Trust-wide Document

NHS
Great Western Hospitals
NHS Foundation Trust

Trustwide Outpatient Parenteral Antibiotic Therapy (OPAT) for Adults Policy

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Status	LIVE		

Target Audience- who does the document apply to and who should be using it. - The target audience has the responsibility to ensure their compliance with this document by: • Ensuring any training required is attended and kept up to date. • Ensuring any competencies required are maintained. • Co-operating with the development and implementation of policies as part of their normal duties and responsibilities.	All Clinicians caring for adult patients at the GWH (Acute) requiring intravenous antibiotic therapy directly employed by the Trust whether permanent, part-time or temporary (including fixed-term contract). It applies equally to all others working for the Trust, including private-sector, voluntary-sector, bank, agency, locum, and secondees. For simplicity, they are referred to as 'employees' throughout this policy
Special Cases	This document does not apply to those receiving oral antibiotic therapy on discharge or those who have completed their intravenous antibiotic therapy before discharge. It does not apply to patients with infections that are not specified within this policy, except in exceptional circumstances when OPAT may be agreed jointly as appropriate by senior clinicians, the antibiotic team and the OPAT specialist nurse. This document does not apply to children and the community.
Accountable Director	Divisional Director of Integrated Care and Community Division
Author/originator – Any Comments on this document should be addressed to the author	Outpatient Parental Antibiotic Therapy Specialist Nurse
Division and Department	Integrated Care and Community Division
Implementation Lead	Outpatient Parental Antibiotic Therapy Specialist Nurse
If developed in partnership with another agency ratification details of the relevant agency	NA
Regulatory Position	British Society of Antimicrobial Chemotherapy Good Practice Recommendations (GPR) for OPAT (Ref 6).
Review period. This document will be fully reviewed every three years in accordance with the Trust's agreed process for reviewing Trust -wide documents. Changes in practice, to statutory requirements, revised professional or clinical standards and/or local/national directives are to be made as and when the	

Service Teamwork Ambition Respect

change is identified.

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Instant Information – Summary of Document Contents

This policy sits within the scope of Great Western Hospitals NHS Foundation Trust (the Trust) Medicines Assurance Committee.

This policy sets out the standards for the management of patients receiving Outpatient Parenteral Antibiotic Therapy (OPAT). This service is supported by the Antibiotic Stewardship Program (ASP) within the Trust (Ref 1).

This policy will enable the Trust to conform to the British Society of Antimicrobial Chemotherapy Good Practice Recommendations (GPR) for OPAT (2019) (Ref 6) ensuring appropriate and safe patient management.

This policy provides clear guidance on:

- Which intravenous antibiotics may be suitable for use in OPAT treatment regimens (Section 2.2)
- Appropriate referral to the OPAT Specialist Nurse (Section 2.3).
- Diagnosis suitable for OPAT and exclusions (Sections 2.3.1).
- Correct discharge process of an OPAT patient (Section 2.6).
- Monitoring and follow up of OPAT patients (Section 2.7).

1 Introduction & Purpose

1.1 Introduction & Purpose

OPAT is a method for delivering intravenous antibiotics (IVAB) in the community or an outpatient setting, as an alternative to inpatient care. It is useful for patients who require intravenous therapy for moderate to severe infections (See section 2.2) but are otherwise well enough to initiate or continue therapy without the need of an overnight stay in hospital. OPAT has been used in many countries since the 1980's and a wealth of evidence has accumulated supporting its clinical justification and cost effectiveness (Ref 2).

The benefits of OPAT include admission avoidance and reduced length of stay in hospital, which result in an increase in inpatient capacity, significant cost savings compared with inpatient care, reduction in risk of healthcare-associated infection (such as *C.difficile* / Methicillin Resistant Staphylococcus Aureus (MRSA)) and improved patient choice and satisfaction. All of these benefits underpin the philosophy and direction of the UK healthcare-quality strategy (Ref 2), with the emphasis on patient-centred and ambulatory care. However, by its very nature OPAT involves less patient supervision than inpatient care, and therefore carries potentially increased risks for patient safety. With careful attention to risk management and robust patient management plans on discharge, these risks are minimised. In the United Kingdom (UK), a consensus statement was first published in 1998 made recommendations for selection of appropriate infections and suitable patients for OPAT, and detailed priorities for OPAT service development (Ref 2).

A key recommendation within this statement was for OPAT to provide treatment equivalent to that for inpatients as a minimum.

Referrals (See section 2.3 for process) for OPAT can be accepted from within the Trust including Trust Community units. Referrals from outside the Trust e.g. Clinical Commissioning Groups (CCG's) can be made by telephone. It may be possible to provide OPAT for patients referred from other Trusts but these will be assessed individually by the OPAT Nurse and will usually only be accepted if the patient is living within Swindon or Wiltshire areas where the CCGs commission OPAT.

1.2 Glossary/Definitions

The following terms and acronyms are used within the document:

%	percentage
<	Less than
>	More than
ANTT	Aseptic Non Touch Technique
ASP	Antibiotic Stewardship Program
BSAC	British Society of Antimicrobial Chemotherapy
C.difficile	Clostridium difficile
CCG	Clinical Commissioning Group
CIVT	Community Intravenous Therapy Team
CQC	Care Quality Commission
CRP	C- Reactive Protein
D&O	Diagnostic & Outpatient
ED	Emergency Department
EDD	Estimated Discharge Date
EDS	Electronic Discharge Summary
EIA	Equality Impact Assessment

