Birmingham Children's Hospital NHS
NHS Foundation Trust

Policy for the Care and Management of Central Venous Catheters

Version:	4.0.0
Approved by:	Senior Operational Nurses Group & Clinical Risk & Quality Assurance Committee
Date Approved:	August 2016 & December 2016 respectively
Ratified by:	Policy Review Group
Date ratified:	February 2017
Name of originator/author:	Jay Kumar, Hermione Montgomery, Oliver Bagshaw and Judith Room
Name of responsible committee/individual:	Julia Bottle, Michelle Butcher, Alison Trimmer, Gillian Campbell, Laura Ludman, James Bennett, and Jason Patel
Date issued:	December 2016
Review date:	December 2018
Target audience:	All Trust Staff

Contents

Appendices

1 Introduction

This policy was developed to ensure that there is consistency in practice when for caring for infants, children and young people with central venous catheters. Central venous catheters include long term catheters (Hickman/Broviac), Peripherally Inserted Central Catheters (PICC) and short term central venous catheters.

2. Purpose

2.1 To inform staff of their responsibilities regarding the care and management of central venous catheters.

2.2 To provide a concise theoretical framework based on accepted evidence based practice.

2.3 To ensure practice is consistent throughout the Trust.

3. Duties

3.1 All qualified staff are responsible for ensuring their practice complies with this policy.

3.2 It is the responsibility of the local manager to ensure that the policy and its procedures are made available to all staff.

3.3 This Trust policy will support the training, competency based assessment and clinical practice in the working environment.

3.4 All staff must ensure that they comply with the requirements for Aseptic Non-Touch Technique (ANTT).

3.5 All staff are responsible for monitoring and maintaining standards of care via monthly audit of High Impact Interventions for insertion; access and on-going care of central venous catheters (Appendix D)

4 Method for development

Identification of stakeholders

4.1 This Policy applies to all clinical staff within the Trust and is to be used in all in and outpatient areas.

4.2 A copy of the Care and Management of Central Venous Catheters policy must be available on the intranet for staff to read and refer to as necessary.

4.3 All clinical staff should be instructed on the location of the policy as part of their induction programme and appropriate training given where necessary.

4.4 Competency must be assessed for all staff using the Trust competency documents.

Policy developed in conjunction with the following professionals:
Clinical Nurse Specialist for Nutrition Support and Intestinal Failure Team, Clinical Education Team, Senior Nurse for Infection Control, Head of Anaesthetics and Clinical Lead Nurse PICU, Educational Lead from Oncology/Haematology, Cystic Fibrosis Clinical Nurse Specialist and Lead Cancer Pharmacist, Heads of Nursing, Operational Lead Nurses, PICU Registrar.

5 Content

5.1 Definitions

5.1.1 Central venous catheter (CVC): a line placed into a vein with the distal tip usually in the superior or inferior vena cava (proximal to the subclavian vein, internal jugular vein, or femoral vein). This includes lines placed directly or terminating in the pulmonary artery, right or left atrium, umbilical vein or trans-hepatic vena cava.

5.1.2 Temporary (non-tunnelled) CVC: a line placed into a central vein with an expected duration of use of <7-10 days; a line without a tunnelled component with the skin puncture site immediately adjacent to the vein accessed.

5.1.3 Peripherally inserted CVC (PICC): a line placed into a central vein with the skin puncture and venous puncture site within the peripheral venous system, typically the arm, leg or scalp, for expected duration of use >10 days.

5.1.4 Permanent (tunnelled) CVC: a line placed into a central vein with an expected duration of use >10 days; a line with a tunnelled component (e.g. Broviac line, Hickman line)

This policy does not cover the management of cardiac bypass, Extracorporeal Life Support (ECLS), vascular ports or haemofiltration cannulae.

5.2 Booking a central venous catheter insertion.

Having identified a child requires central venous access the referring team should decide upon the urgency, type of line and likely duration of use.

5.2.1 Elective Bookings (Insertions and Removals)

Requests must be made via the Vascular Access Service via the P drive on the Trust intranet. Bookings are assessed and scheduled accordingly by The Vascular Access Team. A password-protected list of children waiting and scheduled for catheter insertion and removal is available on the Trust intranet.

Infection status of the patient must be checked at time of line booking and any patient infected or with a history of colonisation must be isolated on admission (if not already admitted); placed last on the list, and this must be recorded on the central booking form . If required the Infection Prevention and Control team can be contacted for advice on x 9966.

Particularly complicated cases merit further discussion with members of the vascular access service.

5.2.2 Urgent cases

Urgent cases should be discussed initially with members of the Vascular Access Service on weekdays between 9am and 5pm or via the on-call Consultant Anaesthetist. This discussion must be conducted on a consultant to consultant basis to allow appropriate scheduling and the correct choice of line.

The referring team may then book the child with the theatre co-ordinator, ext. 9562. A separate booking form is required for the emergency list Such cases will not be booked without the discussion as described above and a CVL booking form completed.

