IPQ Nurse Training

Peripheral IV Cannulation and Venepuncture

Competency record: practical session, supervised practice and final assessment

Version 1.0, September 2026. Review due September 2027.

Complete this record alongside the e-learning and the face-to-face classroom session. Keep it in your professional portfolio, and lodge a copy as your employer requires.

Step 1	Step 2	Step 3	Step 4	Then
E-learning passed	Classroom session, face to face	Supervised practice and assessment	Independent practice	Reassessment at your employer's interval

Practitioner and session details

Name		**Job title and band**	
NMC PIN		**Ward or department**	
Organisation		**Facilitator**	
Date of classroom session		**Local policy references**	

Before the practical session

Requirement	Date	Confirmed by
E-learning completed and final assessment passed at 80% or above (certificate seen)		
Attended the classroom session		
Read the organisation's cannulation, venepuncture, blood sampling, ANTT and sharps policies		
Hand hygiene and ANTT competence current		
Latex allergy declared to the facilitator, or confirmed none		
Understands that step 2 does not authorise any practice on patients		

How to use this record

The practitioner demonstrates each procedure while the facilitator observes against the criteria. Each procedure is performed on a training arm at the skills stations. Step 2 of this course is delivered face to face and is not offered by virtual classroom, because the sequence that keeps the practitioner and the patient safe has to be rehearsed with the equipment in hand. The training arm is preparation, not proof: competence is evidenced on patients in steps 3 and 4. Up to three observed attempts are recorded in columns 1, 2 and 3 using the scale below. Every criterion must reach level I before step 2 is signed off for that skill. Cannulation and venepuncture are signed off separately.

Level	Descriptor	What this looks like
N	**Not yet demonstrated**	The step was omitted, performed unsafely, or the practitioner could not explain it.
P	**Demonstrated with prompting**	The step was performed correctly, but only after a cue, correction or question from the assessor.
I	**Demonstrated independently**	The step was performed correctly, safely and unprompted, and the practitioner explained why.

Safety criteria are absolute. Any breach of ANTT, any unsafe handling of a sharp, or continuing past two failed attempts stops the attempt. It is recorded as N and repeated.

This record does not authorise independent practice. Sign-off in section 6 completes step 2 and allows supervised practice on patients to begin. Step 4, independent practice, follows only after the final assessment in section 8.

Section 1A. Conduct at the practical session

Record once, across the whole session.

Performance criteria	1	2	3	Assessor initials and date
Conduct at the skills stations (both skills)				
1. Treats the training arm or role-play patient as a patient: introduction, identity, explanation, consent				
2. Verbalises each step so the reasoning can be assessed				
3. Handles every sharp as a used sharp: safety device activated, bin at the point of use, never re-sheathed				
4. Uses only training devices marked not for clinical use, and returns none to ward stock				
5. Follows the facilitator's instructions on care of any training equipment and declares any latex allergy				

Section 1B. Cannulation: practical criteria

Record N, P or I for each observed attempt. The assessor initials and dates each completed group.

Performance criteria	1	2	3	Assessor initials and date
A. Preparation, consent and patient assessment				
1. States the indication for the cannula and confirms it is still required				
2. Confirms patient identity, introduces self and explains the procedure in plain language				
3. Gains valid verbal consent and states that it may be withdrawn at any point				
4. Checks allergies, specifically chlorhexidine, latex and adhesive dressings				
5. Assesses the limb and excludes fistula, infection and broken skin; considers lymphoedema, previous axillary surgery, stroke weakness and planned surgery				
6. Positions the patient and limb, ensures adequate lighting and protects the bedding				
7. Selects a gauge appropriate to the intended therapy and justifies the choice				
8. Selects an appropriate safety device and a needle-free connector or extension set				
9. Cleans the tray with a detergent wipe and allows it to dry				
10. Assembles all equipment, including a spare cannula, before applying the tourniquet				
11. Positions a sharps bin within arm's reach at the point of use				
B. Infection prevention and ANTT				
12. Performs hand hygiene at the correct moments, before preparation and before insertion				
13. Applies apron and clean non-sterile gloves				
14. Identifies the key parts and the key site out loud				
15. Opens equipment without contaminating key parts and maintains a non-touch technique throughout				
16. Primes the extension set or needle-free connector with 0.9% sodium chloride				
17. Cleans the skin with a sterile 2% chlorhexidine in 70% alcohol applicator, using friction, for 30 seconds				
18. Allows the site to air dry for 30 seconds and does not fan, blow on or re-palpate it				
C. Vein and site selection				
19. Applies the tourniquet 7–10 cm above the intended site with the radial pulse still present				

