National Infusion and Vascular Access Society (NIVAS)
Competency for Central Venous Access Device (CVAD) Site Care and Dressing Change

Practitioner’s name……………………………………………………………………………………………………

Clinical Area: - …………………………………………………………………………………………………………

Statement of Outcome:

The practitioner will demonstrate competence in performing CVAD site care, needlefree device and dressing changes.

Performance Criteria

The practitioner will be able to demonstrate:

1. Knowledge of the organisation’s policy and is able to discuss the rationale for changing a CVAD dressing and the possible complications associated with the procedure.

2. Knowledge of the type of CVAD in use and the difference between valved and open-ended catheters and the use of an external clamp where appropriate.

3. Appropriate hand hygiene, cleaning of the dressing trolley and the collection of the correct equipment for the procedure.

4. An appropriate introduction at the bedside, explanation of the procedure and the acquisition of the patient’s consent. Ensures the patient’s position is appropriate for the procedure as well as comfortable (If the patient lacks capacity, best interests’ decisions should be made or consent obtained by legal proxy).

5. The use of universal precautions (hand washing and appropriate use of gloves and apron), and prepares the equipment following the principles of asepsis.

6. The removal of the old dressing using a ‘stretch-technique’ and an upwards direction to prevent displacement of the CVAD. Avoids touching the insertion site at all times.

7. An assessment of the integrity of the device and can demonstrate checking for signs of complications.
8. The removal of non-sterile gloves and further decontamination of hands before the application of sterile gloves. (If applicable, removes the securement device and Chlorhexidine dressing, for tunnelled, cuffed catheters considers the timescale for the removal of sutures and winged securement device). Uses 2% Chlorhexidine /70% alcohol solution to clean around the insertion site. Allows to air dry before applying securing device (if applicable), Chlorhexidine dressing if used, and transparent semi-permeable dressing. Dates dressing.

9. Safe removal of the the old needlefree device using clamps when present, appropriate disinfection of the proximal catheter and application of new sterile needlefree device using aseptic non-touch technique

10. Correct flushing of the CVAD using at least 10ml 0.9% sodium chloride and utilising a ‘push pause’ flush with a positive pressure disconnection. Identifies the need for Heparinised saline if required according to organisational policy.

11. Disposal of equipment as clinical waste, cleaning of trolley and decontamination of hands.

12. The completion of appropriate documentation.

It is the responsibility of each individual undertaking a procedure to ensure they have the appropriate skills and knowledge to be competent in accordance with their individual regulating body e.g. NMC.

The individual practitioner will be responsible for ensuring they regularly update their clinical knowledge for this area of practice with reference to the most current guidelines.

This competency will be reviewed every 2 years from the time of publication.

Date compiled:

Review date:
National Infusion and Vascular Access Society (NIVAS)

Competency for Peripherally Inserted Central Catheter (PICC) dressing

Practitioner’s name………………………………………………………………………………………………………

Clinical Area: - ……………………………………………………………………………………………………………

Statement of Outcome:

The practitioner will demonstrate competence in changing a PICC dressing.

Performance Criteria

The practitioner will be able to demonstrate:

1. Knowledge of the organisation’s policy and is able to discuss the rationale for changing a PICC dressing and the possible complications associated with the procedure. (Dressing to be changed 24 hours post insertion and weekly thereafter unless loose or soiled, securement device to be changed according to the manufacturer’s guidelines, Chlorhexidine dressing to be changed weekly if used, needle-free access device to be changed according to organisational policy).

2. Knowledge of PICC tip position and the relevance of this. The difference between valved and open-ended catheters and the use of an external clamp where appropriate.

3. Appropriate hand hygiene, cleaning of the dressing trolley and the collection of the correct equipment for the procedure.
4. An appropriate introduction at the bedside, explanation of the procedure and the acquisition of the patient’s consent. Ensures the patient’s position is appropriate for the procedure as well as comfortable. *(If the patient lacks capacity, best interests’ decisions should be made or consent obtained by legal proxy).*

5. The use of universal precautions (hand washing and appropriate use of gloves and apron), and prepares the equipment following the principles of asepsis.

6. The removal of the old dressing using a ‘stretch-technique’ and an upwards direction to prevent displacement of PICC. Avoids touching the insertion site at all times.

7. An assessment of the integrity of the device and can demonstrate checking for signs of infection, catheter migration (checks internal and/or external length of PICC) and thrombosis (pain in the arm or neck, swelling and/or discolouration of the limb, oedema of neck, chest and upper extremity).

8. The removal of non-sterile gloves and further decontamination of hands before the application of sterile gloves. *(If applicable, removes the securement device and Chlorhexidine dressing).* Uses 2% Chlorhexidine /70% alcohol solution to clean around the insertion site. Allows to air dry before applying securing device and Chlorhexidine dressing if used, and transparent semi-permeable dressing. Dates dressing.

