be given to maintain adequate hydration in patients with mild or moderate dehydration.

Dehydration is a common problem with patients in the terminal phase of an illness and is associated with many symptoms.

The indication for the need for rehydration in those in the terminal stage of an illness is the relief of symptoms of dehydration, if they cannot be relieved in any other way. The primary symptom of dehydration is usually thirst but rehydration can be used to relieve any of the symptoms that are causing distress to the patient.

Much of the literature indicates that in palliative care the use of subcutaneous hydration should be to palliate symptoms experienced by clients rather than to rectify biochemical balance. Some cancer patients also experience reversible conditions such as hypercalcaemia which may cause dehydration.

Discuss the risks and benefits of clinically assisted hydration with the dying person and those important to them. Ensure that any concerns raised by the dying person or those important to them are addressed before starting clinically assisted hydration.

Advise the dying person and those important to them that, in the last days of life:
• Giving clinically assisted hydration may relieve distressing symptoms or signs related to dehydration but may cause other problems and the underlying disease process will continue.
• Death is unlikely to be hastened by not having clinically assisted hydration.

When considering clinically assisted hydration for a dying person, take into account:
• Whether they have expressed a preference for or against clinically assisted hydration, or have any cultural, spiritual or religious beliefs that might affect this, documented in their advance care plan.
• Their level of consciousness
• Any swallowing difficulties
• Their level of thirst
• The risks of pulmonary oedema
• Whether recovery from dying is possible

Consider a therapeutic trial of clinically assisted hydration for the dying person who has distressing symptoms or signs that could be associated with dehydration, such as thirst or delirium. Monitor at least once a day for changes in these symptoms or signs, or for any evidence of benefit or harm in people having clinically assisted hydration:
• Continue with clinically assisted hydration if these are signs of clinical benefit.
• Reduce or stop clinically assisted hydration if there are signs of possible harm to the dying person, such as fluid overload, significant discomfort at the infusion site, or if they no longer want it.

If subcutaneous fluids are commenced, it is important patients and their families have clear understanding of:
• What the subcutaneous fluids are being used for.
• How the decision will be made to stop the infusion (if appropriate).
• What will happen to their relative if the infusion is stopped

Site of Infusion
Sites should be rotated in order to minimise tissue damage. Ideal sites are:
• Abdomen
• Chest
• Lateral aspect of upper arm or thigh

Do not use on the following sites:
• Lymphoedema tissue
• Skin recently irradiated
• Any area with a rash of any type
• Peripheral limbs (below knee or below elbow)
• Sites over bony prominences or near a joint

The fluid is administered via a butterfly infusion set and a regular Intravenous giving set. Because of the relative safety of this method, there is no need for a pump for administration.
Fluids may be administered continuously or by a short 1-2-hour 500ml infusion (Marsden (2001)) in patients who are relatively mobile (Steiner & Beura (1998).
The site, cannula and giving set should be changed at least as frequently as every 3 days and the change should be recorded.

Appendix 2 Training Requirements

Training Needs Analysis

Training topic:	Administration of Parenteral fluids excluding Total parenteral nutrition
Type of training: (see study leave policy)	☐ Mandatory (must be on mandatory training register) ☒ Role specific ☐ Personal development
Directorate to which the training is applicable:	☐ Mental Health ☒ Community Health Services ☐ Enabling Services ☐ Families Young People Children / Learning Disability Services ☐ Hosted Services
Staff groups who require the training:	Registered Nurses Registered Health Care Professionals in Advanced Practice Roles (eg Physiotherapist in Advanced Clinical Practitioner role)
Regularity of Update requirement:	Professionals are responsible for maintaining their clinical competency in relation to this area of practice. Medicines management should be completed 2 yearly as per trust requirements.
Who is responsible for delivery of this training?	Training and development team and/or training from previous roles
Have resources been identified?	N/A
Has a training plan been agreed?	N/A
Where will completion of this training be recorded?	☒ ULearn ☐ Other (please specify)
How is this training going to be monitored?	Via ward managers and clinical service leads

Appendix 2 The NHS Constitution

- The NHS will provide a universal service for all based on clinical need, not ability to pay.
- The NHS will provide a comprehensive range of services.

