University Hospitals Bristol and Weston NHS Foundation Trust

Peripheral Venous Cannulation Policy and Procedure (Adults & Children)

Document Data			
Document Type:	Policy		
Document Reference	22529		
Document Status:	Approved		
Document Owner:	Infection Control Team Vascular Access Lead		
Executive Lead:	Chief Nurse		
Approval Authority:	Clinical Quality Group		
Review Cycle:	24		
Date Version Effective From:	1/8/2023	**Date Version Effective To:**	1/8/2025

What is in this policy?
This guidance relates to the insertion, maintenance, and safe removal of peripheral venous cannula.

Document Change Control				
Date of Version	**Version Number**	**Lead for Revisions (Job title only)**	**Type of Revision**	**Description of Revision**
2023	**10**	Infection Prevention & Control Vascular Access Lead	Minor	Minor changes regarding unregistered nurse flushing practice & community cannula removal times in specific circumstances
2023	**9**	Infection Prevention & Control Vascular Access Lead	Minor	Ensure practice reflects NPSA safe practice requirements.
2021	8	Chief Nurse Team	Major	Review of best practice and role expansion – Inclusion Nursing Associate; Nursing Assistants Band 3 and Radiology Assistants Band 2
2018	7	Chief Nurse Team	Minor	Follow EPIC 3 guidelines
2015	6	Chief Nurse Team	Minor	Ensure practice reflects NPSA safe practice requirements EU Directive on safe sharps management
2012	5.1	Chief Nurse Team	Minor	Ensure practice reflects NPSA safe practice requirements EU Directive on safe sharps management
2011	5	Chief Nurse Team	Minor	Ensure practice reflects NPSA safe practice requirements
2011	4	Chief Nurse Team	Minor	Ensure practice reflects NPSA safe practice requirements
2009	3	Chief Nurse Team	Major	Inclusive of adults & children

Sign off Process and Dates	
Groups consulted	**Date agreed**
Vascular Access Group	11/01/2023
Infection Control Group	28/04/2023
Clinical Quality Group	18/05/2023

- **Stakeholder Group** can include any group that has been consulted over the content or requirement for this policy.
- **Steering Group** can include any meeting of professionals who has been involved in agreeing specific content relating to this policy.
- **Other Groups** include any meetings consulted over this policy.
- **Policy Assurance Group** must agree this document before it is sent to the **Approval Authority** for final sign off before upload to the DMS.

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1. Introduction

Peripheral venous cannulation is the process of inserting a small hollow catheter over a needle into a peripheral vein. It is an invasive procedure that should be only carried out by suitably trained practitioners.

This policy will provide guidance about the correct technique for peripheral cannulation aseptically and the subsequent care of the cannula. By using this policy, the practitioner will act to reduce the risks to patients and staff associated with peripheral venous cannulation. These include thrombosis, pain, local or systemic infection, occupational sharps injury and inappropriate cannula insertion.

2. Purpose

The purpose of this policy is to inform all practitioners about the requirements and processes for peripheral venous cannulation and appropriate aftercare and removal, including.

- The training required.
- The standards of care.
- The correct related procedures and related competency assessments.

To promote best practice and the safety of staff and patients.

3. Scope

This policy applies to all clinical staff involved in cannulation as part of their role across UHBW.

4. Definition

4.1 Aseptic Non-Touch technique (ANTT)

ANTT achieves asepsis by using the approach of key-part and key-site protection: a combination of Standard precautions, non-touch technique and the use of 'Critical' & 'General Aseptic Fields'

General aseptic fields that promote asepsis are used when: key parts are easily protected by critical micro aseptic fields and non-touch technique.

Critical micro aseptic fields are those key parts protected by syringe caps, sheathed needles, covers or packaging the main aseptic field does not have to be managed as a key part. Nonsterile gloves can be used unless key parts must be touched when sterile gloves must be worn.

4.2 Extravasation

Extravasation occurs when a vesicant drug or medication leaks out of the vein & into the surrounding tissue.

4.3 Infiltration

Administration of non-vesicant solution into the surrounding tissue.

4.4 Phlebitis

Inflammation of a vein, more specifically the inner lining (tunica intima). Sign of phlebitis include localised redness, heat, swelling and pain. Phlebitis may be mechanical (physical trauma to the vein), chemical (irritation caused by strong medicines) or infection (caused by infiltration of micro-organisms) in origin.

5. Definition, Roles, and Responsibilities

All clinical professionals are accountable for their own practice and must ensure their own clinical training and updates to demonstrate on-going competence. Registered practitioners remain accountable for delegation of skills to an unregistered practitioner such as assistant practitioners or physician assistants.