EPMA	Electronic Prescribing Medicines Administration
ESBL	Extended Spectrum Beta Lactamases
FBC	Full Blood Count
GP	General Practitioner
GPR	Good Practice Recommendations
GWH	Great Western Hospital
IP&C	Infection Prevention and Control
IV	Intravenous
IVAB	Intravenous antibiotics
IVB	Intravenous Bolus
IE	Infective Endocarditis
IVI	Intravenous Infusion
LFTS	Liver Function Tests
MFFD	Medically Fit For Discharge
MRSA	Methicillin Resistant Staphylococcus Aureus
NHS	National Health Service
OD	Once Daily
OPAT	Outpatient parenteral antibiotic therapy
PICC	Peripherally inserted central catheter
SWICC	Swindon Intermediate Care Centre
SHO	Senior House Officer
SLA	Service Level Agreement
SOP	Standard Operating Procedure
TDM	Therapeutic drug monitoring
TTA	To Take Away
U&E	Urea and Electrolytes
UK	United Kingdom
VAD	Vascular Access Device
WBC	White blood cells
WTE	Whole Time Equivalent

2 Main Document Requirements

2.1 OPAT Accepted Diagnoses/ Suitable Antibiotics and Exclusions

In order to minimise the risk to patients, the OPAT working group within the Trust has compiled an indication-specific list of IVAB in which patients may be suitable for discharge (see 2.2).

Patients must be considered medically fit for discharge (MFFD) must have a named consultant working within the Trust and no longer requiring acute care. Each patient will be assessed individually using the OPAT Pathway (Appendix B) and OPAT Assessment Form (Appendix D) for suitability by the OPAT Specialist Nurse. This includes assessment of vascular access requirements (usually in conjunction with the Peripherally Inserted Central Catheter (PICC) Service) (See Ref 7)

Antibiotics listed below are considered as possible choices for discharge on OPAT but all patients must be referred to the OPAT specialist nurse before 'To Take away (TTA)' IVAB are prescribed.

2.2 Indication Specific List of IVAB on which Patients may be Suitable for Discharge

Speciality	Indication	Antibiotic(s)	Information
Respiratory	Bronchiectasis	Piperacillin/Tazobactam (Tazocin) Meropenem Ceftazidime	These antibiotics are approved to treat OPAT Respiratory patients ONLY.
Orthopaedics	Septic Arthritis Prosthetic joint/material infection Discitis Osteomyelitis Diabetic Foot infection	Ceftriaxone Teicoplanin Ertapenem Daptomycin	
Cardiology	Endocarditis	Ceftriaxone Teicoplanin Daptomycin	Please see section 2.4.1 Assessment & Discharge Criteria for Infective Endocarditis
Urology	Extended Spectrum Beta Lactamases (ESBL) Urinary Tract Infection	Ertapenem On microbiology advice only	
Medical	Cellulitis	Ceftriaxone Teicoplanin	Any patient with a cellulitis diagnosis and who has had IV antibiotics dispensed should be referred to the Community Intravenous (IV) Therapy Service to continue their prescribed treatment. The referrer, in this case remains responsible for review of the patient.

The indications in the table above are not an exhaustive list. Any patients with an alternative diagnosed infection that is on a suitable antibiotic may be appropriate for OPAT.

2.3 Referral Process

Referrals can be made by:

- Ringing through to the OPAT nurse on extension (60) 5195 or bleep 1108
- Emailing: gwh.opativtherapyteam@nhs.net

Referral forms for the OPAT service can be found on the intranet (see Appendix B / Ref 8).

Once a referral has been received, if the patient meets the criteria and is suitable for OPAT, the patient will be assessed by the OPAT Specialist Nurse. (Please see Appendix C for OPAT Pathway).

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If after following the OPAT Pathway the patient is unsuitable, the OPAT nurse will inform the clinical team and document the outcome of the assessment in the patients' medical records or appropriately in OPAT records.

Patients must be referred **at least** 48 hours before discharge.

2.3.1 Exclusions for the Referral Process

The OPAT Nurse will generally not consider the following groups of patients for IVAB at home:

Patient Group	Rationale
Respiratory Patients	Although respiratory patients requiring OPAT are managed by the OPAT Team in the first instance – patients will only be accepted by the OPAT Team if there is capacity. If there is no capacity within the OPAT Team they will be referred back to the Respiratory Specialist Nurses
Previous and Current Intravenous Drug Users	Will NOT be considered for OPAT due to the nature of having a long term Venous Access Device (VAD) and the potential for misuse
Patients who self-discharge against medical advice	Patients who self-discharge against medical advice will not be supported by the OPAT Service
Previous OPAT patients where problems have arisen during OPAT therapy that may compromise clinical management at home.	Individually assessed – dependant on problems from previous OPAT treatment. For example, misuse of previous VAD, previous non-compliance which has resulted in delays in treatment and missed doses
Patients who are severely unwell or clinically unstable	Must not be referred as they are not considered MFFD.
Patients whose: • C- Reactive Protein (CRP) is elevated • White Blood Cells (WBC) greater than 11.0 Units • Neutrophils greater than 7.0 Units • on discharge date	To meet OPAT Criteria patients CRP must be reducing. News 0 or 'normal for them' and patient well with the focus controlled.WBC must be stable or improving (desired range between 4.0-11.0)
Patients with impaired and/or unstable renal and liver function	Patients with acute unstable renal /liver function will not be considered for OPAT until improving/liver/renal function is within normal parameters for that patient. Individual assessment of patients will be required. If patients with an impaired/unstable renal/liver function are receiving an antibiotic that requires therapeutic drug monitoring a level will be required to be taken and within therapeutic range prior to discharge
Patient considered to be at high risk of/or confirmed sepsis	Will not be considered for OPAT
Patients who have not been assessed by their medical team as MFFD	Will not be considered for OPAT. Medical Team will need to document fitness for discharge in the patient's note
Patients who have failed assessment criteria for OPAT	Will require re-referral once suitable.

Patient Group	Rationale

2.4 OPAT Assessment

Once referred the patient will be assessed by the OPAT Specialist Nurse (See Appendix D).