Most lines are screened with X-ray or ultrasound and a radiographer.

The person booking the line should book the radiographer.

Details of microbiology issues and isolation status must be flagged up when booking the case.

5.2.3 Paediatric Intensive Care Unit (PICU)

For patients on PICU needing a tunnelled CVC who do not need additional elective or emergency surgery, discussion with the Vascular Access Service and booking form completion are required.

Patients on PICU, who require a temporary CVC or tunnelled CVC placed as part of the surgical process, do not require booking.

5.2.4 Documentation

The indication, consent, procedure, line type and post-operative instructions must be documented in the patient health care record for each line placed. The positive confirmation of position and 'ready to use' status must be documented by the responsible practitioner placing the line on the BCH Care and Management of Central Venous Lines document (2016).

For Paediatric Intensive Care patients the PICU Procedure Chart should be used

5.3 Preparation of the patient

5.3.1 Consent

Informed consent must be taken prior to the procedure following the BCH Consent to Treatment Trust Policy (Trust intranet)

Physical, emotional and psychological preparation of both the child/young person and family prior to the insertion of the catheter is required. A play specialist and/or a child psychologist's involvement in preparation may be beneficial if any needle phobic or other anxieties are expressed.

The clinical indications, procedure technique, management and care of the catheter, the risks, complications and the length that the device is in situ need to be explained and discussed with either/both the child and family.

Written information should be provided in the format of a Central Line information booklet (8)

5.3.2 MSSA/MRSA

All patients undergoing CVC insertion must have a nose swab collected, which is tested for MSSA as well as MRSA as per Trust Policy for the prevention and clinical management of bloodstream infections with meticillin-sensitive Staphylococcus aureus (MSSA). Please state pre CVC insertion on microbiology form.

5.3.3 Pre-surgical washing pre-procedure

All patients (except cardiac) must be washed top-to-toe including hair with Octenisan undiluted, allowing a contact time of at least one minute prior to washing off.

Cardiac patients must be washed top-to-toe including hair with 4% chlorhexidine scrub diluted 1:8, allowing a contact time of at least 1 minute prior to washing off as per infection control guidance.

5.4 Insertion

It is imperative that every line insertion is conducted according to the criteria identified in the High Impact Intervention Care Bundle (Appendix D). These criteria are incorporated in to the audit document for CVL Insertion.

All precautions must be taken as specified at all times. None are regarded as optional.

5.4.1 Skin Preparation prior to line insertion

Prior to line insertion a 2% chlorhexidine 70% isopropyl alcohol solution (ChloraPrep) device must be used **and allowed to dry**, unless the patient is sensitive to chlorhexidine. Chloraprep is not licenced in neonates < 2 months of age/< 1kg in weight/<26 weeks gestation due to fragility of the skin, and the risk of pooling of the product that can result in burns to the skin.

Risks versus benefits should be weighed up carefully in this cohort of patients and a very gentle technique of application must be adopted, and the product allowed to dry.

5.4.2 Skin decontamination post line insertion

A BioPatch is applied at time of insertion (‘blue to sky’) ensuring 360 degree adherence to the skin. The BioPatch will release chlorhexidine and absorb any exudate. The BioPatch should NOT be placed on patients at risk of skin breakdown including neonates (<1 kg), epidermolysisbullosa, toxic epidermolysis, scalded skin syndrome, toxic shock syndrome or areas of actual skin burn/desquamation around the line site.

This must be documented on the BCH Care and Management of Central Venous lines document (2016).

5.4.3 Dressing

IV 3000 is the current standard dressing of choice being sterile, transparent and semi-permeable, allowing observation of the exit site and maximum evaporation of moisture.

5.4.4 Bleeding

Immediately post operatively the site should be observed for excess bleeding. Pressure will need to be applied to the site in this instance.

5.5 On-going Care

5.5.1 Catheter Fixation

The line must be securely fixed at the time of insertion to prevent accidental removal with a transparent, semi permeable, sterile dressing**.** Ideally, the CVC should be additionally secured with a suture.

The catheter and infusion lines should be fixed and supported in such a way that minimises the risk of pulling and accidental removal.

5.5.2 Site Decontamination and dressing

Dressings must be changed weekly using a sterile, transparent, semi-permeable dressing to allow observation of the site. More frequent dressing changes will be required should it become loose, soiled, wet or non-adhesive. IV 3000 is the current standard dressing as this allows for maximum evaporation of moisture. Using a stretching technique when lifting the dressing disrupts the glue and reduces discomfort.

A BioPatch is also applied with each weekly dressing change for the first 3 weeks post insertion. The BioPatch releases chlorhexidine and absorbs any exudate.