The following staff are allowed to undertake peripheral venous cannulation with appropriate training and competency assessment:

Staff Role	Skill Cannulation	Skill Patency Flush (0.9% Saline)
Registered Health Professionals	√	Intravenous medication administration PGD- can administer 0.9% sodium chloride flush without individual patient prescription
Registered Degree Nurse Apprentice **Registered Nursing Associates** **Trainee Nursing Associates** **Assistant Practitioner** **Health Care Support Worker Band 3 (Specialist Areas)** **Radiography Assistant Band 3**	√	All staff other than registered health professionals can **only** administer a single prefilled 0.9% sodium chloride flush between 5-10mls (e.g., Posiflush) immediately after peripheral venous cannulation.
Midwifery students, student nurses or medical students – who can provide evidence of competence from pre- registration education and training, but ONLY under the direct supervision of a registered healthcare professional that is in the possession of the competency.	√	All staff other than registered health professionals can **only** administer a single prefilled 0.9% sodium chloride flush between 5-10mls (e.g., Posiflush) immediately after peripheral venous cannulation.

The above staff groups must have Completed training and a practical assessment of competence, demonstrated through certification and practice. This can be achieved through UHBW Clinical Skills Training, or by providing written evidence from another NHS organisation.

Training for adult cannulation can be accessed through the UHBW intranet site: Kallidus Learn & children's cannulation can be accessed via Corporate Education

5.1 Chief Executive

- Overall responsibility for ensuring that there are effective arrangements for the insertion, management, and removal of peripheral venous cannula throughout the Trust. In practice this responsibility is delegated to the chief nurse, medical director.

Chief Nurse and Medical Director

- To ensure that this policy is adhered to by all staff and that appropriate resources are available to ensure effective implementation.
- Ensure mechanisms are in place to inform staff, patients, visitors, and others of this Policy.

5.2 Divisional Management Boards

- Ensure recommended actions advised by the Infection Control Group are carried out.
- Monitor compliance within the Divisions of this policy.

5.3 Director of Infection Prevention & Control (DIPC), Infection Prevention & Control Nurses (IP&CNs)

- Provide expert and professional advice and management, in conjunction with the Infection Prevention & Control Vascular Access Lead on practice and provisions required to facilitate safe and effective peripheral cannula management.

5.4 Infection Control Group (ICG)/ Vascular Access Group

- Recommend actions to correct any adverse trends in audits.
- Monitor the implementation and effectiveness of this policy.
- Review any changes made in line with national guidelines.

5.5 *Clinical Skills Educators*

- To ensure provision of quality assured training in both adult & paediatric venous cannulation technique
- To ensure UHBW policy is adhered to in the education setting.
- To provide professional advice in technique, practice & management
- To provide input to policy & guideline development

5.6 Matrons/Ward Managers

- To ensure that actions from audits are completed within the recommended time frame.
- To ensure that any additional monitoring of the insertion and care of peripheral venous cannula is carried out as requested by the DIPC.

- To demonstrate good peripheral venous cannula care in clinical areas and monitor compliance.

5.7 Individuals undertaking peripheral venous cannulation.

- Staff should ensure they meet the training requirements and successfully complete competency to undertake this skill and follow all relevant Trust policies. Staff must be aware of their roles and responsibilities and must identify and communicate any training needs to their line manager.
- Staff must attend the required training run by the Clinical Skills education team if new to this skill and identify to their manager any ongoing training needs.
- Appropriately trained staff are responsible for ensuring safe care, access, and removal of peripheral cannulas.
- Staff are responsible and accountable for their practice and should always work within their competence in accordance with Trust policy and any relevant professional standards such as The Code (NMC (Nursing and Midwifery Council), 2015).
- Health care students**:** must be supervised by an appropriate trained member of staff when carrying out this procedure.
- Staff must refresh their knowledge and skills as required.
- Staff should only make **two attempts** to gain venous access with a peripheral cannula before seeking further help. (This could be another practitioner, under ultrasound guidance or by referring to the Vascular Access team)

6 Policy Statement and Provisions

6.1 Infection Control

All staff performing peripheral venous cannulation should be immunised against Hepatitis B.

Aseptic Non-Touch technique must be used for the insertion, subsequent care of and removal of peripheral venous cannula, in accordance with UHBW Aseptic Technique and Aseptic Non-Touch Technique Policy. [redacted]

Staff must be bare below the elbow (1 plain ring permitted) to facilitate effective hand and wrist washing to prevent the transmission of pathogens.

Hand and wrist washing must be performed after each patient contact, prior to insertion of peripheral venous cannula, during any subsequent care of peripheral venous cannulas and after contact with blood or bodily fluids. Please follow the UHBW Hand Hygiene Policy. [redacted]

Appropriate Personal Protective Equipment (PPE) must be used for any invasive procedure.
Any cuts or abrasions must be covered with waterproof plasters.

The skin must be thoroughly decontaminated at the insertion site with a single-use application of 2% chlorhexidine gluconate in 70% isopropyl alcohol (or povidone iodine in alcohol for patients with sensitivity to chlorhexidine) for 30 seconds using a cross hatch backwards & forwards, side to side technique, and allowed to dry before inserting a peripheral vascular access device.