At present patients can receive antibiotics via three methods:

- District Nurse Administration.
- Self-Administration (if considered competent).
- Daily Attendance at the Trust – must be pre-arranged and accepted by the Ambulatory Care Unit who can administer treatment.

Locality of the patient's home affects the treatment that can be received in the community. See table below:

Method	Swindon Patients	Wiltshire Patients
Cannulas Accepted	✓ (individual assessment required)	x
Doses up to and including a TDS regime	✓ (individual assessment required)	x
Intravenous Bolus (IVB)	✓	✓
Intravenous Infusion (IVI) (not longer than 30 minutes)	✓ (Dependant on Community Team capacity)	✓ (Dependant on Community Team capacity)

2.4.1 Assessment and discharge criteria for patients with Infective Endocarditis (IE)

Patients with IE requiring discharge must meet the following criteria on assessment:

- Stable and responding well to therapy (and not meet any of the exclusion list in section 2.3.1)
- On a once daily antibiotic regime
- No complications of IE, such as congestive heart failure, conduction abnormality, mental status change, or evidence of perivalvular abscess on transoesophageal echocardiogram
- No indications for surgery

Please be aware that self-administration/carer administration is not an option for IE patients

Prior to discharge patients will require at least 2 weeks of inpatient treatment and at least 2 doses of any new antibiotic.
This can be reduced to 1 week of inpatient treatment if they meet the following criteria:

- Infection with Viridans Streptococcal IE (Consultation with Microbiology Consultant on individual patents may identify other low-virulence, low risk organisms for which a similar approach may be taken)
- Medically stable condition without fever and with negative blood culture results & stable Electrocardiogram at time of proposed discharge
- No complications of IE and not included in our exclusion from discharge list (see below)

Patients suffering with the following will not be considered for discharge with OPAT

- Acute IE
- Aortic Valve disease

- Prosthetic valve disease
- IE caused by Staphylococcus aureus or other virulent organisms (Streptococcus pneumonia, Haemophilus influenza, Neisseria meningitides, Neisseria gonorrhoeae, beta-haemolytic streptococci, gram negative bacteria, and fungi.

On discharge the patient must have the following in place
- A named Cardiologist to follow up the patient
- The patient should be educated and fully informed about the complications of IE and indications for and method of contacting their Consultant Team if needed
- Patients and family should be reliable, compliant and live close to the hospital
- Twice weekly blood tests arranged with the district nursing team
- Twice weekly follow up with the discharging team
- Same day evaluation/readmission (avoiding Accident and Emergency department) should be available for patients with recurrent fever or new symptoms.

(The above guidelines were compiled using Ref 9, 10 & 11)

2.5 District Nurse/Clinician from Community Team

The appropriate community nursing team will administer the patients IVAB daily. This will either be in the morning or in the afternoon depending on when the patient has been receiving treatment – The Community Teams normal working pattern needs to be taken into consideration e.g. ideally not sending home patients receiving Once Daily (OD) regime at 21:00. Where possible and where the regime allows, IV antibiotics should be administered within normal working hours. All patients will be asked to attend the IV Clinic in the Swindon Intermediate Care Centre (SWICC) to receive their antibiotics by the Community IV Therapy Team in the first instance if they are able to.

2.5.1 Self-Administration

The option of self-administration will be discussed between the OPAT specialist nurse and the potential candidate to self-administer. If an OPAT patient wishes to administer their own IVAB therapy on discharge this will be discussed between the OPAT Nurse and the potential candidate for self-administration, the OPAT nurse must demonstrate and explain the administration process to the patient (Appendix F). Patients are also given a step by step guide on how to administer their particular treatment which is written by the OPAT Specialist Nurse.

This self-administration training is jointly provided by the OPAT Specialist Nurse alongside the ward nurses (Appendix E).

Patients can be discharged to self-administer their IVAB once suitable training (including hand hygiene, ANTT, correct storage of medication, sharp safety and disposal equipment and waste (Ref 3, 4 & 5) has been provided and the patient considered competent by the OPAT Specialist Nurse. All patients will be provided with sharps bins and informed that they can be brought back to GWH for disposal or given to their District Nursing Team.

Patients must **NOT** be sent home to self-administer IVAB without a full assessment being carried out by the OPAT Specialist Nurse.

A signed copy of the Self Administration and Competency document is then retained appropriately by the OPAT Team (Appendix G).

2.5.2 Carer Administration

Alternatively, if an OPAT patient wishes their carer to administer their IVAB therapy on discharge, the OPAT nurse must demonstrate and explain the administration process to the carer (Appendix F). Carers are also given a step by step guide on how to administer their particular treatment which is written by the OPAT Specialist Nurse.

This self-administration training is jointly provided by the OPAT Specialist Nurse alongside the ward nurses (Appendix F).

Patients can be discharged with carers administering their IVAB once suitable training (including hand hygiene, ANTT, correct storage of medication, sharp safety and disposal equipment and waste (Ref 3,4 & 5) has been provided and the carer is considered competent by the OPAT Specialist Nurse.

Patients must **NOT** be sent home with carers administering IVAB without a full assessment being carried out by the OPAT Specialist Nurse.

A signed copy of the Carer Administration and Competency document is then retained appropriately by the OPAT Team (Appendix F).

2.6 Management of the Discharge of an OPAT Patient

For a patient to be discharged, they must follow the OPAT pathway (Appendix C) as well as the normal procedures for discharge (Appendix G)

2.7 Management and Follow up of OPAT Patients after Discharge

Once a patient has been assessed and discharge planning has been initiated, the OPAT Nurse will ensure appropriate follow up and monitoring of the patient is provided. This will involve weekly blood testing which will be reviewed by the OPAT team and fed back to the Consultant responsible for the care of the patient. If necessary, adjustments will be made to the patient's treatment using a multidisciplinary team approach, as agreed by the antibiotic pharmacist or consultant microbiologist.