Consideration should be given to neonates and patients with impaired skin integrity as BioPatch may not be suitable (see 5.2.4). This must be documented on the BCH Care and Management of Central Venous lines document (2016)

At each dressing change the site must be cleaned with a 2% chlorhexidine in 70% isopropyl alcohol solution (ChloraPrep) using a back and forth motion creating friction

for at least 15 seconds **and be allowed to dry**. (1). If visibly dirty the site must be cleaned with normal saline solution initially.

It is imperative that each time a line is accessed or maintained, care is conducted according to the criteria identified in the audit documents CVL Access and CVL On-going Care (Appendix D).

All criteria are equally important and none must be regarded as optional.

There may be situations where alternative dressings are required. This must be clearly documented. Contact Tissue Viability Team for advice.

5.5.3 On-going Skin Decontamination.

All patients (except cardiac patients) must have Octenisan wash for 4 days post-procedure and every Monday and Thursday thereafter.

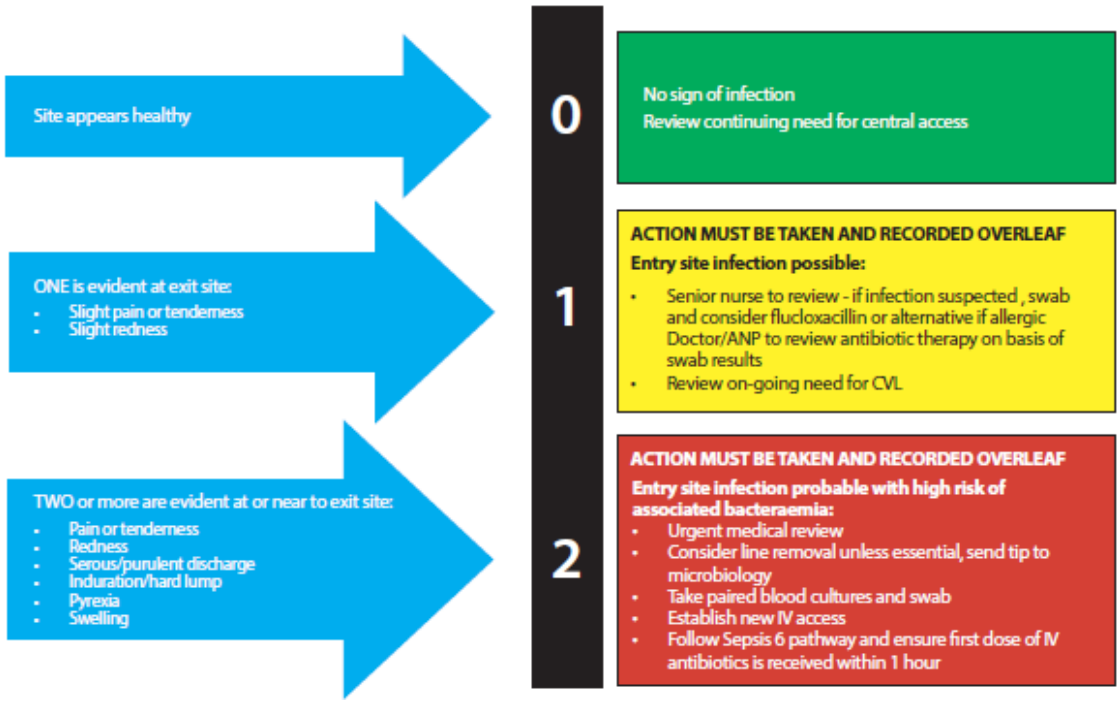
Cardiac patients must have Octenisan wash **every day** until all pacing wires and drains are removed. Consideration must be given to neonates and patients with impaired skin integrity as Octenisan may not be suitable (see 5.2.4).

Octenisan wash must be used every Monday and Thursday as on-going care for the duration of the inserted line.

5.5.4 Site observation

Catheter site inspection is paramount in allowing prompt detection of complications.

A central line visual inspection site score must be carried out once every twelve hours and actions taken accordingly, and documented in the BCH Care and Management of Central Venous lines document (2016).



5.6 Central Venous Catheter Access

5.6.1 Aseptic Non-Touch Technique (ANTT)

When accessing the hub, an Aseptic Non Touch Technique must be used (Appendix C).

Infection and Prevention Control Aseptic Non Touch Technique Policy (January 2017)

Precautions may vary depending on the task. Non sterile gloves and a tray/trolley (cleaned with a clinell universal wipe) are suitable for the majority of interventions.

5.6.2 Needle-free Safety Devices

Where there are needle-free devices the user must follow the manufacturer's instructions.
Please see the Micro clave guideline (Appendix A)

5.6.3. Parenteral Nutrition Lines

A dedicated lumen must be used for parenteral nutrition only (1). A Surgical ANTT procedure must be used when changing parenteral nutrition lines. For parenteral nutrition refer to Nutrition Support and Intestinal Failure Team Guidelines (NSIFT).

5.6.4 Syringes

10 ml syringes should be used for central lines when flushing a catheter or checking patency, as they exert less pressure and therefore can prevent damage to the catheter (2).