Performance criteria	1	2	3	Assessor initials and date
20. Selects the vein by palpation and describes what a suitable vein feels like				
21. Avoids valves, bifurcations, points of flexion and the inner wrist				
22. Selects distally and explains vessel health and preservation in their own words				
23. Releases the tourniquet if it has been in place longer than 1–2 minutes				
D. Insertion technique				
24. Anchors the vein with traction 2–3 cm below the site using the non-dominant hand				
25. Warns the patient and inserts bevel up at an angle of approximately 10–30°				
26. Observes for primary flashback, lowers the angle and advances a further 1–2 mm as one unit				
27. Advances the catheter off the stylet and does not re-introduce the stylet at any point				
28. Releases the tourniquet before withdrawing the stylet				
29. Applies digital pressure over the vein above the catheter tip before withdrawing the stylet				
30. Withdraws the stylet fully and activates the safety mechanism immediately				
31. Recognises a failed attempt, stops after two attempts and states who they would escalate to				
E. Securing, flushing and documentation				
32. Attaches the primed connector using a non-touch technique				
33. Scrubs the hub and flushes with 0.9% sodium chloride using push–pause and a 10 mL or larger syringe				
34. Completes the flush with positive pressure and clamps correctly				
35. Observes for, and asks the patient about, pain, swelling or resistance during flushing				
36. Applies a sterile transparent semi-permeable dressing that leaves the site visible				
37. Loops the line to take tension off the cannula and avoids tape around the limb				
38. Labels the dressing with the date				
39. States the full documentation required, including gauge, batch number, attempts and VIP score				
40. Tells the patient what to report: pain, redness, swelling, leaking or a lifting dressing				

Performance criteria	1	2	3	Assessor initials and date
F. Sharps management and waste				
41. Disposes of the sharp personally and immediately, without re-sheathing or passing it on				
42. Segregates waste correctly, names the correct sharps bin and does not fill above the fill line				
43. Removes gloves and apron correctly and performs hand hygiene on completion				
44. States the immediate actions following a needlestick injury, in the correct order				
G. Ongoing care, complications and escalation (verbal)				
45. Describes the VIP score and the action required at each level				
46. Describes ALFRED and the circumstances in which a cannula must be removed				
47. Distinguishes phlebitis, infiltration and extravasation and states the immediate action for each				
48. Describes recognition and immediate management of arterial puncture and of nerve injury				
49. Describes safe removal of a cannula, including confirming the tip is intact				
50. States local escalation routes, incident reporting and duty of candour requirements				

Section 1C. Venepuncture: practical criteria

Record N, P or I for each observed attempt. The assessor initials and dates each completed group.

Performance criteria	1	2	3	Assessor initials and date
A. Request, identification and consent				
1. Checks the request: the right test, for the right patient, at the right time, including timed samples and special handling				
2. Asks the patient's full name and date of birth and matches them to the wristband and the request				
3. Introduces self, explains the procedure and gains valid verbal consent				
4. Asks about previous fainting, needle fear and allergies, including latex, chlorhexidine and plasters				
5. Asks about restricted limbs (fistula, lymphoedema, previous breast or axillary surgery) and anticoagulants				
6. Confirms no infusion is running in the chosen arm, or uses the other arm				
B. Preparation and ANTT				
7. Performs hand hygiene and cleans the tray				
8. Selects a closed vacuum system with a safety needle or safety winged set appropriate to the vein				
9. Checks tubes are in date and lays them out in the correct order of draw				
10. Does not pre-label any tube				
11. Positions a sharps bin within arm's reach at the point of use				
12. Positions the patient seated with the arm supported and straight, or lying down, and never standing				
13. Applies apron and gloves at the correct moment and identifies the key parts and key site aloud				
C. Vein selection and skin preparation				
14. Applies the tourniquet 7–10 cm above the site with the radial pulse still present				
15. Selects the median cubital or another appropriate vein by palpation and explains the choice				
16. Avoids the basilic vein unless there is no alternative, and explains why				
17. Releases the tourniquet if still searching after one minute				
18. Cleans the skin as local policy directs, allows it to dry fully and does not re-palpate				

Performance criteria	1	2	3	Assessor initials and date
D. Collection				
19. Anchors the vein, warns the patient and inserts bevel up at about 15–30°, in line with the vein				
20. Holds the holder still while changing tubes				
21. Fills tubes in the correct order of draw, allowing each to fill fully				
22. States when a discard tube is needed (winged set with a citrate tube first)				
23. Releases the tourniquet once blood is flowing and within one minute				
24. Inverts each tube gently as the manufacturer states, and does not shake				
E. Withdrawal, aftercare and sharps				
25. Removes the last tube from the holder before withdrawing the needle				
26. Places gauze without pressure, withdraws the needle and activates the safety device immediately				
27. Disposes of the needle and holder personally into the sharps bin at the point of use				
28. Applies pressure for 1–2 minutes with the arm straight, longer if anticoagulated, and checks bleeding has stopped				
29. Removes gloves and apron correctly and performs hand hygiene				
F. Labelling, dispatch and complications (verbal where indicated)				
30. Labels every tube at the bedside from the patient and wristband, including date and time of collection				
31. States the minimum identifiers and labelling rules for transfusion samples				
32. States correct handling and transport for the samples, and completes the request				
33. States the causes of haemolysis and spurious results, and how to prevent them				
34. Describes blood culture collection: skin preparation, first in the order of draw, aerobic bottle first with a winged set, fill volume				
35. Describes immediate management of haematoma, vasovagal reaction, nerve pain and arterial puncture				
36. Stops after two unsuccessful attempts, states the escalation route and documents both attempts				

