# POLICY FOR THE ADMINISTRATION OF INTRAVENOUS ANTIBIOTIC THERAPY TO ADULTS WITHIN THE COMMUNITY HOSPITALS AND COMMUNITY SUPPORT TEAMS WITHIN BACHS

<table>
<thead>
<tr>
<th>Responsible Head of Service:</th>
<th>Lindsay Longfield Head of Business Unit 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of responsible Committee:</td>
<td>Professional Advisory Sub-Committee</td>
</tr>
</tbody>
</table>
| Name of author: | Stephanie Lawrence Team Leader CST Airedale and ACCT  
Debbie Cromack Professional Development Unit  
Donna Cooper Advanced Nurse Practitioner CST Airedale and ACCT |
| Contact for further details: | Stephanie Lawrence,  
Stephanie.lawrence@bradford.nhs.uk |
| Version | 1 |
| Supersede | N/A |
| Date Approved: | 7 December 2010 |
| Review Date: | 7 December 2013 |
| Key words: | |
| Document Type: | Policy |

If you are using a printed copy of this document please be aware that it may not be the latest version. To view the latest version visit [nww.bradford.nhs.uk/extranet/Policies/Pages/default.aspx](nww.bradford.nhs.uk/extranet/Policies/Pages/default.aspx)

Note: All policies remain valid until notification of an amended policy is placed on the intranet.
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
</tr>
<tr>
<td>2</td>
<td>Key related documents</td>
</tr>
<tr>
<td>3</td>
<td>Scope</td>
</tr>
<tr>
<td>4</td>
<td>Definitions</td>
</tr>
<tr>
<td>5</td>
<td>Key roles and responsibilities</td>
</tr>
<tr>
<td>6</td>
<td>Equality and Diversity</td>
</tr>
<tr>
<td>7</td>
<td>Dignity Statement</td>
</tr>
<tr>
<td>8</td>
<td>Aim of the policy</td>
</tr>
<tr>
<td>9</td>
<td>Referral Criteria</td>
</tr>
<tr>
<td>10</td>
<td>Infection Control</td>
</tr>
<tr>
<td>11</td>
<td>Training requirements</td>
</tr>
<tr>
<td>12</td>
<td>Prescribing</td>
</tr>
<tr>
<td>13</td>
<td>Supplies of Intravenous Antibiotics</td>
</tr>
<tr>
<td>14</td>
<td>Preparation of Medicine</td>
</tr>
<tr>
<td>15</td>
<td>Methods of administration 19.1 Intravenous Intermittent Infusion 19.2 Intravenous Injection (bolus)</td>
</tr>
<tr>
<td>16</td>
<td>Administration sets</td>
</tr>
<tr>
<td>17</td>
<td>Documentation</td>
</tr>
<tr>
<td>18</td>
<td>Complications</td>
</tr>
<tr>
<td>19</td>
<td>Monitoring</td>
</tr>
<tr>
<td>20</td>
<td>References</td>
</tr>
</tbody>
</table>

**Appendices**

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Procedure for Administration of Intravenous Antibiotics. Withdrawing a solution or suspension from a vial into a syringe</td>
</tr>
<tr>
<td>2</td>
<td>Reconstituting powder in a vial and drawing the resulting solution or suspension into a syringe</td>
</tr>
<tr>
<td>3</td>
<td>Adding an antibiotic medicine to an infusion</td>
</tr>
<tr>
<td>4</td>
<td>Intravenous Access Device</td>
</tr>
<tr>
<td>5</td>
<td>Criteria for Intravenous Antibiotic therapy within an intermediate care setting</td>
</tr>
<tr>
<td>6</td>
<td>Procedure for Peripheral Vascular Cannulation</td>
</tr>
<tr>
<td>7</td>
<td>Phlebitis Score Statement</td>
</tr>
<tr>
<td>8</td>
<td>Patient Leaflet on Peripheral Cannulation</td>
</tr>
<tr>
<td>Appendix</td>
<td>Title</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>9</td>
<td>Trouble shooting for Intravenous Access Devices</td>
</tr>
<tr>
<td>10</td>
<td>Drug calculations</td>
</tr>
<tr>
<td>11</td>
<td>Care pathway for Intravenous Antibiotic Therapy</td>
</tr>
<tr>
<td>12</td>
<td>Saving Lives: Peripheral Line Care Monitoring Sheet</td>
</tr>
<tr>
<td>13</td>
<td>IV Antibiotic Pathway from Secondary Care</td>
</tr>
<tr>
<td>14</td>
<td>Equality impact assessment</td>
</tr>
<tr>
<td>15</td>
<td>Summary of policy development and consultation</td>
</tr>
</tbody>
</table>
1. Introduction

With the development of complex care in the community, intravenous antibiotics are now being provided in many community settings. This policy has been developed to ensure there is safe and consistent practice in administration of intravenous (IV) antibiotics by Registered nurses within BACHS thereby reducing the risk of complications and to provide a guide for clinical practice based on evidence of best practice.

This Policy was developed to enable patients to safely receive antibiotic therapy in their own homes or in a Community Hospital setting, thereby facilitating early discharge from the acute hospital setting or preventing hospital admission. It will direct a standardised approach to the safe and consistent administration of intravenous antibiotic therapy for both staff and patients.

The RCN IV forum ‘Standards for Infusion Therapy’ Third Edition (January 2010) is incorporated within elements of this document to promote best practice.

This Policy should be read in conjunction with related local policy guidance as specified in Section 4 alongside evidence based guidance provided by individual professional organisations as specified and referenced throughout this document.

2. Key Related Documents

Safe and Secure Handling of Medicines Policy Community Hospitals (2008)
Medicine Management Policy (2009)
Hand Hygiene Policy (BACHS) February 2010
Infection Prevention Management (BACHS) February 2010
Resuscitation for Adults, Children and Infants (BACHS) March 2010
Consent policy February 2010
Clinical Waste Management December 2009
Incident Reporting and Management December 2008
NMC Standards for Medicines Management (2008)
RCN IV Forum, Standards for Infusion Therapy, Third Edition 2010
Aseptic Non Touch Technique Policy June 2010
Waste Management Policy November 2009

3. Scope

3.1 This policy extends to all nurses holding current registration with the Nursing and Midwifery Council (NMC) Professional Register, as a registered nurse within a Community Hospital or Community Support Team. It is a requirement that those employed by Bradford and Airedale Community Health Services attend the required training and have been assessed as having the necessary skills and competencies to administer IV therapy within community settings.
3.2 This policy covers intravenous devices which may be used in the Community setting including a peripheral catheter and peripherally inserted central catheter (PICC)

3.3 It is expected that all members of the multidisciplinary team who may be involved in any part of the medicines trail within the administration of intravenous antibiotics should familiarise themselves with the content of this and related policy guidance.