Smaller syringes may be required when administering accurate small doses or when cytotoxic medication is pre prepared in 2ml syringes. In such cases patency should be established with a 10 ml syringe initially.

Luer-lock syringes must be used where the medication is to be infused via an infusion pump.

5.6.5 Flushes/Maintaining patency

The catheter hub must be scrubbed for a minimum of 15 seconds with 2% chlorhexidine in 70% isopropyl alcohol solution **and allowed to dry** (1). Prior to flushing the line the catheter must be aspirated to ensure patency and correct placement (2).

Flushing must be carried out using a push pause technique and the line clamped while positive pressure is maintained (2). If any therapies (drugs, fluids and bloods) are administered a compatible solution should be used to flush the catheter in between them to prevent mixing.

The volume of flush should be equal to at least twice the volume of the catheter and add on devices (2)

Long term catheters need to be flushed at least weekly to maintain patency.

Normal saline (0.9%) is sufficient if the catheter is being accessed less than 12 hourly (2).

If the catheter is being used less frequently than 12 hourly **0.5mls – 2mls of Heparin 100units/ml** should be administered.

The dose may vary dependent upon the priming volume of the catheter and/or size of the child.

For Neonatal PICC it may be necessary to maintain patency by continuous infusion of 0.9% normal saline.

5.6.6 Administration sets

Administration sets should be changed every 96 hours or immediately if contamination is suspected and this should be documented on the nursing care record (2).

Pharmaceutical guidelines may indicate more frequent changes due to stability of medication

Blood product administration lines must be changed when a transfusion episode is complete or every 12 hours (2)

Patient controlled analgesia should be infused using an anti-syphon administration set.

For parenteral nutrition refer to Nutrition Support and Intestinal Failure Team Guidelines (NSIFT).

5.6.7 Filters

The use of online filters is recommended for blood product transfusion and Parenteral Nutrition administration

5.7 Complications

5.7.1 Infection

A temporary CVC, once placed, must be reviewed at least daily for the on-going need and removed at the earliest opportunity to avoid catheter-related blood stream infection (CRBSI) (6).

If either a local infection or a CRBSI is suspected, urgent treatment is required and the sepsis 6 BCH guideline must be followed which is available on the Trust intranet. The invasive device must be removed wherever possible; blood culture samples and exit site swab taken and appropriate treatment commenced. Any suspected infections, actions taken and reasons why the device could not be removed must be documented in the BCH Care and Management of Central Venous lines document (2016).

Practitioners should refer to local speciality guidelines or to a Consultant Microbiologist for guidance on treatment of a CRBSI.

5.7.2 Phlebitis, Infiltration and Extravasation

5.7.2.1 Definitions

Phlebitis is the inflammation of the tunica intima of the vein and there are three types: bacterial, mechanical and chemical. Clinical signs of phlebitis include erythema, pain and warmth (3).

Infiltration is the inadvertent infusion of a non-vesicant medication into the surrounding tissue instead of the vein (3).

Extravasation is the inadvertent of a vesicant medication into the surrounding tissue instead of the vein (3)

5.7.2.2 Treatment

Refer to BCH Prevention of Extravasation Policy for recognition, treatment and management.

During use the site should be monitored hourly to detect complications as per BCH Extravasation policy.

5.7.3 Air Embolus

Air embolus is defined as air in the vascular system and may reduce cardiac output and can prove fatal (5). The risk of air emboli is very real when caring for patients with central access devices, but can occur with any intravenous access. Air embolus can cause a fall in cardiac output and death.

Signs of air emboli include confusion, disorientation, cyanosis, hypotension, weak thready pulse or collapse. If suspected seek medical assistance immediately, turn the patient onto their left side and place in the Trendelenberg (head down) position and administer oxygen (6).

5.7.4 Occlusion/Partial Occlusion Failure to aspirate blood

If it is not possible to aspirate blood from any of the catheter lumens, this may indicate catheter occlusion. This could be related to the infusate, kinking or compression of the catheter, fibrin sheath formation or thrombosis.

Use the Management of Occluded Central Venous Catheters algorithm (Appendix B).

In the case of temporary CVCs, a chest x-ray should be taken and consideration given to removal or replacement of the catheter.

A chest x-ray or lineogram may be required with referral to the Vascular Access Team.

Central venous access devices are the commonest cause of venous thromboembolism in neonates and children. This can have serious consequences such as catheter malfunction, venous occlusion and a clot embolism.

If a thrombus is suspected **do not use** until an ultrasound of the catheter tip and surrounding veins has been carried out by a radiologist or cardiologist. If a thrombus is present, consideration should be given to removing the catheter and commencing anticoagulants.

Acute onset of symptoms such as dyspnoea, chest pain, syncope, hypoxia, hypotension, tachycardia, tachypnoea, haemoptysis, sweating and fever may be due to pulmonary embolism. This should be included in the differential diagnosis and the appropriate investigations undertaken to confirm or exclude it.