All OPAT patients will require a follow up by a senior clinician on completion of treatment to establish if a full recovery has been made or whether a further course of antibiotics are required. The follow up appointment will also be attended by the OPAT nurse where possible.

If problems arise outside of OPAT working hours the patient/ carer/ community nurse must follow the guidance provided within their personalised management plan.

2.8 Patient Discharged Outside of OPAT Service Hours

Please try to avoid discharging patients outside of OPAT Service hours unless previously agreed with the OPAT Team. If Discharge outside of OPAT hours is necessary please contact to relevant district nursing team prior to discharge to ensure they have capacity and email the OPAT Team to inform them of the discharge.

2.9 Management of a Patient that Requires Readmission

All patients are provided with a management plan on discharge that includes the number of the OPAT Specialist Nurse as well as useful contact numbers for clinical advice, if it is outside service working hours. The management plan also contains information regarding common side effects associated with antibiotic treatment.

If the patient has any of the concerning signs or symptoms mentioned in their management plan, the patient is advised to call the OPAT Specialist Nurse in the first instance if it is within service working hours.

Attempts will always be made to avoid attendance to the Emergency Department (ED).

2.9.1 Orthopaedic Patients

If a review is required by the Consultant Team a clinical appointment via the Fracture Clinic will be arranged or if unavailable, attendance to the Surgical Assessment Unit for review by the On Call Orthopaedic Senior House Officer (SHO) will be arranged.

2.9.2 Podiatry Patients

If a review is required by the Consultant Team a clinic appointment via the fracture clinic/foot attack clinic will be arranged or if unavailable attendance to the Surgical Assessment Unit for review by the Podiatry Team (contactable on bleep 2614)/On Call SHO will be arranged by the OPAT Nurse.

2.9.3 All Other Specialities (Medical Patients)

If review is required by the Consultant Team attendance to the Ambulatory Care Unit will be arranged for a review by the relevant Medical Team.

If the Consultant Team/Microbiologist/Antibiotic Pharmacist/OPAT Nurse feels that the patient is becoming rapidly unwell and requires a more urgent review they will be advised to attend ED.

3 Monitoring Compliance and Effectiveness of Implementation

The arrangements for monitoring compliance are outlined in the table below: -

Measurable policy objectives	Monitoring or audit method	Monitoring responsibility (individual, group or committee)	Frequency of monitoring	Reporting arrangements (committee or group the monitoring results is presented to)	What action will be taken if gaps are identified
90 per cent (%) of patients (referred to the OPAT Service who are medically fit for discharge), go home on IV antibiotics instead of a prolonged inpatient stay.	Patient Records – referrals made to the OPAT Service	OPAT Specialist Nurse	Every six months (re-audit)	Antibiotic Working Group	Service Improvement
100% of patients receive personalised management plan (given to patient to prevent re-admission)	Suitable OPAT Management plans provided to all OPAT Patients Friends and Family, questionnaires.	OPAT Specialist Nurse	Every six months (re-audit)	Antibiotic Working Group	Service Improvement
Readmission Rate to be less than 10% of the total patients discharged.	The patient records of every patient receiving OPAT	OPAT Specialist Nurse	Every six months (re-audit)	Antibiotic Working Group	Service Improvement

4 Duties and Responsibilities of Individuals and Groups

4.1 Chief Executive

The Chief Executive is ultimately responsible for the implementation of this document.

4.2 Ward Managers, Matrons and Managers for Non Clinical Services

All Ward Managers, Matrons and Managers for Non Clinical Services must ensure that employees within their area are aware of this document; able to implement the document and that any superseded documents are destroyed.

4.3 Document Author and Document Implementation Lead

The document Author and the document Implementation Lead are responsible for identifying the need for a change in this document as a result of becoming aware of changes in practice, changes to statutory requirements, revised professional or clinical standards and local/national directives, and resubmitting the document for approval and republication if changes are required.

4.4 Patient's Consultant and Clinical Team

The patient's consultant and clinical team remain responsible for:

- On-going care of the patient whilst in hospital.
- Assessment for discharge and continuing care after discharge.
- Referrals to the OPAT Specialist Nurse.
- Monitoring and follow up of clinical progression and outcome.

4.5 OPAT Specialist Nurse

The OPAT Specialist Nurse is responsible for:

- Supporting the Trusts referring clinician, microbiologist and antibiotic pharmacist in assessing the suitability of patients for OPAT and their treatments.
- Liaising with the PICC team with regards to the insertion, on-going care and removal of venous access devices.
- Ensuring patient/carers are competent to self-administer and are deemed appropriate to do so.
- Supporting the ward staff with the training of patients wishing to self-administer
- Ensuring safe procedures and all necessary documentation is in place for administration of IVAB in the community and liaise with district nurses where necessary to ensure safe administration.
- Completing individual patient management plans and ensuring copies are provided to the patient and community nurses.
- Providing a contact for patients receiving OPAT and community nurses, arranging any necessary follow up for patients as required.
- Attending follow up appointments of OPAT patients and arranging any continuing treatment deemed necessary by clinicians as required.
- Providing training for community nurses relating to IV Administration and the OPAT Service within the Community.

4.6 Discharging Team/Ward Employees

The discharging team is responsible for:

- Ensuring a patient has been clinically assessed as safe for discharge and documenting this in medical notes if requiring OPAT and that a referral to the OPAT specialist nurse has been made in a timely manner.
- Assisting if required, with the training of self-administration/carer administration of antibiotics following the OPAT guidance for self or carer administration if they feel confident and competent to do so
- Provide the patient with a minimum of 14 days of consumables (as per Service Level Agreement with the CCG). If a patient is being discharged self-administering they will require full amount of consumables.

4.7 Pharmacy Department when handling OPAT EDS

All pharmacy employees need to refer to the OPAT Standard Operating procedures (SOP's). These can be found on the Trust T drive and refer to the dispensing of TTA's for patients requiring OPAT on discharge.

4.8 Community Nursing Team

The Community Nursing Team is responsible for:

- Ensuring patients receive antibiotics as prescribed regularly each day
- Documenting all doses given, any missed doses and timing of any therapeutic drug level taken until the planned completion date
- Reporting any problems/deterioration of the patient to the OPAT Specialist Nurse.

5 Further Reading, Consultation and Glossary

5.1 References, Further Reading and Links to Other Policies

The following is a list of other policies, procedural documents or guidance documents (internal or external) which employees should refer to for further details:

Ref. No.	Document Title	Document Location
1	Trust Antimicrobial Prescribing Policy	T:\Trust-wide Documents
2	Good practice recommendations for outpatient parenteral antimicrobial therapy (OPAT) in adults in the UK: a consensus statement.	http://e-opat.com/
3	Hand Hygiene and Skin Care Policy (including scrubbing gowning and gloving)	T:\Trust-wide Documents\ Infection prevention & control
4	ANTT Procedure for any Invasive Clinical Practice	T:\Trust-wide Documents\ Infection prevention & control
5	Safe Handling & Disposal of Sharps Policy	T:\Trust-wide Documents\ Infection prevention & control
6	British Society of Antimicrobial Chemotherapy Good Practice Recommendations (GPR) for OPAT (2019)	*bsac.org.uk*
7	The Royal Marsden manual of Clinical Procedures – Vascular Access Devices: insertion and management	http://www.rmmonline.co.uk
8	OPAT Referral Form	http://intranet/
9	British Society for Antimicrobial Chemotherapy	https://academic.oup.com/jac/article/67/2/269/701537

Ref. No.	Document Title	Document Location
10	Patient Selection Criteria and Management Guidelines for Outpatient Parenteral Antibiotic Therapy for Native Valve Infective Endocarditis	file:///T:/Pathology/Microbiology/Microbiology%20Consultants/Endocarditis%20Database/Patient%20Selection%20Criteria%20and%20Management.pdf
11	Risk factors for failure of outpatient parenteral antibiotic therapy (OPAT) in infective endocarditis	file:///T:/Pathology/Microbiology/Microbiology%20Consultants/Endocarditis%20Database/Risk%20factors%20for%20failure%20of%20outpatient%20parenteral%20antibiotic%20therapy.pdf

5.2 Consultation Process

The following is a list of consultees in formulating this document and the date that they approved the document:

Job Title / Department	Date Consultee Agreed Document Contents
Infection Prevention & Control Specialist Nurse	30/09/2019
Consultant Microbiologist	03/10/2019
Director of Pharmacy	17/10/2019
Clinical Pharmacy Manager	17/10/2019
Antibiotic Pharmacist	17/10/2019
Nurse Practitioner PICC Service	17/10/2019
Respiratory Nurse Specialist	02/10/2019
Community Intravenous Therapy Team (CIVT)	17/10/2019

6 Equality Impact Assessment

An Equality Impact Assessment (EIA) has been completed for this document and can be found at Appendix A.

Appendix A - STAGE 1: Initial Screening For Equality Impact Assessment

At this stage, the following questions need to be considered:			
1	What is the name of the policy, strategy or project? Trustwide outpatient parenteral antibiotic therapy policy		
2.	Briefly describe the aim of the policy, strategy, and project. What needs or duty is it designed to meet? This policy sets out the standards for the management of patients receiving Outpatient Parenteral Antibiotic Therapy (OPAT). Aimed at all staff caring for patients who require OPAT. Provides advice on referrals, suitable patients, and typical therapies.		
3.	Is there any evidence or reason to believe that the policy, strategy or project could have an adverse or negative impact on any of the nine protected characteristics (as per Appendix A)?		**No**
4.	Is there evidence or other reason to believe that anyone with one or more of the nine protected characteristics have different needs and experiences that this policy is likely to assist i.e. there might be a *relative* adverse effect on other groups?		**No**
5.	Has prior consultation taken place with organisations or groups of persons with one or more of the nine protected characteristics of which has indicated a pre-existing problem which this policy, strategy, service redesign or project is likely to address?		**No**

Signed by the manager undertaking the assessment	SLWoodard
Date completed	30/9/19
Job Title	Antimicrobial pharmacist

On completion of Stage 1 required if you have answered YES to one or more of questions 3, 4 and 5 above you need to complete a STAGE 2 - Full Equality Impact Assessment

Equality Impact Assessment

Are we Treating Everyone Equally?

Define the document. What is the document about? What outcomes are expected?

Consider if your document/proposal affects any persons (Patients, Employees, Carers, Visitors, Volunteers and Members) with protected characteristics? Back up your considerations by local or national data, service information, audits, complaints and compliments, Friends & Family Test results, Staff Survey, etc.

If an adverse impact is identified what can be done to change this? Are there any barriers? Focus on outcomes and improvements. Plan and create actions that will mitigate against any identified inequalities.

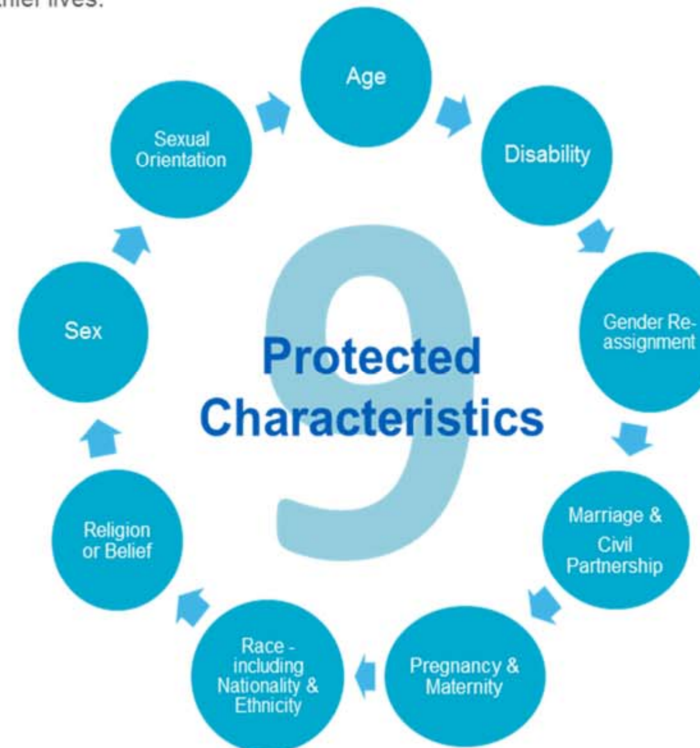
If the document upon assessment is identified as having a positive impact, how can this be shared to maximise the benefits universally?