For infants weighing less than 1.5 kilograms or those less than 30 weeks' gestation, 0.05% Chlorhexidine in water must be used. For infants weighing more than 1.5 kilograms or those more than 30 weeks gestation 0.5% Chlorhexidine in alcohol must be used.

Once disinfected further palpation or touching of the skin must be avoided, disinfect the area again if re-palpated

All tourniquets **must** be single-use or single-patient-use and must be tied using a single 'slip knot' for no longer than 2 minutes at any one time. Fabric tourniquets are not permitted. Gloves must not be used as tourniquets. Tourniquets should not be used for neonates. Ensure tourniquets are removed from patient limbs after use.

If, during an emergency, a cannula is inserted without adherence to aseptic precautions, it must have a red dot applied to the dressing and be removed and replaced during the following 24-hour period.

6.2 Procedure for Intravenous Peripheral Cannulation

The peripheral cannula should be appropriate for:

- The type of infusion / medication / contrast to be delivered.
- The intended or required speed of delivery.
- The duration of intended therapy
- The condition and size of the vein

6.3 Equipment required.

- Adhere to PPE guidance (Mask, gloves, plastic apron)

- Appropriate size cannula then a single needle free connector can be used.
- Use of **MicroClave®** needle free connector with integral extension set.
- Single patient use tourniquet
- Appropriate cleaning wipe or solution as described in point 6.1 above.
- Transparent & breathable cannula dressing
- 10ml syringe prepared with 0.9% sodium chloride.
- Plastic equipment tray
- Sharps box
- Relevant documentation
- Ensure a 0.9% saline flush is prescribed for the patient if required.

6.4 Needle-free connectors

Staff should have received training in using a needle-free device, including cannulas. This device maintains a closed system, reducing the risk of contamination and air embolism.

All paediatric patients will have a primed needle free device with extension set attached to a peripheral cannula.

All adult patients requiring a hospital admission likely to be greater than 24 hours will have a primed needle free device with extension set applied to the peripheral cannula.

The patient in the operating/theatre suite may not require a needle free device extension set applied to the peripheral cannula. This is at the clinicians' discretion, which will depend upon the clinical situation.

Never attach a needle free device without an extension set directly to the cannula. The force of this action will move the cannula in the vein and could cause mechanical phlebitis.

Needle-free devices should be decontaminated prior and post use. They have the potential if used incorrectly to increase the risk of infection.

6.5 Preparation

1. Explain the procedure to the patient, gaining informed, verbal consent or the consent of the parent/carer. Consider patient competency/capacity to provide consent. Further information can be obtained from the Clinical Holding Policy.

2. Check for any history of allergies.

3. Registered practitioners only - Consider the potential need for topical local anaesthetic and ensure application prior to procedure as per the manufacturer's guidance. Children must be offered topical local anaesthetic as a matter of course.

4. Check that a 0.9% saline flush is prepared in accordance with section 5.

5. Appropriately decontaminate hands for at least 20 seconds or use hand gel before patient contact.

6. If a non-emergency situation and a cannula of 18g or larger is to be used, consider the use of intradermal local anaesthesia.

7. Consider the need for the presence of a play therapist/parent/carer or friend.

8. Assist the patient into a comfortable position with selected limb supported. Veins should be used on the upper extremities. Veins in feet and legs, although used in paediatrics, should not be routinely used in adults as related to increased risk of infection and phlebitis. Do not use feet for diabetic patients.

9. Cannula placement to avoid:
    - The arms of patients who have had axillary node dissection, radiotherapy, or fistula.
    - Side of mastectomy or lymphoedema if present

- Compromised, bruised, scarred areas of skin, existing abrasions, or evidence of infection.
- Limb with existing intravenous infusion, or where treatment, invasive procedure or surgery planned.

10. When cannulating an arm, use the less dominant side whenever possible.

11. Remove any topical local anaesthetic cream (after designated time).

12. Re-wash hands or use alcohol gel.

13. Use appropriate PPE.

14. If visibly contaminated, clean the plastic tray with D1 Detergent and water or Clinell detergent wipes. Following this, use a Clinell 70% alcohol wipe and allow it to dry.

15. Ensure the work surface is cleaned prior to placing tray on it.

16. Gather equipment together to the side of the clean plastic tray, ensuring all items are in date and intact.

17. Ensure you have a sharps bin available.

18. In adult services draw up 0.9% saline flush in a 10ml syringe using a blunt fill needle. In children's services draw up 0.9% saline flush in a 10ml syringe using a blue needle.

19. Label the syringe and use it to prime the needle free extension set. Leave the syringe attached and place it in the tray (DO NOT USE A NEEDLE FOR PRIMING).

20. Remove all remaining equipment from packaging, fold down cannula wings and place carefully into the tray, ensuring key parts are protected. Retain cannula packaging for LOT number.

21. Remove PPE & decontaminate hands.

22. Take this tray to the patient.

23. Ensure patient privacy and dignity is maintained.

6.6 Procedure

1. Before contact with the patient, decontaminate hands & apply apron.

2. Have gloves ready.

3. Apply a tourniquet, assess, and select the appropriate vein after palpating.

4. Clean the patient's skin and the selected vein thoroughly for 30 seconds in a backwards & forward /side to side motion using 2% Chlorhexidine, in 70% Isopropyl alcohol (or Povidone Iodine 10% if sensitive to Chlorhexidine) and allow to visibly dry. Do not re-palpate the vein or touch the skin afterwards.

5. Apply gloves. Ensure that cannula wings are folded down.

6. Hold the cannula in a manner that does not contaminate the key parts, remove the needle guard.

7. Anchor the vein by applying manual traction on the skin a few centimetres below the proposed site of insertion.

8. Ensure the cannula is in the bevel-up position and insert the cannula through the skin at the selected angle according to the depth of the vein.

9. Wait for the first flashback of blood in the flashback chamber of the stylet.

10. Level the device by decreasing the angle between the cannula and the skin and advance the cannula slightly to ensure entry into the lumen of the vein (this is known as the 'Trim' distance).

11. Withdraw the stylet slightly and a second flashback of blood will be seen along the shaft of the cannula.

12. Continue to hold stylet with the non-dominant hand, slowly advance the cannula off the stylet and into the vein using the port or the wings.

13. Apply digital pressure to the vein above the cannula tip and with the same hand anchor the cannula. Release the tourniquet & place sterile gauze under the cannula hub. Then remove the stylet and dispose of the stylet immediately into sharps container.

14. If blood sampling, attach the BD Vacutainer® and withdraw samples using correct order of draw – no discard sample is required, and blood samples must not be taken once the cannula has been flushed.

15. Attach the primed needle free device with extension set to the hub of the cannula. Remove gauze & secure cannula with dressing strips. Flush with 5 – 10mls 0.9% sodium chloride using a 10ml syringe and performing the push pause technique. Clamp the extension set under positive pressure, remove syringe.

16. Observe the site for signs of swelling or leakage and assess for any discomfort or pain. If any of these signs are evident, stop and remove the cannula.

17. Apply body of the dressing as per manufacturers guidelines then label with time and date. Clean the end of the needle free connector & allow it to dry.

18. Discard waste in appropriate waste bins.

19. Remove gloves and apron, and wash hands.

20. Document date, time, site of insertion, size of cannula, ANTT and LOT number. In Bristol adult services record on Vital Pac if available. If Vital Pac is unavailable record cannula care & insertion on paper document. In children's services the PIPA record in the core screening tool document is to be completed, plus place green sticker in patient notes. Reason for insertion should be documented in the patient's medical notes by the requesting clinician.

21. Two attempts per practitioner and then consideration should be given for another clinician to undertake the cannulation. (This could be another practitioner, under ultrasound guidance or by referring to the Vascular Access team)

22. If an artery is inadvertently cannulated, remove the cannula and apply pressure until bleeding is arrested and document incident.

6.7 Fixing/securing/labelling

Cannulas must be secured in place with an adhesive sterile dressing. This should be semi-permeable, transparent and have a high moisture vapour transfer rate to allow for the expiration of moisture at the cannula entry site and enable inspection.

Dressings must be carefully changed when damp, soiled or loose.

The dressing must be labelled at the time of insertion (or subsequent dressing change) with the date and time of cannula insertion.

A secondary fixation/dressing should not be used unless the patient is likely to knock the cannula out of place.

Elastoplast may only be used to secure vulnerable cannula in paediatric patients who have been assessed as being at risk of decannulation which would have an adverse outcome for the patient. The Elastoplast must only be used to secure the wings of the cannulation device and not occlude the insertion site. The cannula must be dressed as per policy and observed following the guidance outlined in the PIPA tool. The decision to use Elastoplast must be documented in the patient records and handed over to the receiving team to ensure the insertion site and skin can be monitored appropriately. Elastoplast must be removed using the recommended solution.

Bandages must only be used where there is no alternative available, or where the patient is at risk of deliberately removing the cannula if not firmly secured (e.g., young children, confused patients). It must be changed if it is damp, stained or loose.

The secondary fixation/dressing must be removed, and the cannulation site inspected each time the cannula is used.

6.8 Taking blood from peripheral venous cannula

Blood samples can only be taken from a peripheral venous cannula immediately post insertion. The only exception to this is in the event of a patient requiring blood samples for a glucose tolerance test (or similar), where the cannula is in situ for a few hours only. If there is no option but to obtain a blood sample from a peripheral venous cannula all infusions must have been stopped and then

the first 5mls of blood withdrawn must be discarded (in adults), and the cannula flushed after the procedure with 10ml 0.9% sodium chloride. Local protocols should be followed for children and neonates.

6.9 Initial cannula patency

Assistant practitioners and Nursing Assistants (Band 3) who have received formal Trust training in cannulation are permitted to administer up to 10mls of 0.9% sodium chloride to confirm patency of the cannula they have placed. The sodium chloride flush MUST be prescribed and checked with a registered health professional who is competent in intravenous drug administration. Subsequent flushing of the cannula must not be undertaken.