If the catheter has more than one lumen, then only those lumens that allow free aspiration of blood should be used, until the catheter position has been deemed satisfactory by a member of the medical staff/ANP Team.

5.7.5. 'Pinch off'

'Pinch off 'is a term used to describe is mechanical compression of the catheter between clavicle and first rib which can occur during placement. This is manifested by intermittent blocking of the catheter. If suspected refer to the Management of Occluded Central Venous Catheters algorithm (Appendix B).

5.7.6 Catheter Dislodgement/Accidental removal

External catheters should be secured appropriately to prevent catheter dislodgment. If the line is accidently removed pressure should be applied to the site until bleeding stops. An occlusive dressing should be applied and the catheter checked to ensure that it is intact. If catheter dislodgment is suspected the catheter should not be used until the tip position has been confirmed.

5.8 Planned Catheter removal

Removal of a CVC must be discussed and agreed with the responsible medical/surgical team to confirm resolution of the need for the line to remain in place. The method of removal of the CVC will depend on the type of catheter:

5.8.1 Temporary CVC: dressing and suture removal kit will be required. Assessment of coagulation status and platelet count should be considered by the medical team. Patients with full anticoagulation (e.g. CVVH, heparin/warfarin) may need this discontinuing prior to removal – liaise with medical team.

5.8.2 Tunnelled CVC: liaise with the Vascular Access Service as the line will have a subcutaneous component requiring release.

5.8.3 PICC: dressing and suture removal kit will be required. Assessment of coagulation status and platelet count should be considered by the medical team. Patients with full anticoagulation (e.g. CVVH, heparin/warfarin) may need this discontinuing prior to removal – liaise with medical team.

5.8.4 Umbilical venous line: only applicable to PICU, discuss removal with the medical/surgical team. A dressing pack, gauze swabs, artery forceps and cotton tie should be available prior to line removal.

5.8.5 Patients on ECLS: Note for any patients on ECLS it is unusual to remove lines due to the risk of bleeding and the decision to do so must be taken by the ECLS team on the daily ward round. Please refer to the ECLS protocol.

5.9 Discharge Information

Care of the central catheter must be discussed with the patient/family using the Central line booklet which must be provided on discharge. (8)

The following equipment must be provided

- Written information (8)
- Blues clamps
- Spare dressings
- Gauze
- Spare Caps
- Octenisan wash
- Heparin and saline solution with community prescription if required.

5.9 Education & Training Requirements

5.9 Staff Training

Training may be undertaken with a variety of and blended modes of learning: face to face, eLearning, experiential, demonstration of competency etc.

Reporting & Compliance -

The Education & Learning (E & L) department will proactively consult around the E & L needs at BCH NHS FT and plan delivery, commissioning and programmes in response to workforce and service needs. For all core Statutory and Mandatory Training E & L will design and deliver using blending learning approaches, and report compliance through to the Trust Board. It will have in place mechanisms for escalation around non-attendance and compliance, based on the agreed KPI's.

For role essential, role desirable or speciality specific training, the identified lead will be responsible for defining and designing training needs, and will need to ensure that the quality assurance process for education and learning is followed where appropriate. The lead will report compliance within the relevant governance structure.

6 Monitoring Compliance With and the Effectiveness of the policy

6.1 Process for Monitoring Compliance and Effectiveness

Monthly audits of compliance with regard to CVL High Impact Intervention Care Bundles are undertaken in clinical areas.

The Infection Prevention and Control Team (in conjunction with Infomatics) is responsible for ensuring that data regarding compliance with standards for CVL Access; CVL Insertion and CVL On-going Care are displayed on a performance dashboard and monitored closely.

The department managers and lead nurses are responsible for making sure data is inputted in line with deadlines, and also for ensuring actions are taken appropriately should any audit be found to be non-compliant.

Catheter-related bloodstream infections with MSSA require a route cause investigation.

6.2 Standards/Key Performance Indicators

Audit will identify areas of non-compliance and steps will be taken to improve compliance with best practice standards.

Patients with catheter-related bacteraemia will be identified and managed appropriately