4. Definition

2.1 The term ‘Intravenous’ refers to the administration route which in this case is directly into the vein (usually those of the forearm, hand and occasionally the lower limbs) for the purpose of delivering (in relation to this policy) Antibiotic Therapy.

2.2 IV antibiotic therapy refers specifically to the delivery/administration of an antibiotic drug via the intravenous route.

5. Key Roles and Responsibilities

5.1 Service Managers are responsible for the operational implementation of this policy and associated guidelines.

5.2 The Team Leader is responsible for ensuring that staff have received appropriate training in intravenous skills and cannulation and are competent to practice safely.

5.3 Practitioners who prescribe or administer medicines are fully responsible for their actions and exercise their own professional judgment at all times (BACHS Safe and Secure Handling of Medicines Policy). The prescribing practitioner may not fall under the remit of BACHs employed staff e.g. a GP or consultant and therefore are responsible for their own prescribing actions in accordance with their employing organization.

5.4 All Practitioners are responsible for reporting ‘near misses’ and clinical incidents regarding the prescription, dispensing, storage and administration of medicines via the organizations incident reporting system PRISM (BACHS Safe and Secure Handling of Medicines Policy).

5.5 Practice and Standards for Medicines Management

5.6 The Registered Nurse administering the IV drug is responsible for documenting both electronically on system and in the SAP file in any existing care plan that the patient is receiving IV Antibiotic therapy, in line with NMC Guidelines on record management and BACHS standards for record keeping.

5.7 The Registered Nurse administering the IV Antibiotic drug is responsible for ensuring they have appropriate knowledge and understanding of the medicine to be administered, including:
- indications for use
- recommended therapeutic dose and frequency of use
- how to prepare the drug aseptically and safely
- methods of preparation and administration, including knowledge of the speed of the injection/infusion
- rate of administration
- contra-indications
- side effects and potential adverse reactions
- appropriate emergency interventions (eg: anaphylaxis)
- any special monitoring or health and safety requirement.

5.8 A Registered Nurse appropriately trained and assessed as competent, must have the skills to complete aseptic insertion of a venous access device, administer prescribed antibiotics via the intravenous route and have the skill and confidence to manage any potential anaphylactic reaction which may occur

5.9 The Registered Nurse administering the IV Antibiotic drug must be satisfied with the prescription, ensuring it is signed, dated, clear and unambiguous

5.10 Prior to each administration the nurse must check:
    - patients name, address, date of birth and NHS number
    - date treatment is to commence and a review/completion date
    - name, form and strength of the medicine
    - time and date of administration
    - dose
    - route (intravenous)
    - frequency
    - type and volume of diluent
    - type and volume of flush
    - method and rate of administration
    - expiry dates of the medicine, diluent (if required) and flush Medications must not be administered, and products not used beyond their expiry date (NPSA 2007b)
    - known allergies
    - special direction

Appendix 2 and 3 of this policy state protocol for nurse administration of bolus and intermittent infusion antibiotics

**Responsibility of the General Practitioner (GP)**

5.11 To assess patients following set criteria and follow set protocol/pathway for referral of patients to the Community Support Teams for the locality

5.12 To liaise with the Consultant Microbiologist to define a treatment plan

5.13 To prescribe appropriate IV antibiotics
5.14 To establish that the Community Support Team have capacity and skill mix in order to support the patient through their program of care

5.15 To communicate the treatment plan to the Team Leader/Registered Nurse in charge of the team

5.16 To assess and communicate the patients MRSA status (if information available) and document on Systmone

5.17 To continue to monitor patients progress and accept medical responsibility for further developments in the treatment plan

**Responsibility of the Community Hospital Doctor (GP)/Consultant**

5.18 Assessment of patient on admission to hospital or care home bed

5.19 To liaise with Consultant Microbiologist to define a treatment plan if required

5.20 Aseptic Insertion of a venous access device (cannula) in the event of the skilled Registered Nurse having made 2 failed attempts and in the absence of another nurse skilled and competent in this area of practice

5.21 Daily review of the patients condition and treatment response

5.22 Change to oral therapy as required

**6. Equality and Diversity**

6.1 This policy aims to meet the diverse needs of our service, population and workforce, ensuring that none are placed at a disadvantage over others

6.2 The policy has been developed and will be reviewed on the basis that it does not discriminate and is not prejudicial on the grounds of disability, gender, marital status, sexuality, colour, race, nationality, ethnic origin, religious belief or age.

**7. Dignity Statement**

7.1 All staff are expected to ensure that service users and their carers benefit from care that is focused upon respect for the individual. In order to achieve this, the seven factors of best practice from the Essence of Care benchmark for Privacy and Dignity need to be taken into account when implementing the procedures covered in this policy.

**8. Aim of the Policy**

To define professional responsibilities in the prescribing, preparation and administration of intravenous antibiotics. To provide an evidence base for practice. To provide a vehicle for practitioners to exercise clinical judgement within the realms of professional accountability (NMC 2008). To manage the risks that the administration of intravenous antibiotics can post to both staff and
patients. Ensure that patients receive treatment via the safe and effective administration of an intravenous antibiotic.

9. **Referral Criteria**

9.1 Patients will be considered on an individual basis following assessment by a medical practitioner against the Criteria for the acceptance of patients for Administration of IV antibiotics within the community setting (Appendices 1 & 2).

9.2 A Risk Assessment against the antibiotics involved will also be carried out and medical responsibility agreed and documented by the Medical Practitioner. Consultation with Microbiology may need to take place prior to acceptance for treatment in order to establish appropriate intervention and management.

9.3 The Care Pathway for Intravenous Administration of Antibiotics within the home or Community Hospital setting should be adhered to and completed as a Standard of Best Practice (Appendix 10).

10. **Infection Control**

10.1 The intravenous route has been identified as a high risk activity with regards to healthcare associated infections due to vascular access devices providing an entry portal for pathogens. All staff need to be aware and adhere to the Aseptic Non Touch Technique Policy.

10.2 Peripheral intravenous cannula insertion is a commonly performed procedure and has an associated risk of infection because of the potential for direct microbial entry to the bloodstream.

10.3 Intravenous cannula may be contaminated by the patient's skin flora at the insertion site or by the introduction of other organisms via the cannula hub or injection port.

10.4 All BACHS staff involved in the administration of intravenous antibiotics should be aware of the High Impact Interventions (HII) in the Department of Health “Saving Lives” document which relates to key Clinical procedures which can increase the risk of infection if not performed appropriately. The ‘Care Bundles’ for each Intervention have been developed to provide a simple way of highlighting the critical elements of a particular procedure, the key actions required and a means of demonstrating reliability using measurement tools and audit.