9. Disposal of equipment as clinical waste, cleaning of trolley and decontamination of hands.

10. The completion of appropriate documentation.

It is the responsibility of each individual undertaking a procedure to ensure they have the appropriate skills and knowledge to be competent in accordance with their individual regulating body e.g. NMC.

The individual practitioner will be responsible for ensuring they regularly update their clinical knowledge for this area of practice with reference to the most current guidelines.
This competency will be reviewed every 2 years from the time of publication.

Date compiled:

Review date:
National Infusion and Vascular Access Society (NIVAS) Competency for Peripherally Inserted Central Catheter (PICC) insertion

Practitioner’s name........................................................................................................................................

Clinical Area: - ........................................................................................................................................

Statement of Outcome:

The practitioner will demonstrate competence in the insertion of a PICC

Performance criteria

The practitioner will be able to demonstrate:

1. Knowledge of the venous, arterial and cardiovascular systems in relation to vascular access.

2. An assessment of the patient’s suitability for PICC placement and confirm device required, following a full review of the patient and their history/future requirements.

3. Knowledge of the process of informed consent including what information has to be included.

4. That the environment is suitable for a sterile procedure to be performed and that emergency equipment and personnel are accessible should they be required.

5. An appropriate introduction at the bedside and identification of the correct patient.

6. An explanation of the procedure and the acquisition of the patient’s consent. *(if the patient lacks capacity, best interests’ decisions should be made or consent obtained by legal proxy).*

7. The use of maximum barrier precautions and an aseptic technique when preparing the patient and equipment for device insertion and be able to discuss the importance.

8. The maintenance of asepsis throughout the procedure.

9. That the patient’s position is appropriate for the procedure as well as comfortable.
10. The use of ultrasound (if available) for determining vessel depth, size in relation to catheter diameter, and the assessment of a range of vessels in order to decide upon the optimum site for vascular access.

11. Appropriate measurement of the approximate device length required, and an awareness that the catheter may need to be trimmed prior to insertion.

12. Cleaning of the patient’s skin at the chosen insertion site for 30 seconds with 2% chlorhexidine and 70% alcohol using a single use applicator and allows it to dry (or appropriate alternative if allergy present).

13. The administration of an appropriate local anaesthetic.


15. The application of logical and safe steps during
   a. Guide wire insertion and manipulation
   b. Use of sharps and blades
   c. Catheter measurement whilst demonstrating knowledge of optimal tip position
   d. Dilator / peel away sheath use

16. Knowledge of methods required to prevent excessive blood loss/air embolus throughout the procedure. (Microseldinger technique is the preferred method).

17. Knowledge of troubleshooting methods to that may be required to manage problems with catheter advancement.

18. The attachment of a needlefree access device(s) and flushing with 10ml 0.9% normal saline using a push pause technique and a positive pressure disconnection.

19. Methods to reposition the device if blood flow is intermittent or absent. For example; Valsava manoeuvre, turning the patients head, moving the arm, relaxing the shoulder, brisk, pulsatile flush. (The use of ultrasound on the jugular vein may help to identify incorrect positioning in this vein).

20. Clinical judgement in the event of incorrect or unsatisfactory placement.

21. Securement of the PICC using suture free device.

22. The application of a sterile, transparent, semi-permeable dressing.

23. The safe disposal of sharps and clinical waste.

24. Confirmation or has confirmed, the correct PICC tip position using standard X-ray or ECG tip location technology. Demonstrates an
awareness of own limitations and seeks advice if unable to determine the correct PICC tip position.

25. Documentation of the procedure and correct tip location or appropriate action in the patient’s care record.

It is the responsibility of each individual undertaking a procedure to ensure they have the appropriate skills and knowledge to be competent in accordance with their individual regulating body e.g. NMC.

The individual practitioner will be responsible for ensuring they regularly update their clinical knowledge for this area of practice with reference to the most current guidelines.

This competency will be reviewed every 2 years from the time of publication.

Date compiled:

Review date:
National Infusion and Vascular Access Society (NIVAS)

Competency for Peripherally Inserted Central Catheter (PICC) removal

Practitioner’s name: ........................................................................................................

Clinical Area: - ............................................................................................................

Statement of Outcome:

The practitioner will demonstrate competence in the removal of a PICC

Performance Criteria

The practitioner will be able to demonstrate:

1. An understanding of why the PICC is to be removed.

2. An awareness of the possible complications of PICC removal and suggest the actions to take if they occur.

3. An understanding of the steps involved in the procedure.

4. Appropriate hand hygiene, cleaning of the dressing trolley and the collection of the correct equipment for the procedure.

5. An appropriate introduction at the bedside and identification of the correct patient.
6. An explanation of the procedure and the acquisition of the patient's consent. Ensures the patient's position is appropriate for the procedure as well as comfortable (If the patient lacks capacity, best interests' decisions should be made or consent obtained by legal proxy).

7. Confirmation of the PICC removal request (usually in the patients' notes).

8. Adherence to own organisational guidelines with regards to necessary clotting and platelet levels prior to PICC removal.