Shape its services around the needs and preferences of individual patients, their families and their carers	☒
Respond to different needs of different sectors of the population	☒
Work continuously to improve quality services and to minimise errors	☒
Support and value its staff	☒
Work together with others to ensure a seamless service for patients	☒
Help keep people healthy and work to reduce health inequalities	☒

Respect the confidentiality of individual patients and provide open access to information about services, treatment and performance	☒

Appendix 3 Due Regard Screening Template

Section 1	
Name of activity/proposal	Parenteral fluids Administration In Adults Policy (excluding parenteral nutrition)
Date Screening commenced	20.2.24
Directorate / Service carrying out the assessment	Community Health Services
Name and role of person undertaking this Due Regard (Equality Analysis)	Lynn MacDiarmid, Consultant Nurse
Give an overview of the aims, objectives and purpose of the proposal:	
AIMS: This policy describes the process within CHS to assess, administer, and review the delivery of parenteral fluid administration to patients within in-patient and community settings.	
OBJECTIVES:	

Section 2	
Protected Characteristic	If the proposal/s have a positive or negative impact please give brief details
Age	No negative impact
Disability	No negative impact
Gender reassignment	No negative impact
Marriage & Civil Partnership	No negative impact
Pregnancy & Maternity	No negative impact
Race	No negative impact
Religion and Belief	No negative impact
Sex	No negative impact
Sexual Orientation	No negative impact
Other equality groups?	No negative impact

Section 3	
Does this activity propose major changes in terms of scale or significance for LPT? For example, is there a clear indication that, although the proposal is minor it is likely to have a major affect for people from an equality group/s? Please tick appropriate box below.	
Yes	**No ✓**
High risk: Complete a full EIA starting click here to proceed to Part B	Low risk: Go to Section 4.

Section 4
If this proposal is low risk please give evidence or justification for how you reached this decision:
All aspects of the policy are equally applicable to all patients and staff

Signed by reviewer/assessor	LMacDiarmid	Date	27.2.24
Sign off that this proposal is low risk and does not require a full Equality Analysis			
Head of Service Signed	As above	Date	

Appendix 4 Data Privacy Impact Assessment Screening

Data Privacy impact assessment (DPIAs) are a tool which can help organisations identify the most effective way to comply with their data protection obligations and meet Individual's expectations of privacy.
The following screening questions will help the Trust determine if there are any privacy issues associated with the implementation of the Policy. Answering 'yes' to any of these questions is an indication that a DPIA may be a useful exercise. An explanation for the answers will assist with the determination as to whether a full DPIA is required which will require senior management support, at this stage the Head of Data Privacy must be involved.

Name of Document:	**Parenteral Fluids Administration in Adults Policy (excluding parenteral nutrition)**	
Completed by:	**Lynn MacDiarmid**	
Job title	**Consultant Nurse**	**Date 25.2.2024**

Screening Questions	**Yes / No**	**Explanatory Note**
1. Will the process described in the document involve the collection of new information about individuals? This is information in excess of what is required to carry out the process described within the document.	No	
2. Will the process described in the document compel individuals to provide information about them? This is information in excess of what is required to carry out the process described within the document.	No	
3. Will information about individuals be disclosed to organisations or people who have not previously had routine access to the information as part of the process described in this document?	No	
4. Are you using information about individuals for a purpose it is not currently used for, or in a way it is not currently used?	No	
5. Does the process outlined in this document involve the use of new technology which might be perceived as being privacy intrusive? For example, the use of biometrics.	No	
6. Will the process outlined in this document result in decisions being made or action taken against individuals in ways which can have a significant impact on them?	No	
7. As part of the process outlined in this document, is the information about individuals of a kind particularly likely to raise privacy concerns or expectations? For examples, health records, criminal records or other information that people would consider to be particularly private.	No	
8. Will the process require you to contact individuals in ways which they may find intrusive?	No	

If the answer to any of these questions is 'Yes' please contact the Data Privacy Team via Lpt-dataprivacy@leicspart.secure.nhs.uk In this case, ratification of a procedural document will not take place until review by the Head of Data Privacy.	
Data Privacy approval name:	**Not applicable**
Date of approval	**Not applicable**

Acknowledgement: This is based on the work of Princess Alexandra Hospital NHS Trust