Section 2. Underpinning knowledge

Asked verbally during or straight after the practical session. Record the answer given, not just a tick.

Cannulation

Question	Assessor notes	Answered
1. Who is accountable for the decision to cannulate, and what must be in place before you do it?		
2. Name three sites you would avoid and explain why for each.		
3. Which gauge would you choose for a patient needing five days of intermittent IV antibiotics, and why?		
4. How long do you clean the skin for, how long must it dry, and why does drying matter?		
5. What are the key parts in this procedure, and how do you protect them?		
6. You get flashback, but the catheter will not advance. What do you do, and what must you never do?		
7. How many attempts should one practitioner make, and what happens then?		
8. Describe the VIP score. What action is required at a score of 2?		
9. What is the difference between infiltration and extravasation, and what is your immediate action for each?		
10. What would you do in the first ten minutes after a needlestick injury?		

Venepuncture

Question	Assessor notes	Answered
1. Why is the antecubital fossa acceptable for venepuncture but usually avoided for cannulation?		
2. Name the order of draw by additive, and explain why the order matters.		
3. When would you draw a discard tube?		
4. Give three causes of a haemolysed sample, and how you would prevent each.		
5. What are the labelling requirements for a group and save sample?		
6. Why must blood never be taken above a running infusion, and what do you do instead?		
7. Describe what you do if the patient feels faint during venepuncture.		

Question	Assessor notes	Answered
8. What steps reduce contamination when taking blood cultures?		

Section 3. Simulated scenarios

Run at least two scenarios from each set. The practitioner demonstrates or talks through their response.

Cannulation scenarios

Scenario	Assessor record of the practitioner's response
The difficult vein *The patient is cold, dehydrated and anxious, and you cannot feel a suitable vein. Describe and demonstrate what you would do next.*	
The failed attempt *You get flashback, then it stops and a swelling appears. Demonstrate your immediate actions and describe what you would document.*	
The sharps injury *Your colleague sustains a needlestick from a used cannula stylet. Talk through the next ten minutes and who is contacted.*	
The patient who says stop *Halfway through, the patient pulls their arm away and says they have changed their mind. Demonstrate your response.*	
The cannula in for five days *You find an undated dressing over a site the patient says is sore. Describe your assessment, the VIP score you would record and your actions.*	

Venepuncture scenarios

Scenario	Assessor record of the practitioner's response
The faint *During venepuncture the patient becomes pale, sweaty and says they feel faint. Demonstrate what you do.*	
The unlabelled tube *You find a filled, unlabelled group and save tube on the trolley after a busy round. What do you do, and why?*	
The timed level and the drip arm *A gentamicin level is requested and the patient has an infusion running in their preferred arm. Talk through your checks and choices.*	

Section 4. Practitioner reflection

What went well, and what felt most difficult?

What will you do differently at your first supervised procedure on a patient?

What do you still need to practise or read up on?

Section 5. Action plan

Area identified	Action agreed	Review by

Section 6. Sign-off: step 2 complete, ready for supervised practice

Cannulation

I confirm that the practitioner named in this record has demonstrated every criterion in sections 1A and 1B at level I at the practical session, has answered the underpinning knowledge questions satisfactorily, and is ready to begin supervised cannulation on patients. This confirms step 2 only. It does not confer competence to cannulate patients unsupervised.

Assessor name and role	
Assessor signature and PIN	
Date	
Practitioner signature	

Venepuncture

I confirm that the practitioner named in this record has demonstrated every criterion in sections 1A and 1C at level I at the practical session, has answered the underpinning knowledge questions satisfactorily, and is ready to begin supervised venepuncture on patients. This confirms step 2 only. It does not confer competence to take blood from patients unsupervised.

Assessor name and role	
Assessor signature and PIN	
Date	
Practitioner signature	

Section 7. Supervised clinical practice

Each procedure on a patient is supervised by a practitioner who is assessed as competent. Record unsuccessful attempts too: they are part of the evidence.

Cannulation log

Date	Clinical area	Site and gauge	Attempts	Outcome	Supervisor name, signature, PIN

Supervised insertions required by my organisation: _____

Venepuncture log

Date	Clinical area	Site and samples	Attempts	Outcome	Supervisor name, signature, PIN

Supervised venepunctures required by my organisation: _____

Section 8. Final assessment of competence

Directly observed on a patient by an assessor who is competent in the skill and authorised to assess it.