9. Checking the length of catheter inserted into the patient with the insertion record.

10. The use of universal precautions (hand washing and appropriate use of gloves and apron), and prepares the equipment following the principles of asepsis.

11. Assessment of the integrity of the device and takes action if required.

12. Removal of the existing dressing, and disposal according to own organisational waste management policy.

13. The use of 2% chlorhexidine in 70% alcohol to clean the skin for 30 seconds and allows it to air dry.

14. The slow withdrawal of the PICC and ensures all is removed in accordance with the insertion record.

15. The application of digital pressure for the correct amount of time.

16. The application of an occlusive, airtight dressing once bleeding has stopped.

17. The correct method of sending the PICC tip for microbiological analysis if
required.

18. The maintenance of an aseptic technique throughout the procedure.

19. Disposal of waste in line with organisational policy.

20. Appropriate communication throughout the procedure in order to reassure the patient.

21. The completion of appropriate documentation.

22. The maintenance of patient privacy and dignity throughout the procedure.

It is the responsibility of each individual undertaking a procedure to ensure they have the appropriate skills and knowledge to be competent in accordance with their individual regulating body e.g. NMC.

The individual practitioner will be responsible for ensuring they regularly update their clinical knowledge for this area of practice with reference to the most current guidelines.

This competency will be reviewed every 2 years from the time of publication.

Date compiled:

Review date:
National Infusion and Vascular Access Society (NIVAS)

Competency for Tunnelled Cuffed Catheter Insertion and Port insertion

Practitioner’s name………………………………………………………………………

Clinical Area: - ……………………………………………………………………………

Statement of Outcome:

The practitioner will demonstrate competence in the insertion of a Tunnelled Cuffed Catheter or Implanted Port

Performance Criteria

The practitioner will be able to demonstrate:

1. Knowledge of the venous, arterial, cardiovascular and respiratory systems in relation to vascular access.

2. Knowledge of the physiology of blood flow and its importance in device and vein selection.

3. A critical knowledge of the factors that influence device choice taking into account factors including: length of treatment, type of treatment, device availability, previous complications of vascular access and known vascular anatomical abnormalities, and patient preference.

4. An understanding of the importance of acceptable blood parameters necessary prior to device insertion (e.g. International Normalised Ratio (INR), PT, PTT, White Cell Count, Neutrophil count, Platelet Count, Potassium etc.)
5. Knowledge of the process of informed consent including what information has to be included.

6. An understanding of the safe use of local or general anaesthesia or the use of conscious sedation during device insertion. They should also be able to discuss the appropriate use of patient monitoring (eg: ECG, Oximetry) to support the procedure.

7. An understanding of the effect of patient positioning and is able to discuss how to adapt this in patients who are unable to be managed safely in the trendelenburg position.

8. An explanation of the procedure and acquisition of the patient’s consent (If the patient lacks capacity, best interests’ decisions should be made or consent obtained by legal proxy).
National Infusion and Vascular Access Society (NIVAS)

Competency for Unblocking Central Venous Access Devices (CVADs)

Practitioner’s name: ..............................................................

Clinical Area: - ....................................................................

Statement of Outcome:

The practitioner will demonstrate competence in assessing the cause of a patient’s occluded CVAD and the undertaking remedial action.

Performance Criteria

The practitioner will be able to demonstrate:

1. Knowledge of the potential causes of catheter occlusion and consider the use of an appropriate catheter clearance procedure in order to preserve the patient’s CVAD where possible.

2. Knowledge of medication and/ or solution dosage, contraindications, potential side effects/complications, techniques for instillation, and patient/carer education.

3. Their own organisation’s guidance on which thrombolytic should be used for
unblocking CVADs, e.g. Urokinase.

4.5. An understanding of the pressure that can potentially be exerted on a CVAD when medication / solutions are being instilled and the rationale for not using a syringe smaller than 10ml for the instillation of thrombolytic agents.

5.6. Assessment for, and identification of signs of CVAD occlusion. This may include the inability to withdraw blood, sluggish flow and/or inability to flush or infuse through the device.

6.7. An appropriate catheter clearance procedure.

7.8. Clear labelling of the CVAD when the thrombolytic agent is left in situ e.g. “Urokinase in situ - do not use”.

8.9. The completion of appropriate documentation including the outcome of the procedure in the patient’s notes.

9.10. Clinical judgement if the CVAD unblocking procedure is unsuccessful. This may include repeating the procedure, referring to interventional radiology or removal/replacement of the CVAD.

It is the responsibility of each individual undertaking a procedure to ensure they have the appropriate skills and knowledge to be competent in accordance with their individual regulating body e.g. NMC.

The individual practitioner will be responsible for ensuring they regularly update their clinical knowledge for this area of practice with reference to the most current guidelines.

This competency will be reviewed every 2 years from the time of publication.

Date compiled:

Review date: