Leicestershire Partnership NHS Trust

The Policy and Procedure for the Safe Administration of Intravenous Medication to Adults and Children within the Community and Community Hospital

This policy outlines how clinicians will safely administer medication via the intravenous route using a peripheral cannula or Midline.

Key Words:	Intravenous Medication	
Version:	7	
Author	Sue Swanson	
Approved by:	Medical Risk Reduction Group	
Ratified by:	Quality Forum	
Date this version was Ratified:	May 2024	
Please state if there is a reason for not publishing on website	No	
Review date:	1 October 2026	
Expiry date:	31 May 2027	
Type of Policy	Clinical ✓	Non-Clinical

Contents

1.0 Quick Look Summary

This policy is an update to a previous existing policy.

This policy includes the administration of intravenous (IV) medication via a peripheral IV cannula or an IV Midline.

This policy excludes the administration of medication via a Central Venous Access Device (CVAD) as this is covered in a separate LPT Guideline.

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	Oct 2006	Adopted for LCR PCT
2.0	Dec 2009	
3.0	April 2012	Updated and adopted for LPT Procedure tables created for ease of reading Updated list of other relevant policies Added links to Medical Devices for Electronic Infusion Devices Updated reference list Added Visual Phlebitis Score and Cannula chart
4.0	May 2012	Updated references, updated infection prevention and control measures, updated relevant reading
5.0	March 2018	Updated references, updated template. Revised cannula chart. Includes Privacy assessment
6.0	March 2021	Updated reference list. Updated infection prevention and control measures. Updated Privacy Impact Screening
7.0	2024	Updated references. Updated to new template. Updated Policy title to include IV Midline

1.2 Key individuals involved in developing and consulting on the document

Name	**Designation**
Accountable Director	Bhanu Chadalavada
Author(s)	CHS Clinical Education Lead Sue Swanson and Nurse Consultant Advanced Practice Sonia Thompson
Implementation Lead	
Core policy reviewer group	Medical Risk Reduction Group
Wider consultation	Head of Nursing and Quality CHS Sarah Latham
	Deputy Head of Nursing for Inpatients Louise Moran
	CHS Pharmacy Lead Joanne Charles
	Deputy Head of Nursing for Community Health Services Tracy Yole and Viveen Ashman

	Physical Health Nurse Lead DMH Jacqui Moore
	Nurse Consultant – Advanced Practice Lyn Macdiarmid
	Head of Infection Prevention & Control Amanda Hemsley
	Senior Nurse Diana Childrens Service Katie Willets
	CHS Practice Development Nurse (Community Hospitals) Patsy Huband
	CHS Clinical Practice Educator Jaimini Amin
	s Amii Ball and Claire Warden
	Deputy Head of Nursing FYPC and LDA Melissa Parry
	Lead Nurse corporate patient safety team Sue Arnold

1.3 Governance

Level 2 or 3 approving delivery group	Level 1 Committee to ratify policy
Quality Forum	Medical Risk Reduction Group

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.

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

1.6 Definitions that apply to this Policy

ANTT = Aseptic Non Touch Technique	Processes put in place to reduce potential harm to patients with invasive procedures. This is the underpinning management principle for all IV nursing care. It reflects the understanding of the key definitions of infection control outlined above and guides the practitioner to take specific steps to minimise the risk of introducing microorganisms. The non- touch technique contributes to asepsis, by focusing attention on minimising contamination of key parts.
Bolus	Concentrated medication and/or solution given rapidly over a short period of time
Intravenous Cannula	A tube that can be inserted into the body, often for the delivery or removal of fluid or for the gathering of samples
Extravasation	Inadvertent infiltration of a vesicant solution or medication into the surrounding tissue
Infiltration	Inadvertent administration of a non-vesicant solution or medication into the surrounding tissue

Non-vesicant	Intravenous medication that generally does not cause tissue damage or sloughing if injected outside of a vein
Phlebitis	Inflammation of a vein; maybe accompanied by pain, erythema, oedema, streak formation and/or palpable cord: rated by a standard scale – Visual Infusion Phlebitis Score (VIPS)
Thrombophlebitis	Inflammation of the vein in conjunction with the formation of a blood clot (thrombus)
Vesicant	Agent capable of causing injury when it escapes from the intended vascular pathway into surrounding tissue
Midline catheters	A midline catheter is a thin, soft tube that is placed into a large vein, are peripheral vascular access devices used for medium to long-term access. They are usually 20cm in length and placed in an upper arm using the basilic, brachial or cephalic veins with the tip ending below the level of the axillary line. A midline catheter is often used when there is a need to have medicines or fluids for more than 1 or 2 days and is used to safely administer medication into the bloodstream, like a cannula. A midline can stay in place for approximately four weeks (28 days) if required, however, some people do require replacement catheters. It can also be used for taking blood samples.

2.0. Purpose and Introduction

With the NHS working towards hospital avoidance, virtual wards, and community settings as preferred place of care the administration of IV medication at home is becoming more common. The Trust appreciates the importance of such service provision for both patients and NHS resources however, also recognises the risks associated with such interventions.

The aim of this policy is to set out the standards that must be adhered to by all staff administering IV medicines via a peripheral cannula within a community / community hospital setting to ensure patient safety. The policy will include appendices that describe the clinical actions and rational for each IV administration procedure, and the relevant documentation to be completed.

This policy is applicable to nursing staff employed by the organisation and should be applied in conjunction with the following local and national policies and standards:

- Trust Aseptic Non-Touch Technique and Clean Technique Policy (2022). https://www.leicspart.nhs.uk/wp-content/uploads/2022/11/Aseptic-Non-Touch-TechniqueAnd-Clean-Technique-Policy.pdf
- Trust Consent to examination or treatment Policy (2023) https://www.leicspart.nhs.uk/wpcontent/uploads/2023/08/Consent-to-Examination-or-Treatment-Policy-exp-May-24.pdf
- Trust Hand Hygiene Policy (2022) https://www.leicspart.nhs.uk/wpcontent/uploads/2022/06/Hand-Hygiene-Policy-inc-bare-below-the-elbows.pdf
- Trust Medical Devices Policy (2017 – currently being updated) https://www.leicspart.nhs.uk/wp-content/uploads/2023/11/Medical-Devices-Policy-Exp-Sept24.pdf
- Trust Mental Capacity Act Policy (2022) https://www.leicspart.nhs.uk/wpcontent/uploads/2022/05/Mental-Capacity-Act-Policy-Exp-Nov-24.pdf
- Trust 'The Management of Sharps Injuries and exposure to Blood Born Virus Policy' (2023) https://www.leicspart.nhs.uk/wp-content/uploads/2022/11/Sharps-management-and-BBVPolicy-Exp-November-26-V8.pdf

- Trust Peripheral & Central Vascular Access Catheters Clinical Procedure Guideline (2018). https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.leicspart.nhs.uk%2Fw p-content%2Fuploads%2F2019%2F10%2FPeripheral-Central-Vascular-Access-CathetersGuideline-exp-Dec-20.docx&wdOrigin=BROWSELINK
- NHS England NHS long term plan. 2019. https://www.longtermplan.nhs.uk/onlineversion/overview-and-summary/
- Royal College of Nursing (2019). Standards for Infusion Therapy. London. RCN. (Under review May 2024) https://www.rcn.org.uk/clinical-topics/Infection-prevention-and-controladvice/Standards-for-infusion-therapy
- Royal College of Nursing (2023) 'Sharps Safety' - Guidance for the Prevention & Management of Sharps injuries in health and social care settings. https://www.rcn.org.uk/ProfessionalDevelopment/publications/rcn-sharps-safety-uk-pub-010-596
- Understanding Aseptic Technique: An RCN investigation into clinician views to guide the practice of aseptic technique (2020)
- Standard Operating Procedure (2022) Administration of Drugs in the Community Setting https://staffnet.leicspart.nhs.uk/wp-content/uploads/staff-directory/Standard-OperatingProcedure-for-Administering-Drugs-in-Community-Setting-v5.0-December-2022.pdf

There are many reasons and advantages to giving medication via the IV route and the decision to do so will be based on an assessment by the prescribing clinician of the individual patient's needs. Some of the factors which should be considered when choosing the route of medication are:

1. Rapid absorption of the medication via the IV route allows for a faster and more targeted therapeutic benefit.

2. Certain medications cannot be given orally, and many patients more easily tolerate IV medication than either sub cutaneous or intramuscular injections.

3. Some patients are unable to take medications orally (there are many physiologically and psychological reasons that this might be)

However, there are disadvantages to the IV route as a method of administration and these are mainly the complications, which are covered in the complication section later in this document. The complications associated with IV medications are potentially life threatening and therefore the practice of giving IV medication is a skilled health task which requires a level of both theoretical and practical competence which is assessed and regularly updated. Practitioners within LPT must practice to the agreed standards within this document.

3.0 Policy requirements

Registered Nurses must always work within their professional NMC Code (2018) and adhere to the Professional guidance on the administration of medicines in healthcare settings (2019) - this guidance, co-produced by the Royal Pharmaceutical Society (RPS) and Royal College of Nursing (RCN) provides principles-based guidance to ensure the safe administration of medicines by healthcare professionals (Review date 2023).This policy also adheres to the Professional guidance on the safe and secure handling of medicines (Royal Pharmaceutical Society Dec 2018 Updated Jan 2024).

This policy is an update to a previously existing policy.

3.1 This policy **includes and covers** the administration of intravenous medication via

- Peripheral IV cannula
- Midline IV access

3.2 This policy **excludes** the administration of intravenous medication via:

- Central Lines such as Skin Tunnelled catheters (Hickman Lines) • PICC lines (Peripherally Inserted Central Catheter)
- Portacaths.

(The exclusions are dealt with specifically in a separate relevant policy). Blood transfusions are **NOT** currently undertaken in LPT and are **NOT** part of this policy

4.0 Duties within the Organisation

Lead Director, Directors, Heads of Service

Directorate Directors and Heads of Service are responsible for ensuring that there are appropriate resources provided within their services to implement and adhere to this policy.

All Nursing Staff

Staff will be responsible for ensuring they are familiar with the policy in relation to their field of practice with intravenous medication administration.

Student Nurses

- Student nurses can be involved in the preparation and administration of intravenous medicines, to include bolus doses, infusions, both with and without pumps (including the setting up of the pump) and syringe drivers under the **direct supervision of a Registered Practitioner.**
- This would only be undertaken in clinical practice following the provision of evidence of completion of the relevant theoretical component / module within their course (to be agreed with the Universities in what form this will be evidenced).
- Where the student is involved in the preparation and administration of IV medication with a Registered Nurse **they must not act as the Independent checker**. The medication must be independently checked by two Registered Practitioners in **community hospital or inpatient setting.**

Responsibility of Clinical Staff

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 if they understand the treatment or care about to take place. Consent must be voluntary and informed, and the person consenting must have the mental capacity to make the decision.
- If the patient's mental 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

If a person lacks capacity to give informed consent the Mental Capacity Act Policy must be followed. For children under the age of 16 years follow NHS guidance on consent from

children and young people (Consent to treatment - Children and young people - NHS (www.nhs.uk).

Staff undertaking intravenous administration.

Registered Nurses are responsible and accountable for their practice and should always work within their competence in accordance with The Code (NMC, 2015) and the Royal Pharmaceutical Society (RPS, 2019) and Royal College of Nursing (RCN, 2019) Professional guidance on the administration of medicines in healthcare.

Registered Nurses must attend the required training run within house by the Clinical Education Team CHS or for Childrens Nurses that run by the Clinical Team Leads and, also identify to their line manager any ongoing training needs.

Registered Nurses must maintain their clinical skills within this area and must seek to refresh their knowledge and skills as required.

Registered Nurses must access information from the IV Monographs http://medusa.wales.nhs.uk / BNF as required. Within Childrens services the CBNF or Monographs from the Childrens Hospital would be accessed.

Registered Nurses must be familiar with and demonstrate a working knowledge of policies and procedures.

Registered Nurses must be adequately prepared and equipped to deal with an anaphylactic or untoward reaction.

In community hospitals two Registered Healthcare Practitioners should check drugs to be given intravenously before administration, in accordance with the Trust Medicines Management Policy. Where applicable, calculations must be undertaken independently, and the results compared by the two practitioners.

In the Community where Registered Nurses are administering the drug in the patient's home and have demonstrated the necessary knowledge and competence, they may administer intravenous drugs without a second check.

Visual Infusion Phlebitis (VIP) Scores and checklists must be noted. As record keeping systems evolve these may be documented electronically using EPMA (Electronic Prescribing and Medicines Administration) and electronic patient record, or according to IT access on forms taken from within cannulation packs or as per trust examples in the Appendices.

Practitioners must be Registered Nurses.

- Before accessing an intravenous line independently all staff must have completed the organisations competency-based training and assessment programme to include:
- Intravenous Therapy
- Medicines Management
- Anaphylaxis as well as Adult or Paediatric Basic Life Support
- Infection Prevention and Control.
- Have commenced a period of supervised practice within 2 months of attending the training.

- Provide evidence of assessment and competency signed by an appropriate assessor. Observation, supervised practice, and assessment should ideally be carried out in the clinical area in which the practitioner normally works. It is possible to carry out assessment using a simulation dummy outside of the workplace should the need arise. The dates of supervision and assessments must be documented in the LCAT record of supervision held by the practitioner, the assessor and supervisor must sign this document. The practitioner must keep a record of competency in their professional portfolio as well as having a copy lodged in their personal file held by the line manager.