Trust Equality and Diversity Objectives

Better health outcomes for all	Improved patient access & experience	Empowered engaged & included staff	Inclusive leadership at all levels

Our Vision

Working together with our partners in health and social care, we will deliver accessible, personalised and integrated services for local people whether at home, in the community or in hospital empowering people to lead independent and healthier lives.



Appendix B - OPAT Referral Form

Outpatient Parenteral Antibiotic Therapy (OPAT) Referral Form

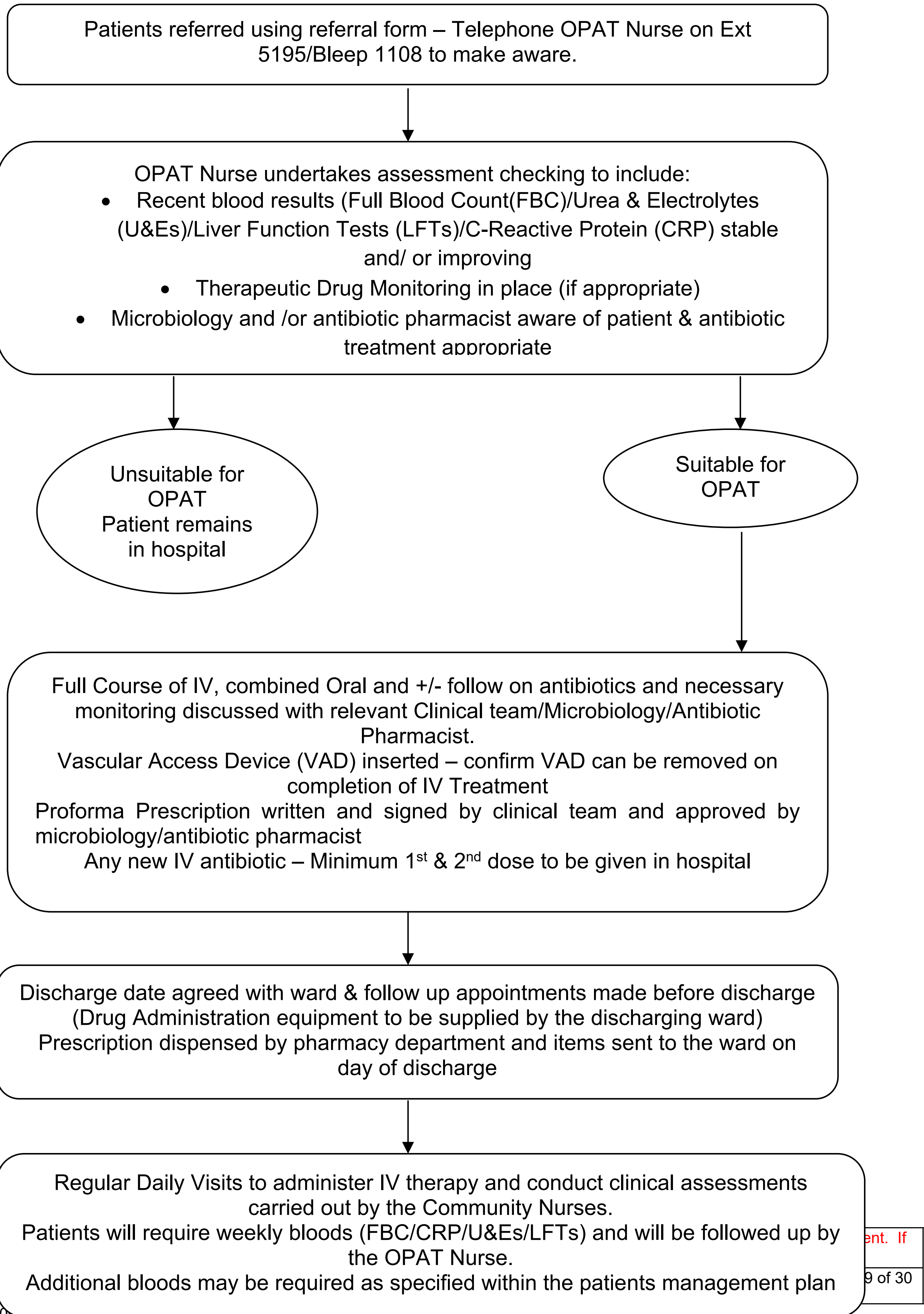
Please aim to refer at least 48 hours before discharge. Referrals are accepted Monday- Friday between 08.30 and 16.30. Please try to plan discharges during the working week.

Referral Details		
Date & Time of Referral:	Referred by:	
Referrer's Designation:	Tel No:	
Patient Details		
Surname	Forename (s)	
Hospital Number:	Tel No:	
DOB:	Ward:	
Swindon or Wiltshire Patient:	Estimated Discharge Date:	
Treatment Details		
Consultant:	Speciality:	Allergies:
Reason for Antibiotic Therapy:		
Antibiotic Prescribed:	Dose & Frequency	
Duration:	Start Date:	
PICC/Midline insitu? – If no has it been requested?		
***** If patient is on Teicoplanin review by the Antibiotic Team is required to check patient has been correctly loaded and renal function is stable prior to discharge*****		

Please send this form to:

Email: gwh.opativtherapyteam@nhs.net
OPAT Nurse Tel: Ext 5195/Bleep 1108

Appendix C – OPAT Pathway



Appendix D - OPAT Assessment Form

OPAT Assessment Form

Contact Details	Patient Contact Number:
Next of Kin & Contact Number:	
District Nurse Team & Contact Number:	
Previous Medical History:	
Allergies & Sensitivities:	**Patient Weight:** **IP&C :**

Details of Admission/Infection				
Consultant:		Ward:		
Admission Date:				
Diagnosis:		Inpatient Procedures:		
Bloods at time of referral/Date taken:				
CRP	LFTs	U&Es	FBC	Levels
Microbiology Results (specimen/results/sensitivities)				
Antibiotic Treatment History:				
Treatment plan (including combined oral therapy/oral switch): **Confirmed at MDT/With a Microbiologist** ☐ **2 does of ABX given prior** ☐ **discharge**				

Vascular Access Device:		
Date inserted	Type of line	Length

Discharge Planning	
District Nurse or Self Administer:	Date Self Admin Training Completed:
Discharge Date	POC required?
Community Referral & P2 completed and sent :	EPMA Complete?
Amount of Consumables Supplied:	Blood Forms given?
Amount of TTAs Supplied:	Date further supply required:
Management Plan Given:	Documented in PT Notes:

Observations on Discharge:			
Blood Pressure:	Respiratory Rate:	Temperature:	O2 Saturation:

On-going monitoring/care
Blood Tests & Frequency:
Vascular Access Due to be redressed on:
Any wound care required:

Notes:

Data Collection		
Referred By:	Date Referred:	Referral Form Received:

Assessed by:	Date of Assessment
Data Inputting:	

Patient List	End Of year Report	Letter on Medway	Alert Added

Appendix E - Criteria for Self Administration

Patient/Carer Criteria for Self Administration

For a patient to self-administer their own Intravenous medication via the OPAT service the **following criteria need to be met:**

- The patient/carer must be willing to accept the responsibility for giving the antibiotics
- Patients must have access to a telephone/mobile and have access to transport if needed.
- The patient/carer must receive relevant knowledge, practical instruction and be deemed competent by a member of the OPAT Team in giving the antibiotics (using the 'self-administration assessment form' – part 2)
- The patient must be registered with a local General Practitioner (GP).
- First and second doses of medication must be given in hospital and not at home

Exclusion Criteria:

- Patient/Carer unable to read or write
- Patient/Carer unable to speak English and does not have access to a suitable translation service
- Patient/carer unable to comply with training
- Previous or current history of substance abuse (including alcohol) in the patient
- More than two intravenous medications required
- Patient has no running water and telephone at home

Steps in assessment and training for self/carer administration

1. The patient is identified as being a potential candidate for self-administration
2. The patient/carer agrees to undergo training and to self/carer administration
3. The exclusion criteria is not applicable and the patient is suitable for self-administration
4. The OPAT nurse will assess the medication that the patient will be taking to ensure it has been agreed by Microbiology and is suitable to use via self/carer administration
5. The OPAT nurse will assess the potential competency of the patient/carer using the 'self/carer administration assessment form' (Appendix F Part 1)
6. Initially the OPAT nurse will demonstrate the administration procedure to the patient/carer
7. After initial demonstration by the OPAT nurse the ward staff can supervise the patient/carer with the administration of the Intravenous Medication
8. Once the patient/carer has been assessed and deemed as competent to administer, he/she will be asked to sign the self/carer administration record (Appendix F Part 2). This will be filed in the patient's medical notes, with a copy being filed in the OPAT Nurses' notes.
9. Patient are referred to community nursing team for weekly visits to review progress, change vascular access device dressing and routine blood tests. This can be undertaken at the patients home or alternatively, at the IV Bay in the Swindon Intermediate Care Centre (SWICC) Building.

10. Written instructions regarding hand hygiene, reconstitution, line care, administration and discarding waste will be supplied via a step by step guide
11. The OPAT nurse will conduct follow up phone calls during the course of treatment to ensure that the patient/carer are managing well with the self/carer administration process and answer any questions that may arise.

Training Sequence

The self-administration training will progress through the following steps:

1. Initial Demonstration (by the OPAT Nurse)
2. Full supervision. The OPAT Nurse to teach the patient/carer how to administer intravenous medications and explain their purpose. This will be repeated until the OPAT nurse is confident that the patient/carer has understood all aspects of the administration process
3. Close Supervision - Ward Staff to watch patient/carer closely in the administration of the intravenous antibiotics
4. Assessment by OPAT Nurse – OPAT nurse to assess patient/carer administering the intravenous medication
5. Full self/carer administration of Intravenous medication – Once deemed competent by the OPAT nurse the patient/carer is allowed to administer the intravenous medication without supervision.

N.B – A patient/carer must progress to step 5 before being allowed to self/carer administer the intravenous antibiotics at home.

There is no guarantee that the patient will eventually be deemed competent to self-administer unsupervised. A patient/carer may withdraw from the self-administration training at any time or the OPAT Nurse may terminate training if there is evidence of an inability of the patient/carer to cope.