6.9.1 Maintaining cannula patency

- It is essential to ensure and maintain the patency of peripheral venous cannula to prevent blockages and unnecessary replacements.

- Cannula must be flushed before and after the administration of drugs (including flushing between each individual drug) or fluids.

- Medication administration - It is essential to ensure that any flush solution is compatible with the medication for administration. In most cases, 0.9% sodium chloride is the flush of choice, but guidance should also be sought from the injectable medications guide and manufacturer's medication instructions.

- Before and after administration of an intravenous injection or infusion, the needle free device must be cleaned thoroughly with 2% Chlorhexidine, in 70% Isopropyl alcohol for a minimum of 15 seconds and allowed to be visibly dry. Povidone Iodine 10% must be used as an alternative if the patient is sensitive to Chlorhexidine.

- Three-way taps should be avoided whenever possible as they contribute to the risk of infection.

- If there is a clinical need for a cannula but it is not used on a regular basis it must be flushed with prescribed 0.9% sodium chloride every six hours.

- Cannulas must be flushed with 5 to 10ml of flush solution, using the push-pause technique and a 10ml syringe. It should be noted that flushing with a 2ml syringe may cause increased pressure in the cannula and cause the cannula to rupture. However, in children, neonates and some specialist clinical areas, the volume and type of flush will vary depending on local protocol. On the final flush, use positive pressure whilst clamping the extension set.

6.10 Inspecting peripheral venous cannula and signs of phlebitis

The purpose of peripheral venous cannula inspection is to always ensure adherence to principles of infection control to reduce complications such as phlebitis, infiltration, extravasation, and patient

discomfort. Observation of the cannula is the primary method of assessment post insertion. Peripheral venous cannula should be inspected, and findings documented every 8 hours on Vital Pac's, users are prompted to check each cannula every 8 hours. If left unchecked, the cannula becomes overdue after 12 hours and breaches after 24 hours (see appendix F) In paediatrics the cannula should be inspected and documented at each use or a minimum of every 6 hours.

The Visual Infusion Phlebitis (VIP) score (see table below) should be used as an assessment tool for adult patients to assist in evaluation of inspection and direct subsequent actions accordingly. The Paediatric Intravenous Phlebitis Assessment Tool (PIPA) should be used for paediatric patients.

The inspection should include examination of the peripheral venous cannula, the insertion site, the surrounding skin, and consideration given to ease of use during administration via the cannula. Bandages are not recommended, but if in use they must be removed fully to facilitate inspection. Inspections should always occur in a good light to ensure accurate assessment. Securing dressings should be inspected to ensure they are secure, dry, and clean. They should be removed and replaced if moist, soiled, damaged or lifting. The inspection and VIP scores are available on the adult peripheral venous cannula insertion, monitoring and removal record (area specific documents should be used for children and neonates). The PIPA tool can be found in the Core Screening Tool document.

Visual Infusion Phlebitis (VIP) Score Table.

Assessment	Score	Evaluation and action
IV site appears healthy	**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 **REMOVE CANNULA** **Complete an incident report (Datix)** **Document action taken in patients' medical records**
All of the following are evident. • Pain along path of cannula • Erythema • Induration	**3**	Medium stage of phlebitis **REMOVE CANNULA** Alert medical staff to consider treatment. **Complete an incident report (Datix)** **Measure area of erythema & document action taken in patients' medical records**
All of the following are evident and extensive. • Pain along the path of cannula • Erythema • Palpable venous cord	**4**	Advanced stage of phlebitis or start of thrombophlebitis. **REMOVE CANNULA** **ALERT MEDICAL STAFF TO CONSIDER TREATMENT** **Complete an incident report (Datix)** **Measure area of erythema & document action taken in patients' medical records**

All of the following are evident and extensive. • Pain along path of cannula • Erythema • Palpable venous cord • Pyrexia	**5**	Advance stage of thrombophlebitis **REMOVE CANNULA** **ALERT MEDICAL STAFF TO START TREATMENT** **Complete an incident report (Datix)** **Measure area of erythema & document action taken in patients' medical records**

6.11 Removal timescales and process

Peripheral venous cannulas must be removed as soon as they are no longer required in-order to reduce the potential complications such as phlebitis and patient discomfort. A cannula may be left in-situ for up to 10 days if the following criteria are fulfilled or the patient is a child, and rationale appropriately documented:

- The patient still requires peripheral access.
- The cannula is patent.
- There is no sign of phlebitis.
- PIPA & VIP score must be 0.
- No-one else can cannulate the patient.

On vital Pac's practitioners will receive a reminder to remove a cannula 10 days after insertion. There will be a prompt after 7 days to consider seeking alternative IV access if likely to be required for longer than 10 days.