Staff employed from another trust must provide evidence of a completed training and assessment programme and completed competencies that should be current. A supportive competency assessment of the staff must be carried out to ensure that they have the required skills in line with this organisations policy.

Criteria for Supervisors

For staff new to accessing intravenous ports and delivering medication via this route, supervision should be carried out by members of staff with experience and competence in this skill.

Supervising staff must:

Be a Registered nurse.

Have a sound knowledge of the relevant policies and documents.

Criteria for Assessors

Final assessment of Competency must be carried out using the LCAT (Leicester Clinical Assessment Tool, McKinley, R.K et al 2008) by an accredited LCAT assessor. A register of accredited assessors is held by the Clinical Education Leads.

5.0 Monitoring Compliance and Effectiveness

Page/Section	Minimum Requirements to monitor	Process for Monitoring	Responsible Individual /Group	Frequency of monitoring
	Registered Nurses or other healthcare professionals must have undertaken appropriate training to administer Intravenous medications	Via ULearn or evidence of previous training	Line Managers	As required

	Patient safety incidents are reported via Ulysses regarding any intravenous medication administration issues	Incident forms received, reviewed and escalated for review/investigations as required	Directorate governance groups for oversight, local managers have responsibility for review and escalation/management	within 15 days of incident being reported

6.0 References

Leicestershire Partnership Trust (2021) Administering medication in the community setting Standard Operating Procedure LPT 2022 https://staffnet.leicspart.nhs.uk/wp-content/uploads/staffdirectory/Standard-Operating-Procedure-for-Administering-Drugs-in-Community-Setting-v5.0-December2022.pdfLeicestershire Partnership Trust (2023) Parental fluids administration in adults policy (excluding parental nutrition). LPT 2023. https://www.leicspart.nhs.uk/wp-content/uploads/2023/11/Parenteral-Fluids-Adminstration-in-Adults-Policy-V5-Exp-Nov-25.pdf

NHS Consent to treatment guidance (2022) Consent from children and young people. Consent to treatment - Children and young people - NHS (www.nhs.uk)

Nursing and Midwifery Council (2018) The Code: Professional standards of practice and behaviour for nurses, midwives, and nursing associates. https://www.nmc.org.uk/standards/code/

Royal College of Nursing (2023) Sharps Safety - Guidance for the Prevention and Management of sharps injuries in health and social care settings. London RCN 2023

Royal College of Nursing (2019). Standards for Infusion Therapy, London

Royal Pharmaceutical Society (RPS 2019) and Royal College of Nursing (RCN 2019) Professional Guidance on the administration of medicines in healthcare. https://www.rpharms.com/Portals/0/RPS%20document%20library/Open%20access/Professional%20standards/SSHM%20and%20Admin/Admin%20of%20Meds%20prof%20guidance.pdf

Royal Pharmaceutical Society (Dec 2018) Professional guidance on the safe and secure handling of medicines. Rpharms.com. Updated Jan 2024. https://www.rpharms.com/recognition/settingprofessional-standards/safe-and-secure-handling-of-medicines/professional-guidance-on-the-safeand-secure-handling-of-medicines

Trust Anaphylaxis and Drug Allergy Policy (2021) https://www.leicspart.nhs.uk/wpcontent/uploads/2021/09/Anaphylaxis-and-Drug-Allergy-Policy-exp-Sep-24.pdf

'Safer Sharps' https://www.supplychain.nhs.uk/programmes/safer-sharps/

Appendix 1

INTRAVENOUS ADMINISTRATION PROCEDURE (PREPARATION OF BOLUS DOSE OF DRUG)

Safer sharps should be used at all times

ACTION	RATIONALE
1 Discuss procedure with patient or parent/carer and obtain informed consent to the treatment.	To check that the patient or parent/carer understands the procedure and treatment and gives his or her consent.
2 Read all prescription and authorisation details and confirm they relate to the patient to be treated. Check that the medication has not inadvertently been given already.	To ensure patient safety and that the prescription is detailed enough to safely administer from and to ensure that it is legal.
3 Check for patient allergies.	To ensure patient safety and reduce the risk of an allergic and anaphylactic reaction
4 Ensure that the area in which the medication is to be prepared is as clean and uncluttered and free of distraction as possible. This may include requesting quiet area in patients home to prepare medication	To reduce the risk of contamination and mistakes.
5 Assemble all equipment required. Check all expiry dates and that medication, diluents, and flushes are not damaged and have been stored correctly.	To ensure patient safety and comply with the Professional guidance on the administration of medicines in healthcare settings (RPS & RCN, 2019)
6 Check that the medication formulation, dose, infusion fluid and rate of administration correspond to the prescription and product information. Check that we have the correct infusion device available or in place e.g., infusion pump	To ensure patient safety and comply with the Professional guidance on the administration of medicines in healthcare settings (RPS & RCN, 2019)

7 Calculate the volume of medicine solution needed to give the prescribed dose. If required, check this with another registered nurse.	To comply with the Professional guidance on the administration of medicines in healthcare settings (RPS & RCN, 2019)
8 Community Hospital Nurses must use yellow labels and attach them to the syringe. Community Nurses should use yellow labels if syringes containing a flush have the same volume in them as a syringe containing a drug.	To clearly identify syringes containing drugs as they are transported from preparation area to the patient.

9 Disinfect your work surface using 70% alcohol and 2% Chlorhexidine swab. Wash hands with liquid soap and water and dry thoroughly. Put on a plastic apron and clean gloves. Dressing pack can be used	To reduce the risk of bacterial contamination during the procedure.
10 Wash hands. Open dressing pack Put on a sterile gloves and apron	To reduce the risk of bacterial contamination during the procedure.
11 Using an ANTT (Aseptic Non-Touch Technique) assemble needles and syringes. **Do Not Touch Key Parts** Prepare the injection by following the manufacturer's instructions. Draw up pre and post bolus flushes as required using sterile gauze to hold the bottles	Using ANTT reduces the risk of bacterial contamination during the procedure. Key parts are described as the fluid being administered or the skin around the insertion site. Therefore, the needles, hubs, syringes, needle-less connectors/bungs, and the exposed lumen of the IV line that the fluid comes into contact with are the elements which the technique aims to prevent from becoming contaminated.
12 **REMEMBER** if piercing a rubber seal always cleanse with a swab of 70% alcohol and 2% Chlorhexidine and leave to dry for 30 seconds (do not blow on it to speed up the process).	To ensure that bacterial contamination risk is reduced.
13 **REMEMBER** some medications require to be gently swirled to dissolve all the powder and should not be allowed to bubble up. It may take several minutes to dissolve powders. Check monograph or reconstitution notes if unsure.	
14 Always keep ampoules and any unused medicine until administration to the patient is complete and no untoward reactions have occurred.	Once ampoules or vials have been disposed of, they cannot be retrieved from sharps safes in the case of untoward reactions.

15 Once solutions have been drawn up, remove the needle from the luer lock syringe and either fit a blind hub or a new sheathed needle to maintain asepsis.	Reduces the risk of accidental sharps injury and maintains asepsis of key parts.
16 Remove gloves and apron disposing of correctly according to policy.	

Appendix 2

ADMINISTRATION OF A PERIPHERAL INTRAVENOUS BOLUS DOSE OF DRUG

Safer sharps should be used at all times

ACTION	RATIONALE
1 Before administering any drug check the following: Right patient, Right drug, Right dose, Right time, Right route. In date.	To comply with the Professional guidance on the administration of medicines in healthcare settings (RPS & RCN, 2019)
2 Obtain informed consent.	To check that the patient understands the procedure and treatment and gives consent
3 Check for allergies.	To ensure patient safety and reduce the risk of an allergic and anaphylactic reaction
4 Check that an appropriate venous access device is in place this should include the use of an extension/octopus line and that the administration site is free of leakage, infection, and inflammation.	Use of an octopus/extension line enables ease of access and reduces the risk of vascular damage and device mobility. Leakage, inflammation, and infection are possible contra indications to the use of the access device. **See Appendix 5 & 6**
5 Take all equipment to the patient.	
6 Wash and dry hands thoroughly if gloves have been removed post preparation procedure/ or use hand sanitiser	Reduces the risk of bacterial contamination.
7 Put on a plastic apron and gloves and clean gloves (if cleanliness has been compromised during preparation procedure)	Reduces the risk of bacterial contamination.

8 **AT ALL TIMES TAKE CARE NOT TO TOUCH KEY PARTS –** Clean the needle free connector (i.e., bionector) located at the end of the IV canula  extension / octopus line  thoroughly using Chlorhexidine 2% and alcohol 70% swab and allow to dry for 30 seconds.(do not blow on equipment to speed up drying process)	To prevent bacterial contamination during the procedure.