7 References

1. Loveday, H.P, Wilson, J.A, Pratt, R.J, Golsorkhi, M, Tingle, A, Bak, A, Browne, J, Prieto, J and Wilcox, M.(2014) epic3: National Evidence-Based Guidelines for Preventing Health care - Associated Infections in NHS Hospitals in England. Journal of Hospital Infection 8651 (2014) S1-S70.
2. Royal College of Nursing (2016) Standards for Infusion Therapy 4th Edition. Royal College of Nursing. London.
3. Weinstein, S.M, (2007) Plumer's Principles and Practice of Intravenous Therapy. Eighth Edition. Lippincott Williamsans Wilkins London.
4. Dougherty, L. (2008) IV Therapy: recognizing the differences between infiltration and extravasation**.** British Journal of Nursing 17 (14): 896-901.
5. S. Gordy, Rowell, S (2013) Vascular Air embolism. International Journal of Critical Illness and injury Science. (www.ncbi.nlm.nih.gov).
6. L.S, Cook (2013) Infusion-related air embolism. Journal of Infusion Nursing. Vol 36. 1. PP. 26-36.
7. PronovostPJ.Needham, D, Berenholtz.S, Sinopoli, D, Chu. H, Cosgrove. S, Sexton.B, Hyzy. R, Welsh. R, Roth. G, Bander. J, Kepors. J, Goeschel. C An Intervention to Decrease Catheter-Related Bloodstream Infections in the ICU, *N Engl J Med* 2006; 335:2725-2732
8. 'I need a Central Venous Line Booklet' Information Leaflet for young people Birmingham Children's Hospital.
9. British Medical Association and Royal Pharmaceutical Society (2016) British National Formulary (2016) Pharmaceutical Press.
10. Syner-KINASE (urokinase) (2009) Summary of Product Characteristics.

Appendix A Guidelines for the use of Microclave

Birmingham Children's Hospital
NHS Foundation Trust

Guidelines for Use - MicroClave®

- Remove from packaging and prime the MicroClave® or extension set using an asceptic non-touch technique
- Do not overtighten the MicroClave® device onto the cannula OR hub of a central line when attaching the device
- Scrub the hub of the MicroClave® BEFORE and AFTER each access with a 2% chlorhexidine, 70% alcohol wipe. CLEAN FOR 30 SECONDS AND ALLOW TO DRY FOR 30 SECONDS

- Do not try to access with a needle
- No additional caps/bungs are required on the end of the MicroClave®

- Access with a luer lock OR slip luer syringe. A simple ¼ turn with a slip luer syringe will ensure retention into the device
- When accessing a central line, hold the device **AND** not the hub of the line, to avoid over-tightening
- MicroClave® connectors can remain in place for up 7 days or 600 activations, whichever comes first

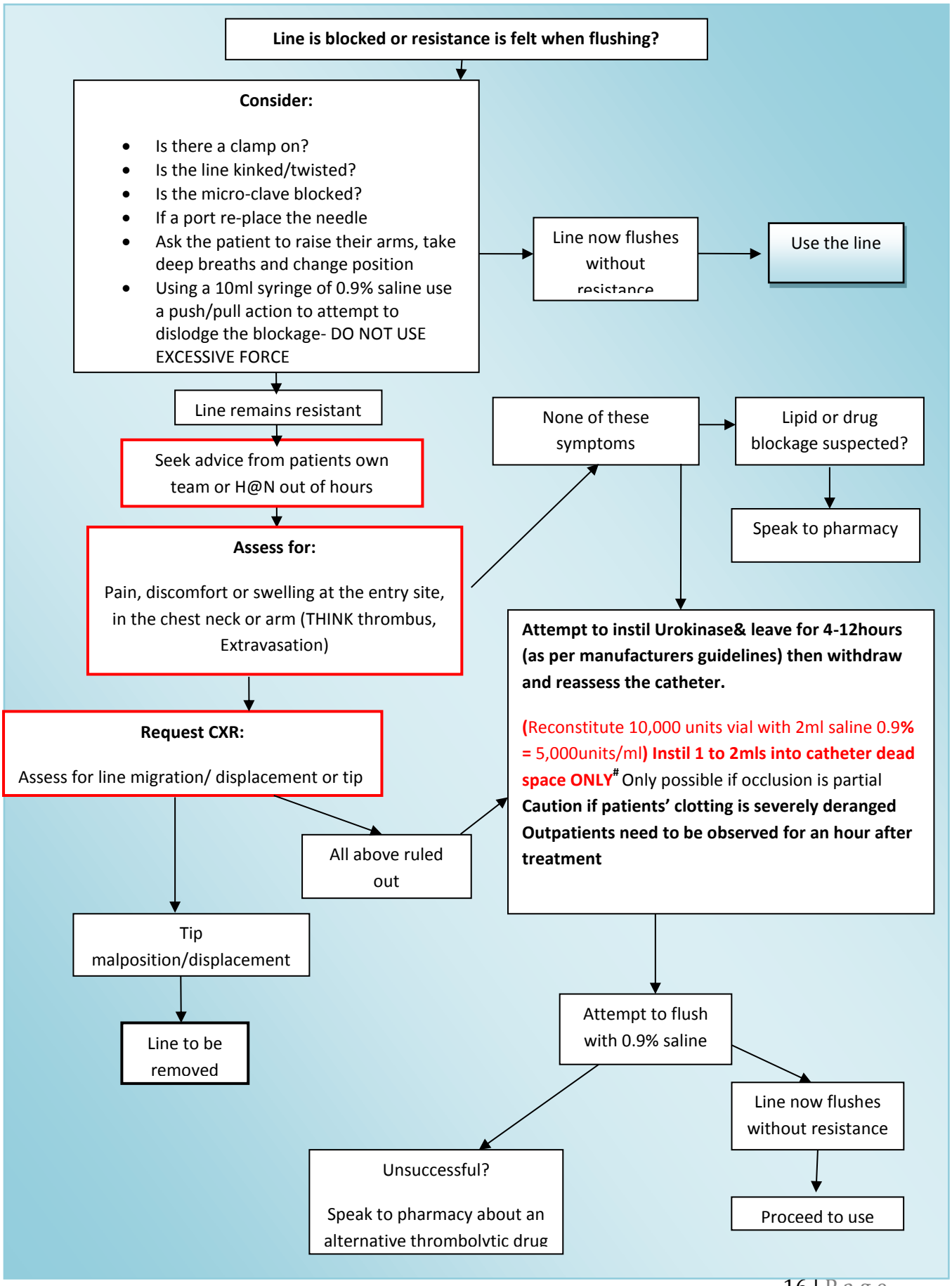
DO NOT PLACE END CAPS ON THE END OF THE MICROCLAVE® –
The MicroClave® is a closed barrier to bacterial colonisation