10.5 All BACHS staff involved in the insertion and monitoring of a cannula / peripheral line for the purpose of administering antibiotics should be aware of and adhere to the principles of measuring compliance in the care and management of peripheral intravenous cannulae.
10.6 All staff involved in the administration of intravenous antibiotics should refer and adhere to the Standard Precautions stated within BACHS Aseptic Technique Policy (2010)

10.7 A peripheral cannula inserted in an emergency situation where aseptic technique has been compromised should be replaced within 24 hours (RCN 2010)

10.8 Latex free sterile gloves should be worn when performing infusion procedures.

10.9 Disposable plastic aprons should be worn during all infusion procedures.

10.10 All used disposable sharp items should be disposed of at the point of use in a non-permeable, puncture resistant, tamper-proof container complying with UN3291 and BS7320 standards in line with BACHS Clinical Waste Policy.

10.11 All medical equipment, dressings and solutions used during invasive procedures must be sterile and disposed of in line with BACHS clinical waste policy.

10.12 All medical equipment such as drip stands and infusion devices must be cleaned routinely and following each patient use, in line with BACHS decontamination policy.

11. Training requirements for Registered Nurses who are to prepare and administer an intravenous antibiotic

11.1 The administration of an intravenous antibiotic within the Community Hospital or within the patient's home /Care Home may only be carried out by a Registered Nurse who:

- has the necessary knowledge and skill in preparing and administering an intravenous antibiotic

- has the necessary knowledge and skill in inserting devices, assessed competency in all clinical aspects of infusion therapy and have validated competency in clinical judgement and practice in accordance with the NMC Code of Professional Conduct and RCN Standards for Infusion therapy

- has attended BACHS recognised IV skills training (including cannulation) which incorporates a theoretical and practical element with competencies, pharmacology, legal and profession issues, drug reconstitution and administration, infection control, use of equipment and risk management

- has the necessary training and skills regarding the care of the PICC line
- has had competencies signed off around cannulation, IV drug administration and care of PICC lines by appropriately qualified competent practitioner

- competencies need to be re-checked on an annual basis.

12. **Prescribing**

12.1 The prescribing of intravenous antibiotics may only be carried out by a Medical Practitioner or General Practitioner who has agreed to maintain overall medical responsibility for overseeing the care and medical plan for the individual.

12.2 Out of hours Medical practitioners (Local Care Direct) should not be involved in the prescribing of first dose antibiotics as medical responsibility must be undertaken by a permanent member of the team responsible for the consistent and coordinated care and review of the patient in the community setting.

12.3 Each recognised Medical Prescriber should adhere to the following key control checks in the management of prescribing antimicrobials for the treatment of common infections;

- check patients notes to confirm that the patient has, or is suspected to have, an infection

- check that the prescribed antibiotic is appropriate and in line with Trust protocol

- check the prescribed antibiotic is not a ‘restricted’ antibiotic. Antibiotics classified as restricted are: imipenem, meropenem, ertapenem, aztreonam, ciprofloxacin (IV only), daptomycin, linezolid (oral and IV) and tigecycline.

- Discharge information should be provided from the acute hospital when it is a patient for whom we are facilitating an early discharge.

These antibiotics can only be prescribed following discussion with and advice from a Consultant Microbiologist or Infectious Disease Consultants (or registrar), who will issue a code authorising the use of one of these antibiotics for a specific period of time.

- check the prescribed dose is appropriate and in accordance with the Trusts antibiotic protocol or the BNF

- check the prescribed intravenous route is appropriate and that other formulations or routes have been considered
- IV to oral switch (IV Administration Review): if given intravenously, antibiotics should normally be given by this route for no longer than 48 hours before review

If an antibiotic has been given intravenously then switching to an oral antimicrobial agent should be considered if the patient:

- has completed 48 hours of intravenous treatment
- is improving clinically
- is haemodynamically stable
- shows a trend towards normal of temperature, white cell count (and other inflammatory markers)
- can take oral medication (and an appropriate oral formulation and agent is available)
- has a functioning GI tract and has no signs of malabsorption
- does NOT have a deep seated infection
- the course length must be specified in the patients notes and/or a stop date indicated on the prescription
- Medical practitioners with medically responsibility for the patient should check results frequently and de-escalate antimicrobial treatment once the results are available
- Prescribers should adhere to the daily review of patients need, relevance or appropriateness of antimicrobial therapy

12.4 The treatment prescribed must be appropriate and manageable in the Community setting eg bolus injection or intermittent infusion time of no more than 30 minutes and no more than twice a day

12.5 IV antibiotic treatment via a peripheral cannula should not normally exceed two weeks duration (RCN 2010). If treatment is expected to last longer than two weeks it may be appropriate to review if the community is appropriate setting to safely and effectively manage the severity of the individuals infection.

12.6 It is the responsibility of the discharging doctor to prescribe intravenous antibiotics on an authorised and recognised prescription if the transfer of care involves discharge of the patient from an acute care facility to a Community Hospital or to the Community Support Team for ongoing treatment and management and the acute hospital must also provide all the equipment needed for the duration of the treatment.
12.7 Verbal orders must not be taken for the commencement or changes to the prescription/regime of administering an intravenous antibiotic

12.8 The prescriber must provide clear, precise written instructions regarding the medicine, dose, route and frequency of administration

13. Supplies of Intravenous Antibiotics

13.1 For individuals being discharged from an acute hospital, the antibiotics plus diluents and flushes must be prescribed and dispensed by the discharging hospital

13.2 For patients being treated within their own homes, the antibiotics plus diluents and flushes must be prescribed by the patients GP on an approved community prescription chart. The equipment e.g. giving sets, syringes etc would be provided by the Community Support Team or Community Hospital.

13.3 For patients being treated within the Community Hospital setting the Medical Practitioner co-ordinating the care will prescribe the antibiotic drug onto the patients medication prescription chart which allow the Registered Nurse to order from Lynfield Mount Pharmacy. The same would apply if it was a patient in an ACCT bed but the drugs would be ordered via Airedale pharmacy. Giving sets, syringes and needles are ordered via standard stores procedure.

14 Preparation of medicine

14.1 Advanced preparation of substances before their prescribed time is not acceptable or best practice

14.2 Medication must not be prepared by one practitioner for administration by another.

14.3 The medication must be prepared aseptically immediately prior to administration in accordance with the manufacturer’s instructions for reconstitution. Preparation should also adhere to BACHS policy for the Safe and Secure Handling of Medicines and Infection Prevention Management.