9 Ask the patient to promptly report any soreness at the access site or any discomfort at all. Recheck the access site and device for any signs of leakage, infection, or inflammation.	Early detection of untoward reactions and prompt action will reduce further complications. **See Appendix 5**
10 Attach a 10ml luer lock syringe filled with sodium chloride 0.9% to the end of the Bionector on the Octopus/extension line and flush with 5ml of the sodium chloride 0.9%. **DO NOT FORCE.**	To ensure patency of the device.
11 Disconnect the syringe.	
12 Attach luer lock syringe containing IV medication as prescribed and inject over the appropriate amount of time.	All drugs must only be injected over the prescribed rate and time as set out by IV monographs and manufacturer's instructions. Reduces the risk of speed shock. (speed shock is characterised as an adverse systemic reaction when a foreign substance is introduced into the bloodstream. Speed shock may occur with IV push medication administration when the medication peaks very quickly. This sudden peak increases the risk of significant side effects).
13 Disconnect the syringe	
14 Attach a 10ml luer lock syringe filled with sodium chloride 0.9% and flush with 5ml of the sodium chloride 0.9%.	To ensure the patient receives the full dose of the prescribed medication. Please record flushes on patient's fluid chart if strict fluid balance is required

15 Clear away equipment and ensure the patient is comfortable and the line is secure. Discard used ampoules / vials and sharps into the appropriate sharp safe container.	Once ampoules or vials have been disposed of they cannot be retrieved from sharps safe containers in the case of untoward reactions
16 Remove gloves and apron and dispose of appropriately then wash and dry hands thoroughly.	
17 Make a detailed record of administration using appropriate documentation to include drug and fluid batch numbers and expiry dates.	To comply with local policies

Appendix 3

INTRAVENOUS ADMINISTRATION PROCEDURE (ADDING A DRUG TO AN INFUSION BAG)

Safer sharps should be used at all times

ACTION	RATIONALE
1 Before administering any drug check the following: Right patient, Right drug, Right dose, Right time, Right route. Prepare the medicine in the syringe using the method described in appendix 1.	
2 Check the outer wrapper of the infusion solution is not damaged	To ensure that asepsis of the contents have not been contaminated.
3 Check the infusion solution is in date, free of particles, haziness, discolouration and is intact. Remove the wrapper.	Out of date fluid should not be used. Particles, haziness, discolouration would indicate contamination and must not be used.
4 Using clean gloves remove the tamper evident seal on the additive port according to manufacturer's instructions. Cleanse with 70% alcohol and 2% chlorhexidine swab and leave to dry for 30 seconds (do not blow on equipment to speed up drying).	To reduce the risk of bacterial contamination.

5 **REMEMBER** if the volume of medicine solution to be added to the infusion bag is greater than 10% of the initial contents of bag then an equivalent volume needs to be removed prior to adding the medication. **EXAMPLE** 50ml into a 500ml infusion bag or 100ml to 1000mls.	
6 On a flat surface inject the medicine into the infusion through the centre of the injection point taking care to keep the tip of the needle away from the side of the infusion bag.	To prevent accidental piercing of the infusion bag.
7 Once the drug has been added to the infusion bag remove the syringe and needle placing in a sharps bin. Gently invert the bag at least 5 times.	To ensure the medication is completely mixed within the infusion solution.
8 Check the appearance of the final infusion solution for haziness, discolouration, and particles.	Haziness, discolouration, and particles would indicate incompatibility or contamination and the infusion should not be used.

ACTION	**RATIONALE**
9 Prime the administration/giving set slowly to reduce air gaps in the line. Ensure the end of the line is covered.	Reduces the risk of air embolus and prevents bacterial contamination.
10 Fully complete the yellow infusion label and attach it to the bag.	To ensure that all staff are aware of the addition of the drug to the infusion solution.

Appendix 4

ADMINISTRATION OF A DRUG ADDED TO AN INTRAVENOUS INFUSION

Safer sharps should be used at all times

ACTION	RATIONALE
1 Before administering any drug check the following: Right patient, Right drug, Right dose, Right time, Right route. In date.	To comply with local policies and to keep the patient safe.
2 Obtain informed consent.	To check that the patient understands the procedure and treatment and gives consent.
3 Check for allergies.	To ensure patient safety and reduce the risk of an allergic and anaphylactic reaction.
4 Check that an appropriate venous access device is in place which should include the use of an extension/octopus line and that the administration site is free of leakage, infection, and inflammation.	Use of an octopus/extension line enables ease of access and reduces the risk of vascular damage and device mobility. Leakage, inflammation and infection are possible contra indications to the use of the access device. **See appendix 5 & 6**
5 Take all equipment to the patient.	
6 Wash and dry hands thoroughly	Reduces the risk of bacterial contamination.
7 Apply clean gloves	Reduces the risk of bacterial contamination.
8 **AT ALL TIMES TAKE CARE NOT TO TOUCH KEY PARTS -** Clean the needle  free connector (bionector) located at the end of the extension /  octopus line thoroughly using Chlorhexidine 2% and alcohol 70% swab and allow to dry for 30 seconds.	To prevent bacterial contamination during the procedure.
9 Attach a 10ml luer lock syringe filled with sodium chloride 0.9% to the end of the Bionector and flush with 5ml of the sodium chloride 0.9%. **DO NOT FORCE.**	To ensure patency of the device.
10 Disconnect the syringe.	