Fannin
Caring for Life since 1829

If you have any questions regarding the change over please contact: **Ben James**, the Product Specialist from Fannin UK and can be contacted on: **07795 238 368**

PART OF DCC VITAL
PHARMA DEVICES LOGISTICS

Appendix B Management of Occluded Central Venous Catheters



Appendix C:

Recommended ANTT for Commonly Performed Procedures

Procedure	Technique	Hand Hygiene	Field
Accessing vascuports (i.e. inserting gripper needle into implanted port)	Standard ANTT	Routine	General
Biopsies	Surgical ANTT	Surgical scrub	Critical
Care of wounds healing by primary intention, e.g. surgical incisions	Standard ANTT	Routine	General
Indwelling urinary catheter insertion	Surgical ANTT	Surgical scrub	Critical
Insertion of tracheostomy tubes (surgical)	Surgical ANTT	Surgical scrub	Critical
Suturing of wounds	Standard ANTT	Routine	General
Central venous catheter insertion including Hickman lines and Arterial lines	Surgical ANTT	Surgical scrub	Critical
Chest drain insertion	Surgical ANTT	Surgical scrub	Critical
Emptying of urinary catheter drainage bag	Standard ANTT	Routine	General
Accessing a central venous line to take blood or administer medication	Standard ANTT	Routine	General
Cannulation	Standard ANTT	Routine	General

Appendix D

CVL Access

Birmingham Children's Hospital NHS
NHS Foundation Trust

Ward		Month		Completed by (Print Name)	

Audit No.	Staff Discipline	Hand Hygiene	Access	ANTT Used	Injection Ports
1	Medic Nurse Other	Before AND After Before After Neither	2%CHG/70%IPA Med Dev Wipe Used & Dry 2%CHG/70%IPA Med Dev Wipe Used & NOT Dry Other Used & Dry Other Used & NOT Dry Hub Not Cleaned	Yes No	New sterile cap Not Applicable Same cap replaced
2	Medic Nurse Other	Before AND After Before After Neither	2%CHG/70%IPA Med Dev Wipe Used & Dry 2%CHG/70%IPA Med Dev Wipe Used & NOT Dry Other Used & Dry Other Used & NOT Dry Hub Not Cleaned	Yes No	New sterile cap Not Applicable Same cap replaced
3	Medic Nurse Other	Before AND After Before After Neither	2%CHG/70%IPA Med Dev Wipe Used & Dry 2%CHG/70%IPA Med Dev Wipe Used & NOT Dry Other Used & Dry Other Used & NOT Dry Hub Not Cleaned	Yes No	New sterile cap Not Applicable Same cap replaced
4	Medic Nurse Other	Before AND After Before After Neither	2%CHG/70%IPA Med Dev Wipe Used & Dry 2%CHG/70%IPA Med Dev Wipe Used & NOT Dry Other Used & Dry Other Used & NOT Dry Hub Not Cleaned	Yes No	New sterile cap Not Applicable Same cap replaced
5	Medic Nurse Other	Before AND After Before After Neither	2%CHG/70%IPA Med Dev Wipe Used & Dry 2%CHG/70%IPA Med Dev Wipe Used & NOT Dry Other Used & Dry Other Used & NOT Dry Hub Not Cleaned	Yes No	New sterile cap Not Applicable Same cap replaced

CVL Insertion

Birmingham Children's Hospital NHS
NHS Foundation Trust

Ward		Month		Completed by (Print Name)	

