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The broad reach of the vascular access team; A multidisciplinary approach

Andrew Barton NIVAS UK Chair Advanced Nurse Practitioner Vascular Access & IV Therapy Lead Frimley Health NHS Foundation Trust

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Intravenous & Vascular Access Services (IVAS) Team







Insertion

Team

PICC

- 1 Advanced nurse Practitioner
- 3 Clinical Nurse Specialists
- Place 150 PICCs per month
 - 2 hospital sites

PICC insertion with navigation and ECG

PICC Insertion (Sherlock 3CG)

Receive order for PICC Insertion

Review patient/PICC Insertion

Printed documentation from Sherlock 3CG

Catheter can be used

- Same day placements
- Confirmed placement in under an hour
- Suitable for 95% adult patients
- No Malposition's
- Low Waste
- Cost saving
- NICE recommended



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- Paediatric patients
- Overweight or obese patients
- Elderly patients
- Chronically ill

Difficult IV

Access

Patient

- Emergency / acute (i.e. skin burn, haematoma, dehydration)
- Oncology
- Needle Phobic

11. Vascular Access Team Referral Contacts

Frimley Health all sites

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Chris Powers- Clinical Nurse Specialist IVAS- Frimley Site

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- -Telephone 01344 877904
- Email christopher.powers@nhs.net

- IVAS team is reactive to patients needs
- Can attend patients within 10mins or be booked in
- Attend emergencies
- Multiple referral portals

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- Prioritise vessel health
- Reduce the number of needle sticks
- Improve patient outcomes

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Peripheral Cannulation Difficult Vascular Access Guidance



4 Step Approach for DIVA

Local Anesthetic

Vein Location Technology Strategies for Successful Vascular Access

Positioning

for comfort

Patient Distraction

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Vein Technology

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- Work closely with patient safety team
- Lead reviewer for all clinical incidents for the Hospital
- Respond to complaints
- Co-ordinate serious incident investigations
- Respond to national alerts
- Learn from incidents and update Hospital wide practice

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Day 6 photographs





Day 15



EXTRTAVSATION DIAGNOSED = 5% Dextrose 40mmol K+ Osmolarity 409, pH 4.2

Over the 8 days the patient was an inpatient he had been treated for high calcium and low potassium with 6 litres of 5% dextrose with 40mmols potassium via a peripheral cannula in the right arm.







Learning

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- Implement pump checklist and fluid chart
- Double check initial starting infusion rate
- All infusions via a pump if longer than an hour or a vesicant
- Check pump infusion pressure setting
- Weekend IV and vascular access support needed
- Include incident in annual IV updates







- We work closely with infection control and attend monthly hospital infection control committee meetings
- Interventional nutrition group
- Parenteral nutrition
- Safer medication committee
- Audit IV medication errors
- Govern injectable medications policy and review fitness to practice in relation to medication safety issues
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Patient outcomes

- No insertion infections
- 2017-19 No CVC/PICC related blood stream infections
- Low patient harms
- 1 CVC retained wire
- 1 CVC air embolism







Clinical Procurement

- Have supported our IVAS team to grow and provide the most up to date technology and materials
- Gate keepers to product standardisation
- Procurement Clinical Nurse Specialists
- Values high standards of care alongside cost savings
- Clinical product evaluation co-ordination
- Supports patient safety & experience

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Central IV Access Service

 The IVAS service can place all vascular access devices as required



Nurse led PORT insertion service

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Placing with ECG





Specialist IV Access

- Renal IV Access
- Paediatrics
- Satellite USS PIVC services
- Individualised IV needs

Paediatrics

- Device selection should be appropriate for first insertion
- Vessel health should be considered including tip location and vessel diameter
- Technology guided insertion
- 4 step approach
- Good device after care & maintenance is essential
- Paediatric nurses and doctors have been trained to use ultrasound for IV access

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Working Together Facing The

Specialist IV services

- Ultrasound stations
- IVAS link nurses
- Phlebotomy USS
- Community support GP referrals

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- Cross site vascular access guidelines
- Injectable medicines policy
- Complications guidelines

Policy &

Governance

Leadership

- Fluid administration guidelines
- Extravasation policy



Connorthand To Exceptance WorkLing Together Pairing The Polyns	Committed to Excellence Working Together Facing The Future NHKS Foundation Trust
Cross Site Vascular Access and IV Therapy Clinical Guidelines: PART 1	SAFETY STANDARDS FOR INSERTION OF VASCULAR ACCESS DEVICES
<text><text><text><text><text><text><text></text></text></text></text></text></text></text>	 Key Points The standards described in this document set out the key elements necessary to deliver safe care for patients undergoing insertion of vascular access devices: Peripherally Inserted Central Catheter (PICC) Short-term Acute Central Venous Catheter (SA-CVC) Short-term Tunnelled Central Venous Catheter (ST-CVC) Long-term Tunnelled Central Venous Catheter (TI-CVC) Totally implanted Central Venous Catheter (TI-CVC) Peripherally Inserted Arterial Catheter (PI-AC) The information included in this document provides a framework for good and safe practice when undertaking insertion of short term acute central venous catheter (STCVC) The standards set out are based on international, national and local guidelines which are evidence based best practice in clinical practice. These standards have been developed by the intravenous and vascular access team and have taken into account local conditions and circumstances while ensuring that all provisions are fulfilled. The processes within this document will be continually audited against compliance and reviewed against patient safety incidents, near misses and suggestions from procedure teams for ways of improving patient safety.
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Practice Development & Training

- IV therapy administration course
- Venepuncture and cannulation course
- International vascular access academy

- Decisions making tools
- Care bundles
- Documentation



CHOOSING THE SAFEST VASCULAR ACCESS DEVICE

Frimley Health NHS Foundation Trust

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- Same day IV therapy
- Iron Infusion
- Blood transfusion
- Venesections
- Antibiotics
- Frusemide
- IV fluids
- MS
- Immunology -IVIG
- Drop in cannulation and venepuncture
- Outpatient vascular access

IVAS unit

- Infusion unit
- 10 chairs
- 9 infusion nurses
- Specialist IV infusions
- OPAT
- Nurse led
- Non-medical prescribers







- Nurse led with support from microbiology
- Home IV antibiotics
- Weekly nurse led clinic
- Patient self administration
- GP referrals

Home

Infusion

Therapy

- Pathway practice
- Integrated care systems



- Veinsite infrared vein location technology
 - SecurAcath
 - SyrEase

Research

Development

- Sherlock 3CG
- CHG Dressings
- Portocator
- Veinplicity
- PORT placement with ECG
- Community IVAS
- New catheter securement device Cath Latch MACOVA 2020

Building a vascular access team

- How will a team benefit your organisation
- What will the team offer
- Who will help make it happen
- How will it be funded
- What will the service offer
- How will outcomes be measured



Current focus in IVAS clinical practice

- Partnership working, taking care out of the acute hospital bed
- IV therapy delivered in hubs and day units
- Reliable IV devices that are cost effective, safe and robust
- Reduce the risk of catheter related blood stream infections
- Reduce the risk of exit site catheter related infections
- Reduce the risk of thrombosis
- Vessel health preservation

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Thank you MACOVA