15. Methods of administration

15.1 Intravenous Bolus Injection: direct injection of a small volume of fluid/medicine contained within a syringe administered directly into the injection port of an infusion line or directly into an indwelling cannula over a short period of time, refer to Royal Marsden Hospital Manual of Clinical Nursing Procedures (7th edition)

15.2 Intravenous Intermittent Infusion: infusion of a volume of fluid/medicine over a period of time at prescribed intervals and stopped until the next dose is required Royal Marsden Hospital Manual of Clinical Nursing Procedures (7th edition)
16. **Administration sets**

16.1 Primary Intermittent administration sets should be changed every 24 hours if remaining connected to a device or discarded after each use if disconnected and disposed of as per BACHS waste management policy.

16.2 The set should be disconnected immediately upon suspected contamination and discarded when the integrity of the product or System has been compromised (Hopwood 2008 cited in Dougherty and Lister).

16.3 Primary intermittent administration sets must be changed using aseptic technique and observing standard precautions (Pratt et al 2007 cited in Dougherty and Lister).

17. **Documentation**

17.1 Documentation in the patients notes and/or medical record shall contain complete information regarding infusion therapy and vascular access.

17.2 Documentation should include:
- type, length and gauge of the vascular access device
- date and time of insertion
- number and location of attempts
- identification of the site
- type of dressing
- name and role of the person placing the device

17.3 Date of insertion should be recorded on the dressing.

17.4 If for any reason the dressing is changed but NOT the cannula, record the date of insertion on the new dressing.

17.5 The phlebitis Score must be documented at least daily.

17.6 Complications and side effects from the antibiotic therapy must be documented.

17.7 The date and time of removal of the peripheral cannula must be documented.

18. **Complications**

18.1 The potential hazards and risks of IV Therapy include anaphylaxis, interactions, side effects and infection.

18.2 Infusion related complications might be local or systemic and include Phlebitis, infiltration, extravasation and haematoma speed-shock and Air embolus.
18.3 During intravenous administration of an antibiotic the Registered Nurse Must monitor the patients condition for any adverse reaction

18.4 If there is any sign of adverse reaction then the Registered Nurse must Stop the intravenous administration of the antibiotic immediately.

18.5 All Registered Nurses who are trained and competent to administer Intravenous antibiotics must be familiar with the anaphylaxis procedure and must be up to date with mandatory training in Anaphylaxis and Basic Life Support Skills

18.7 Adrenaline for intramuscular administration by a Registered Nurse should be available at the point of administration of an intravenous antibiotic in the event of any adverse reaction requiring emergency treatment. As per the Resuscitation Council (UK) 2008 guidance, Adrenaline 500 micrograms (0.5ml of Adrenaline 1:1000) should be administered Intramuscularly in the first instance. Monitoring of the patient involving pulse, blood pressure, ECG and pulse oximetry should commence as soon as possible to establish response to the adrenaline whilst awaiting further support via the emergency services.

18.8 All antibiotics have the potential to interact with warfarin and alter the INR (increasing or decreasing the anticoagulant effect). Prescribers should check the potential for interactions in the BNF (Appendix 1) and be aware that increased monitoring of the INR may be necessary

18.9 Alterations in the INR can occur after 3-4 days of antibiotic therapy, but in some cases a delayed interaction may occur after the course of antibiotic has finished. Patients should be warned to report of any signs of bleeding or unexplained bruising immediately to their GP.

19. Monitoring

19.1 Monitoring and Audit is advised to ensure quality standards and best practice. The Department of Health document “Saving Lives”: Reducing Infection, Delivering clean and safe care, provides a toolkit (Peripheral Intravenous Cannula Care Bundle 2) for utilisation in this process

20. References (to reformat/Harvard reference format)


NMC Code of Professional Conduct

NMC Standards for Medicines Management

NPSA Promoting safer use of injectable medicines 28th March 2007 (20)
RCN IV Forum Standard for Infusion Therapy (Third Edition) printed January 2010


Appendix 1 Procedure for Administration of Intravenous Antibiotics

Withdrawing a solution or suspension from a vial into a syringe

- Use aseptic technique at all times
- Remove the tamper-evident seal from the vial and wipe the rubber septum with an alcohol wipe. Allow to dry for at least 30 seconds
- With the needle sheathed attach the needle to the syringe, draw into the syringe a volume of air equivalent to the required volume of solution to be drawn up
- Remove the needle cover and insert the needle through the rubber septum
- Invert the vial. Keep the needle in the solution and slowly depress the plunger to push air into the vial
- Release the plunger so that the solution flows back into the syringe
- If large volumes are to be withdrawn, use a push-pull technique. Repeatedly inject small volumes of air and draw up an equal volume of solution until the required total is reached
- Withdraw the needle from the vial
- Expel excess air from the syringe. Remove the needle and exchange it for a new needle
- The vial and any unused medication should be kept until administration is complete
- The batch number and expiry date of each vial should be documented for both the antibiotic drug and the solution used to reconstitute
Appendix 2 Reconstituting powder in a vial and drawing the resulting solution or suspension into a syringe

- use aseptic technique at times
- remove the tamper-evident seal from the vial and wipe the rubber septum with an alcohol wipe. Allow to dry for at least 30 seconds
- withdraw the required volume of diluent from the ampoules(s) into the syringe
- inject the diluent into the vial. Keeping the tip of the needle above the level of the solution in the vial, release the plunger. The syringe will fill with the air which has been displaced by the solution (if the contents of the vial were packed under a vacuum, solution will be drawn into the vial and no air will be displaced)
- If a large volume of diluent is to be added, use a push pull technique as detailed in 18.1
- with the syringe and needle still in place, gently swirl the vial(s) to dissolve all the powder, unless otherwise indicated by the product information. This may take several minutes
- withdraw the required volume of solution into the syringe
- if a purpose designed reconstitution device is used, the manufacturers instructions should be read and carefully followed
Appendix 3 Adding an antibiotic medicine to an infusion

- use an aseptic technique at all times
- prepare the medicine in a syringe using one of the medicines above
- check the outer wrapper of the infusion container is undamaged
- remove the wrapper and check that it is intact and free from cracks, punctures or leaks
- check the infusion solution. It should be free from haziness, particles and discolouration
- where necessary, remove the tamper-evident seal on the additive port according to the manufacturers instructions or wipe the rubber septum on the infusion container with an alcohol wipe and allow to dry for at least 30 seconds
- if the volume of the medicine solution to be added is more than 10% of the initial contents of the infusion container (e.g. more than 50ml to a 500ml infusion) an equivalent volume must first be removed with a syringe and needle
- inject the medicine into the infusion container through the centre of the injection port, taking care to keep the tip of the needle away from the side of the infusion container. Withdraw the needle and invert the container at least five times to ensure thorough mixing before starting the infusion
- check the appearance of the final infusion for absence of particles, cloudiness or discolouration
- ensure the infusion is administered immediately
Appendix 4  Intravenous Access Device

The nurse must:

- check/observe the site and patency of any device before, during and post administration and report/act on any concerns

- Follow the Royal Marsden Hospital Manual of Clinical Procedures (7th Edition 2008) regarding the care of a peripheral cannula/skin tunnelled cannula (PICC).