If during an emergency a cannula is inserted without adherence to aseptic precautions, it must have a red dot applied to the dressing and be removed and replaced during the following 24-hour period.

Note: NHS@Home patients may keep their cannula in for a few days longer under specific circumstances when the VIP score remains 0 & the cannula continues to be clinically indicated

- When IV treatment is due to end in the next couple of days therefore the cannula is only needed for a few more days.
- Pending PICC placement in the next couple of days
- History of difficult cannulation and patient declining PICC

6.12 Removal of cannula

Equipment:

- PPE (Personal Protective Equipment) – mask, non-sterile gloves, apron, eye protection
- Sterile gauze
- Securing tape
- Plastic equipment tray

- Sharps box
- Relevant documentation

Preparation:

- Check that peripheral venous cannula is no longer required and should be removed.
- Identify the correct patient.
- Inform patient and carers if appropriate of procedure and gain consent.
- Ensure no domestic cleaning is occurring.
- Ensure administration set is turned off and disconnected by a registered health care professional.

6.13 Disposal of sharps and other waste

- All sharps used during cannula insertion and care must be disposed of safely in an approved sharps bin at the point of use.
- Cannulas must be safely disposed of into an approved sharps bin following removal from a patient.
- Administration sets must be disposed of whole, in a large sharps bin/yellow box.
- All waste that is contaminated with blood or body fluids and that has been used in the insertion or care of a cannula must be disposed of as clinical waste in an appropriately identified bin.
- Any packaging or uncontaminated non-sharp waste must be disposed of into an appropriately labelled domestic waste bin.
- If the patient has received an administration of a radiopharmaceutical through the cannula in the preceding 24 hours, must be disposed of into a purple top appropriately labelled sharps bin and or advice must be sought from the Nuclear Medicine Department as to the disposal of the cannula as it will be classed as radioactive waste.

6.14 Documentation

- All cannula-related care must be documented appropriately. This includes a record of insertion: by whom, date and time, location in hospital, location on patient, size of cannula and the documentation of ANTT (Aseptic Non-Touch Technique). Record of 0.9% saline flush administration.
- On-going inspections and assessments should be documented 8 hourly in adult services and a minimum of 6 hourly in paediatric services.
- Removal must be recorded including the PIPA score at this time and if there are signs of phlebitis an on-going record should be recorded until such a time as it is resolved.

- The adult peripheral venous cannula insertion, monitoring and removal record should be used for all adult peripheral venous cannula care via Vital Pac's electronic records depending on local policy.

- Nursing assistants that are competent can remove Peripheral Venous Cannulas, however a registered nurse must record a VIP score prior to removal and the nursing assistant must document removal in the care log for the registered nurse to remove the device record from Vital Pac's.

- When using the electronic recording method any variances or complications that occur from the peripheral cannula being in situ must be logged in the patient's medical notes.

- Appropriate records should also be maintained using the relevant documentation for children and neonates. 'Core care plan: Insertion record and management of paediatric peripheral cannula.'

- NHS@Home patients, in exceptional circumstances could keep the cannula in situ for longer than 10 days in the following circumstances when VIP score is 0 & no concerns identified by the clinical team.

    - When IV treatment is due to end in the next couple of days therefore the cannula is only needed for a few more days.
    - Pending anticipated PICC placement in the next 48 hours
    - History of difficult cannulation and patient declining PICC

6.15 Use of administration sets.

- Administration sets must be labelled with the date and time of setting up and planned removal time and date.

- Once an administration set has been disconnected from a patient it must not be reconnected – a new set must be used. If changing patients' clothes you can use the same giving set if strict aseptic non-touch technique is adhered too.

- An exception would be for rapid line manipulations in an emergency. Disconnections should only occur when essential.

- A guide for changing of administration sets is as follows:

6.16 Administration set change times.

Clear fluids (e.g., sodium chloride)	For continuous infusions 96 hours or immediately if problems apparent
Lipids	24 hours or immediately if problems apparent
Whole blood	Every 12 hours or on completion of transfusion, whichever is sooner.
Platelets	After every unit, using a specific set, discarding on completion.

Intermittent infusions (e.g., antibiotics)	If disconnected from a patient, you must discard the giving set.

7 Standards and Key Performance Indicators

All staff are offered the opportunity to attend the clinical skills study day, which is provided to staff, details of such are on Kallidus.

There is a peripheral vascular access competency document available to complete which can be found on the DMS. Children's division competency is given on the training event.

All staff undertake infection prevention and control training, which includes an ANTT component, as follows:

- At Corporate Induction on joining the Trust.
- Annual Essential Training updates (e-learning).
- Ad hoc if a root cause analysis shows that a particular team requires an update.
- ANTT Link Practitioners are encouraged to carry out ANTT training in their areas with support from the IP&CNs.
- Ad hoc training will be defined and delivered by the IP&CNs.

8 References

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NHS (England) (2020) *Five Year Forward View*. London. NHS England [online] available at https://www.gov.uk/government/publications/implementing-personalised-health-and-care-2020/delivering-the-five-year-forward-view

Epic3: national evidence-based guidelines for preventing healthcare-associated infections in NHS hospitals in England.