		Aseptic Non-Touch Technique/PPE											
Audit No.	Octenisan pre-insertion wash	Gloves	Drapes	Gown	Operator hat/mask	Eye proctection	Aseptis maintained	Insertion site	Catheter type	Skin preparation	Drressing	Safe sharps	Documentation
1	Yes No	Yes No	Yes No	Yes No	Both Hat only Mask only Neither	Worn Not indicated Not worn but indicated	Yes No	Subclavian Internal Jugular Femoral Other	Single Lumen Multiple Lumen (Indicated) Multiple Lumen (Not indicated)	2%CHG/70%IPA used & dry (Chloraprep) 2%CHG/70%IPA used & NOT dry Other used & dry Other used & NOT dry Skin Not cleaned Not appropriate – alternative product	Biopatch Plus Transparent Transparent only Other dressing	Appropriate Disposal Passed safely (Theatres) Needle & Syringe disassembled Sharp passed hand to hand	Yes person inserting Yes by another Not documented
2	Yes No	Yes No	Yes No	Yes No	Both Hat only Mask only Neither	Worn Not indicated Not worn but indicated	Yes No	Subclavian Internal Jugular Femoral Other	Single Lumen Multiple Lumen (Indicated) Multiple Lumen (Not indicated)	2%CHG/70%IPA used & dry (Chloraprep) 2%CHG/70%IPA used & NOT dry Other used & dry Other used & NOT dry Skin Not cleaned Not appropriate – alternative product	Biopatch Plus Transparent Transparent only Other dressing	Appropriate Disposal Passed safely (Theatres) Needle & Syringe disassembled Sharp passed hand to hand	Yes person inserting Yes by another Not documented
3	Yes No	Yes No	Yes No	Yes No	Both Hat only Mask only Neither	Worn Not indicated Not worn but indicated	Yes No	Subclavian Internal Jugular Femoral Other	Single Lumen Multiple Lumen (Indicated) Multiple Lumen (Not indicated)	2%CHG/70%IPA used & dry (Chloraprep) 2%CHG/70%IPA used & NOT dry Other used & dry Other used & NOT dry Skin Not cleaned Not appropriate – alternative product	Biopatch Plus Transparent Transparent only Other dressing	Appropriate Disposal Passed safely (Theatres) Needle & Syringe disassembled Sharp passed hand to hand	Yes person inserting Yes by another Not documented
4	Yes No	Yes No	Yes No	Yes No	Both Hat only Mask only Neither	Worn Not indicated Not worn but indicated	Yes No	Subclavian Internal Jugular Femoral Other	Single Lumen Multiple Lumen (Indicated) Multiple Lumen (Not indicated)	2%CHG/70%IPA used & dry (Chloraprep) 2%CHG/70%IPA used & NOT dry Other used & dry Other used & NOT dry Skin Not cleaned Not appropriate – alternative product	Biopatch Plus Transparent Transparent only Other dressing	Appropriate Disposal Passed safely (Theatres) Needle & Syringe disassembled Sharp passed hand to hand	Yes person inserting Yes by another Not documented
5	Yes No	Yes No	Yes No	Yes No	Both Hat only Mask only Neither	Worn Not indicated Not worn but indicated	Yes No	Subclavian Internal Jugular Femoral Other	Single Lumen Multiple Lumen (Indicated) Multiple Lumen (Not indicated)	2%CHG/70%IPA used & dry (Chloraprep) 2%CHG/70%IPA used & NOT dry Other used & dry Other used & NOT dry Skin Not cleaned Not appropriate – alternative product	Biopatch Plus Transparent Transparent only Other dressing	Appropriate Disposal Passed safely (Theatres) Needle & Syringe disassembled Sharp passed hand to hand	Yes person inserting Yes by another Not documented

CVL Onging Care

Birmingham Children's Hospital NHS
NHS Foundation Trust

Ward		Month		Completed by (Print Name)	

Audit No.	Line Indicated	Date of Insertion Documented	Appropriate Site Inspection Document	Octenisan given	Dressing			Admin Set Replacement
					Biopatch applied	Transparent	Entry site/Biopatch visible	
1	Still indicated & documented Still indicated & NOT documented Not indicated	Yes No	Yes No	Yes No N/A	Yes No N/A	Yes No	Yes No	Set dated & in date Set dated & NOT in date Set NOT dated N/A
2	Still indicated & documented Still indicated & NOT documented Not indicated	Yes No	Yes No	Yes No N/A	Yes No N/A	Yes No	Yes No	Set dated & in date Set dated & NOT in date Set NOT dated N/A
3	Still indicated & documented Still indicated & NOT documented Not indicated	Yes No	Yes No	Yes No N/A	Yes No N/A	Yes No	Yes No	Set dated & in date Set dated & NOT in date Set NOT dated N/A
4	Still indicated & documented Still indicated & NOT documented Not indicated	Yes No	Yes No	Yes No N/A	Yes No N/A	Yes No	Yes No	Set dated & in date Set dated & NOT in date Set NOT dated N/A
5	Still indicated & documented Still indicated & NOT documented Not indicated	Yes No	Yes No	Yes No N/A	Yes No N/A	Yes No	Yes No	Set dated & in date Set dated & NOT in date Set NOT dated N/A