- Ensure the removal of the peripheral cannula at the end of treatment

- Ensure that the patient is aware of the measures to take in the event of displacement and has been provided the Patient Information Leaflet for Peripheral Cannula
APPENDIX 5  Criteria For IV Antibiotic Therapy within 
an Intermediate Care setting e.g. own home or inpatient bed

Inclusion

1. Any patient who is clinically stable but requires hospital admission purely for IV therapy

2. The patient must be 18 years or over

3. Patients who have recovered from an acute illness but are otherwise well enough to be discharged but still require IV therapy

4. All patients who are suitable for IV therapy at home, must have a telephone at home to be able to contact the Community Nurse or Out of Hours Service, if any problem should arise

5. Patients must not be liable to abuse intravenous access, for example for the misuse of drugs

6. Patients must comprehend the implications of having IV therapy and cannulation at home and be able to consent to treatment. Consent to treatment must be in line with the Mental Capacity Act (2005) and BACHS Policy Guidance with respect to Mental Capacity and Consent

7. Patients must be registered with a General Practitioner (GP) within the Bradford and Airedale PCT locality

8. The nursing team must accept nursing responsibility for intravenous (IV) therapy

9. The patients General Practitioner (GP) who has been involved in the assessment and suitability for the patient to receive intravenous antibiotics within the home setting must agree to accept medical responsibility for the medical management of said individual

10. Staff must follow the disease specific pathway where available in conjunction with this policy.

Exclusion

1. Pregnancy

2. Patients who have received intravenous antibiotic treatment for cellulites of the same site in the preceding month

3. Two or more signs of sepsis e.g. Pyrexia, localized swelling/redness/heat at the site of the cannula, tachycardia, tachypnoea, hypotension, confusion.

4. Patients requiring more than one IV antibiotic
5. Patients requiring IV medications with a narrow therapeutic index and Specific monitoring (eg gentamicin)

6. Patients with severe renal and/or liver function abnormalities

7. Signs of severe large cellulitis, tissue necrosis and lymphangitis

8. Co morbidities such as immunosuppression, poorly controlled diabetes, peripheral vascular disease, obesity and alcoholism

9. Patients requiring antibiotics more than twice daily.

Adapted from: Dorset Primary Care Trust (2008) Medicines Code. Chapter 15. Appendix 1
APPENDIX 6 PROCEDURE FOR PERIPHERAL VASCULAR CANNULATION

1.0 Introduction

1.1 The aim of peripheral cannulation is to provide an established, patent route for the administration of intravenous medications or fluids, when it has been established by medical assessment to be the most appropriate method to deliver the treatment.

1.2 Safe and reliable venous access is necessary to meet the needs of patients requiring a vascular access device (VAD), to ensure that the administration of prescribed IV treatment is as comfortable and uneventful as possible.

1.3 The following guidelines are intended to improve patient care in the insertion and management of a peripheral cannula by standardising practice. The information is based on evidence-based knowledge and local policy guidance.

2.0 Responsibilities of Clinical Staff

2.1 Before a Registered Nurse is allowed to cannulate independently, the following criteria must be met:

- the nurse must have received theory and practice training relating to intravenous cannulation via a course recognised by BACHS

- the Registered Nurse must have achieved at least 10 successful supervised cannulations by a competent mentor using a variety of cannulae and a range of patients

- The Registered Nurse will be expected to act in accordance with the NMC Code of Professional Conduct and maintain responsibility for the update of their knowledge and skills.

2.2 Medical Practitioners are expected to have undertaken competency-based training and maintain their competency in accordance with their own medical training and professional codes of practice.

2.3 Healthcare Assistants are able to remove a peripheral cannula device only if they have been assessed and deemed competent by an appropriate and named Registered Nurse.

3.0 Re-siting a Peripheral Cannula

3.1 A peripheral cannula should be re-sited every 72 hours. It is accepted that immediate access to a healthcare professional competent in cannulation is not always possible in community settings. Under these circumstances, the cannula may remain in situ for longer than 72 hours providing the phlebitis score is at zero. Strict attention must be paid to recording the phlebitis score at each drug administration and the cannula must be changed as soon as is practically possible.
3.2 The Registered Nurse must document the reason for leaving the cannula in longer than 72 hours within the patients care plan

3.3 Within the community setting, a Registered Nurse should not make more than two cannulation attempts without seeking the assistance of a more experienced practitioner

4.0 Peripheral Cannula site selection

4.1 A full assessment of the patient and their veins should be carried out before the vein and the device are chosen

When selecting a vein for cannulation, the following factors should be considered:
- insertion site
- condition of the vein
- purpose of the infusion (rate and solution to be infused)
- duration of therapy

5.0 Vein sites of choice

5.1 The vein sites of choice are
- branches of the metacarpal veins
- the basilic vein
- the cephalic vein
- the median cubital vein in the antecubital fossa

5.2 The metacarpal veins are accessible, easily visualised and palpated and are well suited to short term, outpatient and community intravenous therapy. However, there is evidence to contraindicate the use of these veins in the older adult as there is diminished skin turgor and loss of subcutaneous tissue, which makes veins difficult to stabilize

5.3 Preference should be given to veins that have not been previously used, that are easily detected by inspection and/or palpation, patent and healthy. These veins feel soft, bouncy and will refill when depressed. They should be straight and free of valves to ensure easy advancement of the cannula into the vein. Valves can be felt as small bumps or may be visualized at bifurcations

6.0 Veins to avoid

6.1 Visual inspection will enable identification of areas to avoid eg; areas of Phlebitis, infection or oedema, bruised or inflamed veins, or any veins which have undergone multiple punctures

6.2.1 Accurate site assessments cannot be performed if previous phlebitic or infiltrated areas are used for cannulation. Also if damaged veins are used greater injury the skin and vein will occur

6.2.2 Veins should not be re-cannulated at a point lower than the recently used site in the same vein. Healing will be adversely affected as the vein continues to be
used for the infusion. Problems relating to phlebitis, thrombophlebitis and infection could be exacerbated for the same reason.
Appendix 7

PHLEBITIS SCORE STATEMENT

All patients with an intravenous access device in place must have the IV site checked at least daily for signs of infusion phlebitis. The subsequent score and action(s) taken (if any) must be documented.