NHS England National infection prevention & control manual for Englandhttps://www.england.nhs.uk/national-infection-prevention-and-control-manual-nipcm-for-england/

9 Associated Trust Documentation

Peripheral Cannulation Competency 2021 [redacted]

Aseptic Non-Touch Technique Policy 2022 [redacted]

Hand Hygiene Policy 2022 [redacted] M10 – Approval of Administration of Medicines by Skilled and Competency Non-Registered Staff - 2019

10 Appendix A – Monitoring Table for this policy

The following table sets out the monitoring provisions associated with this Policy.

Objective	Evidence	Method	Frequency	Responsible	Committee
Competent & capable workforce	Review of peripheral venous cannula related incident reports	Audit	Bi-monthly incident reports	Clinical sharps group	Clinical sharps group.
Competent & capable workforce	Completion of competency assessment	Appraisal	Annual competency review by means of learning portal	Ward Sister / Charge Nurse	Essential Training Steering group.
Monitor Peripheral cannula care	Tendable Electronic observation system (Vitals)	Audit	Monthly	Ward Sister / Charge Nurse	Divisional quality / governance groups

11 Appendix B – Dissemination, Implementation and Training Plan

The following table sets out the dissemination, implementation and training provisions associated with this Policy.

Plan Elements	Plan Details
The Dissemination Lead is:	Chief Nurse Team
Is this document: A – replacing an expired policy, B – replacing an alternative policy, C – a new policy:	A
Alternative documentation this policy will replace (if applicable):	[DITP - Existing documents to be replaced by]
This document is to be disseminated to:	Directors of nursing, matrons, and Ward sisters
Method of dissemination:	Email, newsbeat communications and Infection control group.
Is Training required:	Yes
The Training Lead is:	Clinical skills trainers

Additional Comments
[DITP - Additional Comments]

12 Appendix C – Document Checklist

Checklist Subject	Checklist Requirement	Document Owner's Confirmation
Title	The title is clear and unambiguous:	Yes
	The document type is correct	Yes
Content	The document uses the approved template:	Yes
	The document contains data protected by any legislation	Not Applicable
	All terms used are explained in the 'Definitions' section:	Yes
	Acronyms are kept to the minimum possible:	Yes
	The 'target group' is clear and unambiguous:	Yes
	The 'purpose and scope' of the document is clear:	Yes
Document Owner	The 'Document Owner' is identified:	Yes

Checklist Subject	Checklist Requirement	Document Owner's Confirmation
Consultation	Consultation with stakeholders (including Staff-side) can be evidenced where appropriate:	Yes
	The following were consulted:	Clinical skills, education facilitators and infection control team
	Suitable 'expert advice' has been sought where necessary:	Yes
Evidence Base	References are cited:	Yes
Trust Objectives	The document relates to the following Strategic or Corporate Objectives:	
Equality	The appropriate 'Equality Impact Assessment' or 'Equality Impact Screen' has been conducted for this document:	No
Monitoring	Monitoring provisions are defined:	No
	There is an audit plan to assess compliance with the provisions set out in this procedural document:	No
	The frequency of reviews, and the next review date are appropriate for this procedural document:	Yes

Approval	The correct 'Approval Authority' has been selected for this procedural document:	Yes

13 Appendix D – Equality Impact Assessment (EIA) Screening Tool

For more information on this section, please refer to the [redacted]

Query	Response		
What is the main purpose of the document?	To ensure clinical staff know the requirements and training surrounding Peripheral venous cannulation and can identify any complications and actions that are required and the correct forms for documentation.		
Who is the target audience of the document (which staff groups)? Who is it likely to impact on? (Please tick all that apply.)	Nursing, medical, physicians' associates Staff / Patients Visitors Carers Others		
Could the document have a significant **negative** impact on equality in relation to each of these characteristics?	YES	No	
Age (including younger and older people)		No	
Disability (including physical and sensory impairments, learning disabilities, mental health)		No	
Gender reassignment		No	
Pregnancy and maternity		No	
Race (includes ethnicity as well as gypsy travelers)		No	
Religion and belief (includes non-belief)		No	
Sex (male and female)		No	
Sexual Orientation (lesbian, gay, bisexual, other)		No	

Groups at risk of stigma or social exclusion (e.g., offenders, homeless people)		No	
Human Rights (particularly rights to privacy, dignity, liberty and non-degrading treatment)		No	

Will the document create any problems or barriers to any community or group? NO

Will any group be excluded because of this document? NO

Will the document result in discrimination against any group? NO

If the answer to any of these questions is YES, you must complete a full Equality Impact Assessment.