Cannulation

I confirm that the practitioner named in this record has completed the required supervised clinical practice, has been observed performing peripheral intravenous cannulation safely and independently on a patient, and is assessed as competent to cannulate without direct supervision in line with organisational policy. The practitioner remains personally accountable for maintaining this competence.

Assessor name and role	
Assessor signature and PIN	
Date of assessment	
Practitioner signature	
Date for review or reassessment	

Venepuncture

I confirm that the practitioner named in this record has completed the required supervised clinical practice, has been observed performing venepuncture safely and independently on a patient, including correct order of draw and bedside labelling, and is assessed as competent to take blood without direct supervision in line with organisational policy. The practitioner remains personally accountable for maintaining this competence.

Assessor name and role	
Assessor signature and PIN	
Date of assessment	
Practitioner signature	
Date for review or reassessment	

Appendix. Quick reference

Visual Infusion Phlebitis (VIP) score

Score	What you see	Action
0	IV site appears healthy	No signs of phlebitis. Observe the cannula.
1	One of: slight pain near the site, or slight redness near the site	Possible first sign of phlebitis. Observe the cannula.
2	Two of: pain at the site, erythema, swelling	Early stage of phlebitis. Resite the cannula.
3	All of: pain along the path of the cannula, erythema, induration	Medium stage of phlebitis. Resite the cannula and consider treatment.
4	All of: pain along the path, erythema, induration, palpable venous cord	Advanced phlebitis or start of thrombophlebitis. Resite and consider treatment.
5	All of the above, plus pyrexia	Advanced thrombophlebitis. Initiate treatment and resite the cannula.

Record a VIP score at every check and act on it. Remove the cannula at a score of 2 or above, and escalate in line with local policy. Redness is unreliable in darker skin tones: weigh pain, warmth, swelling, induration and change from the patient's own baseline.

Cannula gauge selection

Gauge	Colour	Approx. flow	Typical use
14G	Orange	~270 mL/min	Major haemorrhage, rapid resuscitation
16G	Grey	~180 mL/min	Rapid fluid replacement, major surgery
18G	Green	~90 mL/min	Blood components, large volumes, contrast
20G	Pink	~60 mL/min	Routine infusions, most IV medicines, blood
22G	Blue	~36 mL/min	Fragile or small veins, many medical patients
24G	Yellow	~20 mL/min	Very fragile veins; paediatrics only with separate training

The smallest gauge that will do the job, in the largest suitable vein. Flow rates vary between manufacturers; check the packaging.

Order of draw

	Tube (by additive)	Common cap colour	Used for and notes
1	**Blood cultures**		Always first. With a winged set, aerobic bottle first. Adults: about 10 mL per bottle.
2	**Sodium citrate**		Clotting studies. Fill exactly to the line. Discard tube first if using a winged set.
3	**Serum (with or without gel)**		Many biochemistry, immunology and serology tests.
4	**Lithium heparin**		Biochemistry in many laboratories.
5	**EDTA**		Full blood count, HbA1c; larger tube for group and save or crossmatch.
6	**Fluoride oxalate**		Glucose and lactate. Always last.

Cap colours differ between manufacturers, and some brands use completely different colours. Learn the order by additive and check the tubes your laboratory supplies. Invert tubes gently as the manufacturer states; never shake.

Sharps bin lid colours (HTM 07-01)

Orange lid	Sharps not contaminated with medicines, such as cannula stylets and blood sampling needles
Yellow lid	Sharps contaminated with medicines other than cytotoxic or cytostatic medicines
Purple lid	Sharps contaminated with cytotoxic or cytostatic medicines

Close bins at the fill line. Local policy applies where it differs.

ANTT key parts and key sites

	Cannulation	Venepuncture
Key site	The cleaned skin and the insertion wound	The cleaned skin and the puncture site
Key parts	Needle tip and catheter, hub, needle-free connector, syringe and flush tips	Needle tip, holder's inner needle, blood culture bottle tops

Standards this record is based on

NMC (2018) The Code. NIVAS (2026) Clinical Standards for Vascular Access and Infusion Therapy. RCN (2016) Standards for Infusion Therapy. IPS, RCN and NIVAS (2020) UK Vessel Health and Preservation Framework. epic3 (2014). NHS England National Infection Prevention and Control Manual. ANTT Clinical Practice Framework. WHO (2010) Guidelines on drawing blood. CLSI GP41. BSH (2018) Pre-transfusion compatibility procedures. UKHSA SMI B 37. Health and Safety (Sharp Instruments in Healthcare) Regulations 2013. HTM 07-01. Where local policy differs, local policy applies.