The cannula site must also be observed:

- when any drugs are administered by the intravenous route
- when intravenous flow rates are checked or altered
- when solution containers are changed

The incidence of infusion phlebitis varies. The following Good Practice Points May assist in reducing the incidence of infusion phlebitis, and include:

- observe cannula site at least daily
- secure cannula with a proven intravenous dressing
- replace loose, contaminated dressings
- cannula must be inserted away from joints whenever possible
- aseptic technique must be followed
- consider re-siting the cannula every 48-72 hours
- plan and document continuing care
- use the smallest gauge cannula most suitable for the patients needs
- replace the cannula at the first indication of infusion phlebitis (Stage 1 on the peripheral phlebitis score)

Peripheral Phlebitis Score

<table>
<thead>
<tr>
<th>Signs</th>
<th>Score</th>
<th>Action Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>No pain or signs</td>
<td>0</td>
<td>Continue to observe</td>
</tr>
<tr>
<td>Pain/redness around insertion site</td>
<td>1</td>
<td>Remove and replace cannula in alternative site. Observe both sites</td>
</tr>
<tr>
<td>Pain, swelling, redness. Palpable venous cord</td>
<td>2</td>
<td>Remove and replace cannula in alternative site. Observe both sites and treat where necessary</td>
</tr>
<tr>
<td>Pain, swelling, induration, redness. Palpable venous cord above 3cm. Presence of pus</td>
<td>3</td>
<td>Remove cannula and refer for medical advice. Swab site</td>
</tr>
<tr>
<td>All of the above Presence of tissue damage</td>
<td>4</td>
<td>Remove cannula and refer for medical advice. Swab site. Complete incident form</td>
</tr>
</tbody>
</table>

* NOTE: CANNULA SHOULD BE CHANGED EVERY 72 HOURS

Adapted from RCN Standards for Infusion Therapy (Third Edition) 2010 Page 80
APPENDIX 8

HOME INTRAVENOUS ANTIBIOTIC ADMINISTRATION SERVICE

Information for patients with a cannula

It has been decided with your consent that you may start/continue your intravenous (into a vein) treatment at home.

In order for us to give you your treatment into a vein, it is necessary for you to have a small hollow plastic tube inserted into your hand/arm. This plastic tube is called a CANNULA.

The cannula goes through your skin and into a vein where it stays to allow us to give your medicines directly into your bloodstream. You will have a waterproof dressing over the cannula to help it stay in place.

As the cannula is sitting in a vein, there is a risk of bleeding if the cannula becomes accidently dislodged.

THERE IS NO NEED TO PANIC IF THIS DOES HAPPEN

Usually any bleeding will stop within a few minutes with pressure

IF YOUR CANNULA COMES OUT:

Apply pressure to the area with cotton wool, gauze or a tissue
Maintain this pressure until the bleeding has completely stopped
Once the bleeding has stopped apply a plaster
Contact the community support team as soon as possible to organise resiting of cannula.

IF THE BLEEDING DOES NOT STOP:

Keep applying pressure to the area
Lift your arm above your head
Telephone the community support team on the number below.

IF THE CANNULA SITE IS PAINFUL OR INFLAMED:

Inform the CST as soon as possible to organise resiting of the cannula

CONTACT DETAILS:

Between 8AM and 5PM please telephone (needs insertion of appropriate number depending on team)Out of hours, weekends and Bank Holidays please telephone
APPENDIX 9

TROUBLESHOOTING FOR INTRAVENOUS ACCESS DEVICES

If the patient/client experiences any of these symptoms contact the Medical Practitioner, ANP responsible for the co-ordination and management of care or the Emergency services for urgent treatment

<table>
<thead>
<tr>
<th>PROBLEMS AND POSSIBLE CAUSES</th>
<th>SIGNS, SYMPTOMS AND ACTIONS TO TREAT AND PREVENT COMPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Air Embolism:</strong> this may occur if air enters through the intravenous device following removal, an open catheter or a faulty device. An air embolism can occur at any time and can be fatal, from insertion to a few days after removal</td>
<td>Dyspnoea, chest pain, tachypnoea (rapid shallow breath), cyanosis, raised central venous pressure (CVP), coma and cardiac arrest</td>
</tr>
<tr>
<td><strong>Anaphylaxis:</strong> severe, life-threatening, generalized or systemic reaction to a medication</td>
<td>Severe airway, breathing and circulatory problems <strong>Call 999 and initiate emergency treatment as required</strong></td>
</tr>
<tr>
<td><strong>Bleeding:</strong> A small amount of bleeding may be apparent at the exit site for the first 24 hours after the intravenous access device is inserted. Severe or prolonged bleeding (haemorrhage) most often occurs in patients on anticoagulant therapy or other medication eg aspirin. Haemorrhage may occur as a result of the catheter or connections becoming dislodged, or damage caused to other vessels during insertion</td>
<td>If bleeding is severe apply pressure and call 999 immediately. If minimal bleeding prolonged, assess site and contact Medication Practitioner responsible for care</td>
</tr>
<tr>
<td><strong>Catheter breakage:</strong> this can occur with too much twisting of the catheter when changing the connector, too much kinking or too much force when flushing</td>
<td>Leakage of fluid and the dressing is wet. Remove catheter and re-site. Observe area for signs of infection</td>
</tr>
<tr>
<td><strong>Catheter thrombosis/Clotting:</strong> a blood clot may block the flow of fluid through the catheter.</td>
<td>If you cannot flush any liquid into the catheter, <strong>STOP.</strong> Do not force the fluid as this can rupture the catheter. Contact the Medical Practitioner responsible for patients care for advice</td>
</tr>
<tr>
<td><strong>Cardiac Tamponade:</strong> this occurs when a central vein, right atrium or right ventricular wall is perforated as a result of erosion by the catheter tip</td>
<td>The effusion of blood, air or pus into the pericardial sac, puts pressure on the heart. The patient will feel unwell, be breathless, thachycardic and cyanosed. <strong>Call 999 and initiate emergency treatment</strong></td>
</tr>
<tr>
<td><strong>Infection:</strong> Exit site infection/Phlebitis may occur if</td>
<td>Check site for signs of infection</td>
</tr>
<tr>
<td>the exit site is not kept clean and dry.</td>
<td>Local infection and systemic infection</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td><strong>Thrombosis</strong>: in a major vessel may occur due to irritation/damage by foreign body (catheter)</td>
<td>Signs of thrombosis are pain/oedema and tenderness of arm, neck, face and chest. Engorged peripheral veins or feelings of tightness</td>
</tr>
<tr>
<td>Call 999 and initiate emergency treatment</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 10

DRUG CALCULATIONS

To calculate the amount of medicine to give from a solution:

\[ \text{Dose to be given} \times \text{Strength available} = \text{Volume of Solution} \]

Or

\[ \frac{\text{What you want}}{\text{What you've got}} = \frac{\text{Whats its in}}{\text{What you've got}} \]