11 Attach the administration giving set and regulate and run the infusion as required	All drugs must only be injected over the prescribed rate and time as set out by the prescription/authorisation or IV monographs and manufacturer's instructions. Reduces the risk of speed shock.

12 Once infusion is complete stop the infusion.	
13 Put on a plastic apron, decontaminate hands using hand sanitiser and apply clean gloves	To reduce bacterial contamination
14 **AT ALL TIMES TAKING CARE NOT TO TOUCH KEY PARTS** – Detach the administration giving set from the access device.	To prevent contamination of key parts
15 Attach a 10ml luer lock syringe filled with sodium chloride 0.9% and flush with 5ml of the sodium chloride 0.9%.	To ensure the patient receives the full dose of the prescribed medication.
16 Clear away equipment and ensure the patient is comfortable and the line is secure.	To prevent cross infection
17 Discard used ampoule /vials and sharps into the appropriate sharp safe container	Once ampoules or vials have been disposed of they cannot be retrieved from sharps safe container in the case of untoward reactions
18 Ask the patient to promptly report any soreness at the access site or any discomfort at all. Recheck the access site and device for any signs of leakage, infection, or inflammation.	Early detection of untoward reactions and prompt action will reduce further complications.
19. Remove gloves and apron and dispose of appropriately then wash and dry hands thoroughly.	Remove gloves and apron and dispose of appropriately then wash and dry hands thoroughly.
20 Make a detailed record of administration.	To comply with local policies
21 Check that arrangements for monitoring fluid balance or clinical parameters have been made. Ensure that relevant documentation is made available for subsequent regular monitoring to take place.	To keep patient safe and monitor for early complications. If an IV medication error occurs the Medicines Management Policy should be followed

N.B. ELECTRONIC INFUSION DEVICES

If the medication requires to be given with the use of an electronic infusion device in line with monographs or information from the drug manufacturer, it is the Registered Nurses professional responsibility to ensure their competence by accessing training or by reading instruction manuals and declare such competence to the organisation prior to using the equipment. This is in line with the LPT Management of Medical Devices and equipment policy and The Code (NMC 2018)

Appendix 5

WORKED EXAMPLE OF THE FORMULA FOR CALCULATING DRIP RATES IF NOT USING AN ELECTRONIC INFUSION DEVICE

$$\frac{\text{mls to be infused (500) X Drops per ml (20)}}{\text{Hours to run (12) X Convert to min (60)}} = \frac{10000}{720} = \textbf{13.8 dpm (14)}$$

Appendix 6 **Removal of peripheral cannula/midline device**

Action	Rationale
Wash and dry hands, Apply alcohol hand rub. Use full aseptic technique (ANTT)	
Open dressing pack, open chosen dressing onto dressing pack	
Put on gloves	
Carefully remove the covering dressing and any tape which has been used to secure the line in situ.	
Hold the cannula securely with dominant hand in the other hand have a gauze swab ready to apply pressure to the site once the cannula is removed. Pull the cannula gently from entry site and apply pressure.	
Once the site has stopped bleeding, the skin around the site can be cleaned if needed with 2% Chlorhexidine Gluconate in 70% IPA wipe being careful not to dislodge the newly formed clot on the entrance site.	
Apply a dressing to site. The patient or carers should be advised that ideally this dressing should remain in situ for 24 hours and be kept dry during this period.	
Safely discard cannula in sharps box and cannula dressing in appropriate waste.	
Make record of removal and appearance of site	

Appendix 7

EXAMPLE of VISUAL INFUSION PHLEBITIS SCORE (VIPS) – Taken from: Jackson A (1998)

IV Site appears healthy. No pain evident.	**0**	No signs of phlebitis • OBSERVE CANNULA
ONE of the following is evident: • Slight pain near IV site • Slight redness near IV site	**1**	Possible first signs of phlebitis • OBSERVE CANNULA
TWO of the following are evident: • Pain at IV site • Erythema • Swelling	**2**	Early stages of phlebitis • RESITE CANNULA
ALL of the following signs are evident: • Pain along the path of cannula • Erythema • Induration	**3**	Medium stage of phlebitis • RESITE CANNULA and CONSIDER TREATMENT
All of the following are evident and extensive: • Pain along path of cannula • Erythema • Induration • Palpable venous cord • Pus	**4**	Advanced stage of phlebitis or the start of thrombophlebitis • RESITE CANNULA and INITIATETREATMENT • COMPLETE INCIDENT FORM
All of the following are evident and extensive: • All of the above PLUS • Pyrexia • Tissue damage	**5**	Advanced stage of thrombophlebitis • RESITE CANNULA and INITIATE TREATMENT • COMPLETE INCIDENT FORM