Could the document have a significant **positive** impact on inclusion by reducing inequalities?		No	
Will it promote equal opportunities for people from all groups?		No	
Will it help to get rid of discrimination?		No	
Will it help to get rid of harassment?		No	
Will it promote good relations between people from all groups?		No	
Will it promote and protect human rights?		No	

On the basis of the information / evidence so far, do you believe that the document will have a positive or negative impact on equality? (Please rate by circling the level of impact, below.)

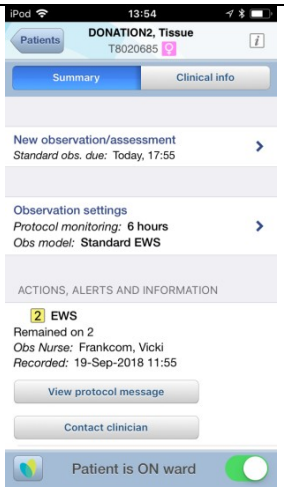
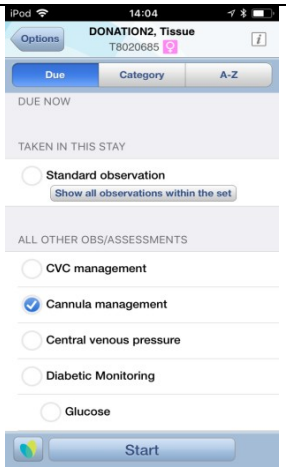
Positive impact				**Negative Impact**		
Significant	Some	Very Little	NONE	Very Little	Some	Significant

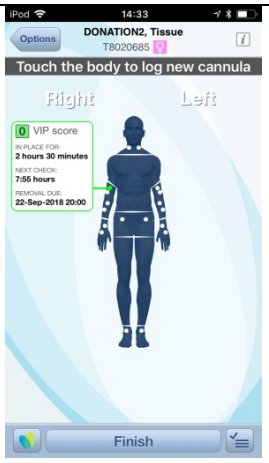
Is a full equality impact assessment required? NO

Date assessment completed: 31/3/23

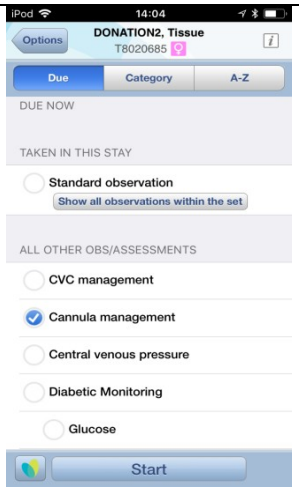
Person completing the assessment: Sarah Beech

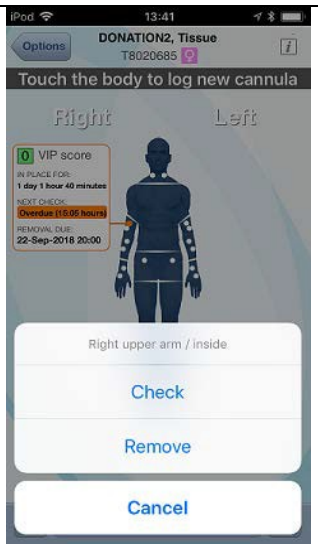
14 Appendix E – Inserting a cannula on Vital Pac's

Select Patient from ward list. Select **New observation/assessment**	
If the standard observation is due this will need to be completed before recording the insertion of the cannula. Select **Cannula management** within the list of "**all other obs/assessments**" Select start at the bottom of the screen. Select start again to confirm bay and bed details	
Select the area of the body and the specific site using the areas marked with a white dot. If you select the wrong area press back to return.	

You will then be asked a series of questions i.e. lot number, date/time inserted, reason etc. Answer these questions appropriately. This will then calculate the VIP score. **Select Submit** to this screen. Cannula guidance will appear and then return to the main cannula screen. Next check/removal due will be shown in the green box with the VIP score. Select **Finish** on this screen.	

Checking/ Removing a cannula in Vital Pac

Within the main ward view, when a cannula has been inserted the following symbol will appear  selecting this will confirm the details for check/removal. The following symbol will appear if the cannula is overdue a check/removal. 	
Select the patients name, N**ew observation/Assessment** and **Cannula management**. Confirm the Patient's Bay and bed details.	
The full body screen will indicate if the cannula is due/overdue for check/removal etc. Click on this area and select either **check** or **remove** **Check** For checking you will be asked a series of questions regarding who checked the site, is it site clean and healthy etc., answer as appropriate. Select submit at the bottom of the screen to return to the main body screen	

Cannula guidance is given on check and removal. The details will update to show when next check is due. **Remove** – confirm cannula has been removed and reason for removal	
From the full body screen, you can insert another cannula if required, or finish.	

	**CANNULA CHECK/ REMOVAL: DUE**
	**CANNULA CHECK/ REMOVAL: OVERDUE**
	**CANNULA CHECK/ REMOVAL: BREACHED**
	**ONE OF MORE CANNULAS: LOW VIP**
	**ONE OF MORE CANNULAS: MEDIUM VIP**
	**ONE OF MORE CANNULAS: HIGH VIP**