Example:

If a patient is prescribed a medicine that comes as 250mg in 5ml but requires 200mg the calculation will be

\[ \frac{200}{250} \times 5ml = 4ml \]

To calculate the flow rate of an infusion in drops per minute:

\[ \text{Flow rate (drops/min)} = \frac{\text{Volume of solution (mls)}}{\text{Duration of infusion (mins)}} \times \text{Number of drops per ml} \]

A standard administration set delivers 20 drops per ml
The number of drops per ml may vary with different manufacturers – always refer to packaging to confirm

Example:

To administer 100ml over 30 minutes the calculation would be:

\[ \frac{100 \text{ (mls)}}{(30 \text{ minutes})} \times 20 \text{ (drops) = 66.6 drops per minute} \]
APPENDIX 11 CARE PATHWAY FOR INTRAVENOUS ANTIBIOTIC THERAPY

This pathway is for use with patients who meet the criteria for entry for the intravenous administration of antibiotics at home, in a Care Home (by Community Support Staff of BACHS) or in a Community Hospital. Please refer to Appendix 1 & 2 of the Administration of Intravenous Antibiotics Policy for the criteria for acceptance.

This care pathway is intended as a guide to care and treatment and an aid to documenting patient progress. The Care Pathway document is designed to replace the conventional medical and nursing clinical record. This document should be retained in the patients notes for this episode of care.

If the care pathway is varied from for any reason, the reason for variation and subsequent action taken must be documented.

### Policy guidance

1. Safe and secure handling of medicines policy Community Hospitals (2008)

### Abbreviations used in pathway

<table>
<thead>
<tr>
<th>RN</th>
<th>Registered Nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANP</td>
<td>Advanced Nurse Practitioner</td>
</tr>
<tr>
<td>IV</td>
<td>Intravenous</td>
</tr>
<tr>
<td>SAP</td>
<td>Single Assessment Process</td>
</tr>
<tr>
<td>GP</td>
<td>General Practitioner</td>
</tr>
</tbody>
</table>

### All users to complete

<table>
<thead>
<tr>
<th>Print name</th>
<th>Signature</th>
<th>Initials</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Policy for the administration of intravenous antibiotic therapy to adults within the community hospitals and community support teams within BACHS 1.11.10
©BACHS 2010
# CARE PATHWAY FOR INTRAVENOUS ANTIBIOTIC THERAPY

<table>
<thead>
<tr>
<th>No</th>
<th>Designation</th>
<th>Intervention</th>
<th>Y</th>
<th>N</th>
<th>Signature Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Consultant, GP, ANP</td>
<td><strong>Does the patient meet the criteria for home or community hospital administration of antibiotics?</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Consultant, GP, ANP or RN in charge of team</td>
<td><strong>Medical responsibility accepted by named medical practitioner from the Community Hospital or GP locality.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Modern Matron/Registered Nurse in charge</td>
<td><strong>Nursing skill and competency confirmed and nursing responsibility accepted for the administration of intravenous antibiotics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Consultant, GP, ANP</td>
<td><strong>Reason for IV therapy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Is this clearly documented in the patient's medical notes?</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Consultant, GP, ANP</td>
<td><strong>Patient has received information re procedure, risks and benefits.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Consultant, GP or ANP</td>
<td><strong>Completed medical records are required to include the medical plan, review dates and a full prescription of the required drug</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Consultant, GP or ANP</td>
<td><strong>There is a clear prescription regime detailing drug, dose and frequency on either hospital drug chart (for inpatients) or a community prescription (FP10). This must also include details of diluent for pre and post administration flush</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Consultant, GP or ANP</td>
<td><strong>Verbal consent obtained</strong> and documented in patients medical notes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Consultant, GP, ANP or RN with Competency</td>
<td><strong>A patent cannula has been inserted. A care plan has been commenced to document date, time, location, size of cannula. Sterile transparent dressing in place</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Consultant, GP, ANP or RN with competency</td>
<td><strong>Patients identification checked against the prescription both before preparation of the antibiotic and prior to administration of the first dose</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Policy for the administration of intravenous antibiotic therapy to adults within the community hospitals and community support teams within BACHS 1.11.10

©BACHS 2010
**CARE PATHWAY FOR INTRAVENOUS ANTIBIOTIC THERAPY**

Name ___________________ NHS No ____________________ DOB ________________

<table>
<thead>
<tr>
<th>No</th>
<th>Designation</th>
<th>Intervention</th>
<th>Y</th>
<th>N</th>
<th>Signature (Date/Time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>RN with competency</td>
<td><strong>The patient is observed for side effects</strong> such as: anaphylaxis, rash, rigor, phlebitis&lt;br&gt;<strong>Please note that this is not a comprehensive list of all the side effects which may be experienced</strong></td>
<td>Y</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>RN with competency</td>
<td>Intravenous antibiotic administered without any adverse problems</td>
<td>Y</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>RN with Competency</td>
<td><strong>Staff trained and assessed as competent in the administration of intravenous antibiotics accept responsibility to continue treatment as per medical plan</strong></td>
<td>Y</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Consultant, GP or ANP</td>
<td>Medical review date set and documented</td>
<td>Y</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>RN with Competency</td>
<td><strong>The cannula site is assessed and the phlebitis score is recorded prior to the administration of each dose. Staff to compete the Saving Lives Peripheral Line Care risk assessment sheet pre and post administration</strong></td>
<td>Y</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>RN with competency</td>
<td>The cannula is assessed for patency prior to each administration</td>
<td>Y</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Consultant, GP or ANP</td>
<td>Medical review date:</td>
<td>Y</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Consultant, GP or ANP</td>
<td>Intravenous therapy to continue. Review date set and documented</td>
<td>Y</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Consultant, GP or ANP</td>
<td>Intravenous therapy discontinued and documented</td>
<td>Y</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Consultant, GP or ANP</td>
<td>Oral antibiotics commenced for ________ days&lt;br&gt;To be reviewed ______________</td>
<td>Y</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td>CARE PATHWAY ENDS</td>
<td>Y</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

Policy for the administration of intravenous antibiotic therapy to adults within the community hospitals and community support teams within BACHS 1.11.10

©BACHS 2010
Adapted from Dorset Primary Care Trust. Policy for the administration of intravenous therapies to adults in the community and community hospitals. February 2008
## APPENDIX 12

### BASE TEAM

**Delivering clean safe care**

**Saving Lives** Peripheral Line Care

### Aim:
To reduce the incidence of catheter-related bloodstream infections

<table>
<thead>
<tr>
<th>Observation</th>
<th><em>Hand hygiene</em></th>
<th><em>Continuing clinical indication</em></th>
<th><em>Site inspection</em></th>
<th><em>Phlebitis Score documented</em></th>
<th><em>Disinfection of line port or hub access site</em></th>
<th><em>Line insitu &lt; 72 hours</em></th>
<th><em>Dressing</em></th>
<th>All elements performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>% Compliance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Place a √ (yes) X (no) or N/A (not applicable) for each episode of care.*
Key:

Hand hygiene: decontaminate hands before and after patient contact and before applying protective gloves
Continuing clinical indication: all lines and associated devices are still indicated. If no indication then the lines should be removed
Site inspection: regular observation for signs of infection (at least daily)
Phlebitis score documented: document
Disinfection of line port or hub access site: use aseptic technique and swab port or hub with alcoholic 2% chlorhexidine solution prior accessing the line and administering medication via bolus or intermittent infusion
Dressing: An intact, adherent transparent dressing is present to allow observation of insertion site
Appendix 13

**IV ANTIBIOTIC PATHWAY FROM SECONDARY CARE**

- Patient identified on a hospital ward either in a Bradford or Airedale Hospital requiring long term antibiotics via a PICC line, who is medically stable and could have the ongoing treatment at home.

- Patient fulfils the criteria for home IV antibiotic treatment, see steps below.

- Patient aged 18 or over.

- Consultant facilitated fast-track re-admission if required in conjunction with patient specific readmission criteria.

- Must have had the first 2 doses of antibiotic in hospital.

- Individual patient specific rationale for medication from hospital pharmacist.

- All prescriptions, drugs and equipment must be supplied by the hospital (CST will provide list of what is required in terms of equipment).

- Patient consent obtained by consultant / medical team and clearly documented.

- CST will assess the patient on the ward following receipt of the referral and will discuss date of discharge where appropriate.

- Patient accepted or declined for home IV antibiotics.
### Appendix 14

EQUALITY IMPACT ASSESSMENT

Stage One: Screening of a policy, procedure, tender or strategy

<table>
<thead>
<tr>
<th>1. Name of policy, procedure, tender or strategy.</th>
<th>Policy for administration of Intravenous Antibiotic Therapy to adults within community hospitals and community support teams within BACHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is it a policy, strategy, procedure or practice?</td>
<td>POLICY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Who has been consulted?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Head of Business unit 2 and all staff in BACHS within this business unit that this policy will impact on</td>
</tr>
<tr>
<td>• Relevant clinicians in BTHFT and Airedale NHS Foundation Trust</td>
</tr>
<tr>
<td>• Members of professional advisory sub-committee</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Main aims</th>
</tr>
</thead>
<tbody>
<tr>
<td>To define professional responsibilities in the prescribing, preparation and administration of intravenous antibiotics. To provide an evidence base for practice. To provide a vehicle for practitioners to exercise clinical judgement within the realms of professional accountability (NMC 2008). To manage the risks that the administration of intravenous antibiotics can post</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. How has the policy been explained to those most likely to be affected?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct responses made to questions raised at consultation.</td>
</tr>
<tr>
<td>to both staff and patients. Ensure that patients receive treatment via the safe and effective administration of an intravenous antibiotic</td>
</tr>
</tbody>
</table>
Collecting and collating existing information and data

<table>
<thead>
<tr>
<th>Equality target group</th>
<th>1. Is the policy likely to have a potential differential impact with regards to the equality target group listed?</th>
<th>2. How have you arrived at the conclusions in box 1?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 = no</td>
<td>i. Who have you consulted? (appropriate individuals/groups internally and externally)</td>
</tr>
<tr>
<td></td>
<td>1 = little</td>
<td>ii. What have they said?</td>
</tr>
<tr>
<td></td>
<td>2 = medium</td>
<td>iii. What information/data have you interrogated? (library search, complaints data, PALS, research reports, local studies, advice from internal and external specialists)</td>
</tr>
<tr>
<td></td>
<td>3 = high</td>
<td>iv. Where are the gaps in your analysis?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>v. How will your paper promote the equality duties if they apply?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Older people</th>
<th>Young people</th>
<th>Children</th>
<th>Early years</th>
<th>1</th>
<th>The service only operates for people over the age of 18</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Disability</th>
<th>Sensory disabilities</th>
<th>Physical disabilities</th>
<th>Learning disabilities</th>
<th>Mental health</th>
<th>0</th>
<th>The pathway is open to all adults over the age of 18 who can give consent to treatment and where all the criteria are met.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Men</th>
<th>Women</th>
<th>Transgender</th>
<th>0</th>
<th>As above</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Race</th>
<th>Minority ethnic</th>
<th>0</th>
<th>As above</th>
</tr>
</thead>
<tbody>
<tr>
<td>communities Gypsies and travellers</td>
<td>0</td>
<td>As above</td>
<td></td>
</tr>
<tr>
<td>Religion or belief</td>
<td>Christian Muslim Hindu Buddhist Sikh Jew Other</td>
<td>0</td>
<td>As above</td>
</tr>
<tr>
<td>Sexual orientation</td>
<td>Lesbian Gay men Bisexual</td>
<td>0</td>
<td>As above</td>
</tr>
</tbody>
</table>

Summary

Is a more full equality impact assessment required? No

Please describe the main points arising from the initial screening here that support your decision:

This policy applies to all people irrespective of the above factors so long as they meet the criteria of the pathway and that is the only reason a person would not be eligible for care under this pathway.

Policy lead conducting impact assessment: Stephanie Lawrence

Approved by (member of the equality and diversity team): Lynne Carter

Date: 19.11.10
Appendix 15

SUMMARY OF POLICY DEVELOPMENT AND CONSULTATION

This policy was developed in response to Bradford and Airedale Community Health Services (BACHS) need for its own policy to enable them to commence home IV antibiotic therapy and to deliver care to patients in their own homes requiring long term IV antibiotic therapy.

The work was originally undertaken by the Professional Development Unit and then it was felt it needed to incorporate staff from Intermediate Care Services who would be delivering the care.

An internet search was completed to look for similar policies in use in other organizations. Whilst some of these offered some guidance most were very specific to their own areas.

The overall intention was to develop a policy that enables BACHS staff to safely deliver IV antibiotics in patients own homes.

Consultation on this document commenced by email in May 2010, but it was felt at this stage that a lot more work was required, therefore a working group was set up to look at this. The first draft policy was sent out for comment via email on 29 September 2010. Those consulted were asked for general comments on the document and its application to practice.

Those invited to comment included:

- Heads of Business Unit 2
- Clinical lead for professions and quality
- Service managers, team leaders and modern matrons in business unit 2
- Acute trust clinicians
- Infection prevention and control

Members of the following committees:

- Professional advisory sub-committee

Three responses were received, a number of positive suggestions and amendments were made which have been incorporated into the final document. There were no particularly contentious issues raised.