Appendix 8

EXAMPLE of a VISUAL INFUSION PHLEBITIS SCORE AND CANNULA CHECKLIST

(ANY SCORE GREATER THAN 0 REQUIRES AN ENTRY IN THE EVALUATION OF CARE)

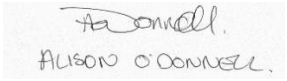
Patients Full Name:	**Date of Birth:**	**NHS Number:**

Cannula No		**1**		**2**		**3**		**4**		**5**	
Insertion of cannula											
Date of cannulation											
Inserted by											
Insertion site											
Size / colour of cannula											
Manufacturer											
Batch no & expiry date											
		Score	**Signature**	**Score**	**Signature**	**Score**	**Signature**	**Score**	**Signature**	**Score**	**Signature**
VISUAL INFUSION PHLEBITIS SCORE	**Day 1**										
	Night 1										
	Day 2										
	Night 2										
	Day 3										
	Night 3										
	Remove the cannula unless the patient has poor venous access or clinician can justify leaving in situ.										
	Day 4										
	Night 4										
	Day 5										
	Night 5										
Removal of cannula											

Date of removal					
Removed by					
Swab Taken?	Y / N	Y / N	Y / N	Y / N	Y / N
Tip sent for C&S?	Y / N	Y / N	Y / N	Y / N	Y / N
Sterile dressing to site?	Y / N	Y / N	Y / N	Y / N	Y / N

Appendix 9 Training Needs Analysis

Training required to meet the policy requirements must be approved prior to policy approval and publication. Learning and Development manage the approval of training. Send this form to lpt.tel@nhs.net for approval.

Training topic/title:	IV Therapy via Peripheral Line		
Type of training: (see Mandatory and Role Essential Training policy for descriptions)	☐ Not required ☐ Mandatory (must be on mandatory training register) ☐ Role Essential (must be on the role essential training register) X Desirable or Developmental		
Directorate to which the training is applicable:	X Directorate of Mental Health X Community Health Services ☐ Enabling Services ☐ Estates and Facilities X Families, Young People, Children, Learning Disability and Autism ☐ Hosted Services		
Staff groups who require the training: (consider bank /agency/volunteers/medical)	Registered nurses		
Governance group who has approved this training:	Quality Forum	Date approved:	May 2024
Named lead or team who is responsible for this training:	Clinical Training Team (CHS) Diana Service (FYPC/LDA)		
Delivery mode of training: elearning/virtual/classroom/ informal/adhoc	elearning		
Has a training plan been agreed?	Yes		
Where will completion of this training be recorded?	X uLearn ☐ Other (please specify)		
How will compliance with this training to be audited?	X Manager ulearn report Local manager personal records StatMand (Flash) topic compliance report Other please specify		
Signed by Learning and Development Approval name and date		Date: **3.7.25**	

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 11 Due Regard Screening Template

Section 1	
Name of activity/proposal	Administration of Intravenous Medication via peripheral cannula and midline
Date Screening commenced	Feb 2024
Directorate / Service carrying out the assessment	CHS
Name and role of person undertaking this Due Regard (Equality Analysis)	Sue Swanson
Give an overview of the aims, objectives and purpose of the proposal:	
AIMS: Update the policy that prescribes the standards to be adhered to when preparing and administering medication via a peripheral IV cannula or midline	
OBJECTIVES: To ensure that any medication given via a IV peripheral cannula is given safely and protects the patient and nurse against errors	

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

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:			
Implementation of this policy is low risk. It is an update from an existing policy. It should not have an impact on any protected characteristics. It merely prescribes good practice.			
Signed by reviewer/assessor	S Swanson	Date	30/05/2024
Sign off that this proposal is low risk and does not require a full Equality Analysis			

Head of Service Signed		Date	11/06/2024

Leicestershire Partnership NHS Trust

Appendix 12 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:	**The Policy and Procedure for the Administration of Intravenous Medication to Adults and Children within the Community and Community Hospitals**	
Completed by:	Sue Swanson	
Job title	CHS Clinical Education Lead	**Date 30/5/24**

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:	
Date of approval	

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