Documentation to be given to patient:

- Step by Step administration guide
- Anaphylaxis and the signs to look for
- Information on how to care for your PICC/Midline (provided by the PICC Team)
- OPAT Management plan

Filed in notes:

- Self/Carer Administration assessment form (Part 1 and Part 2)

Appendix F - Self Administration Assessment and Competency
Part 1

Patient Initial Self/Carer Administration Assessment Form

1	Is the patient or carer interested in being assessed for self-administration?	Yes	No
2	Can the patient/carer open the containers that the medicines are supplied in?	Yes	No
3	Does the patient/carer understand?		
	(a) The Medicines he/she will be taking or giving?	Yes	No
	(b) The dose and times of administration?	Yes	No
	(c) Any side effects which might need to be reported to nursing staff?	Yes	No
4	Can the patient/carer identify and differentiate between the drugs and flushes?	Yes	No
5	Does the patient/carer understand the implications of self-administering the medicines?	Yes	No
6	Does the patient/ carer understand the prevention of infection by		
	(a) ANTT?	Yes	No
	(b) Hand hygiene?	Yes	No
	(c) Sharp safety?	Yes	No
	(d) Correct storage of medication?	Yes	No
	(e) Disposal of sharps/equipment and waste?	Yes	No
7	Is the patient/carer willing to take the responsibility to do so?	Yes	No
8	Does the patient/carer understand the importance of good PICC/Midline/Hickman line care?	Yes	No
9	Is the patient/carer aware of what to do if condition worsens/has any concerns?	Yes	No
10	**Conclusion** Is the patient or carer suitable for performing self-administration? (Answer **Yes** only if all the previous responses were Yes)	Yes	No

Name, signature and designation of assessing nurse	**Signature and name of person performing self-administration (designate if patient or carer)**	**Date of assessment**

Part 2

Antimicrobials to be administered

Drug and dose: ....

Frequency: ....

	Date	Date	Date	Date	Date	Date
Skill Required	OPAT Demonstration	1st Assess (✓ for pass or x for fail)	2nd Assess (✓ for pass or x for fail)	3rd Assess (✓ for pass or x for fail)	4th Assess (✓ for pass or x for fail)	5th Assess (✓ for pass or x for fail)
Hand Hygiene						
Preparation of area						
Aseptic Non-Touch Technique						
Preparing medication and flushes correctly						
IV Access management and Visual Infusion Phlebitis (VIP) awareness						
Administration of flushes and medication correctly						
IV access management after treatment						
Disposal of sharps/equipment and waste						
Storage of drugs/equipment at home						
Pass or refer						
Signature of assessor (OPAT Team Member)						

Patient information and guidance given about anaphylaxis	Yes	No
Advised about drug information sheet in packets	Yes	No
Supplied with Drugs, diluents, flushes	All	Date of collection:
Supplied with appropriate clinical equipment	Yes	Outstanding:
Patient/Carer (name) I .... have undertaken training in how to administer IV therapy and have been deemed competent and understand all the above information.	Signature: Date:	

Appendix G - Procedure for Discharge

- The patient needs to be considered medically stable by the clinical team prior to discharge planning. The clinical team must assess the patient and document they are medically fit for discharge using the following criteria:Full Blood Count with a visible improvement in White Cell Count/Neutrophils if previously raised
- Liver Function Tests with unremarkable results
- Urea & Electrolytes with unremarkable results
- CRP to be reducing (unless otherwise agreed by Microbiology)
- Patient well with a NEWS 0, or normal ranges for them
- Focus of infection controlled
- Stable renal function
- Antibiotic consistently within the therapeutic range prior to discharge (if therapeutic monitoring required on the Trust Intranet) In some cases this can be monitored at home.
- Creatinine Kinase (If required) within normal range

- 2. At least one member of the OPAT team Consultant microbiologists and /or
- Antibiotic pharmacists

Need to have discussed the patient with the clinical team and decided on a correct and appropriate treatment course and monitoring for the patient.

Patients must have received at least 2 doses of the IV antibiotic in hospital (or completed loading doses) and considered to be responding well to treatment (afebrile for 48 hours/inflammatory markers improving).

Each patient must be considered individually and the time to discharge may vary according to the type or severity of infection, response to treatment or other individual patient considerations or comorbidities.

3. A suitable Vascular Access Device (VAD) must be decided by the OPAT nurse and an insertion date arranged prior to discharge.

4. A community OPAT prescription for IV antibiotics plus any necessary diluents and flushes will be completed (proforma are available for commonly used antibiotics – please see Trust Intranet) and signed by a prescriber of the clinical team and requires additional signed approval by a member of the OPAT Team. Once completed, the prescription will then be faxed to the relevant district nursing team. The responsible clinician must also complete a Trust TTA for the patient either on Electronic Prescribing Medicines Administration (EPMA) or on an Electronic discharge summary.

5. Antibiotics/diluents/reconstitution fluids and flushes will be provided from the hospital pharmacy (further outpatient supplies are provided by the Boots onsite pharmacy if required). A maximum of twenty eight days' worth of consumables (needles, syringes, sharps bin etc.) will be provided from hospital ward stock (see **Appendix H** for list)
General practitioners may be approached to provide supplies in some circumstances, this will generally be organised for individual patients by the OPAT specialist nurse.

6. A follow up clinic appointment must be arranged prior to discharge on/before completion of OPAT Treatment.

Once the above has been completed the OPAT specialist Nurse will either;

- Arrange for self/carer administration training and inform the appropriate district nurse teams by telephone
  OR
- Make a formal community nurse referral via referral form

NB A suitable start date for OPAT will need to be confirmed with Community Teams before discharge to ensure capacity.

7. A personalised management plan will be completed and provided by the OPAT specialist nurse to the patient and the appropriate community nurse team to use for patient management purposes. This is also posted as a clinical letter on the hospital clinical management system (Medway).

Appendix H - Consumables Required for Discharge

Consumables required for Supported Discharge for patients with a Vascular Access Device requiring Outpatient Parenteral Antibiotic Therapy (OPAT)

ITEM	NEEDED	SUPPLIED
Sharps Bin		
10ml Syringes for pre and post flush		
10ml Syringes		
20ml Syringes		
50ml Syringes		
IV Administration Set		
Blunt Fill Needles		
Blunt Fill Needles with Filter		
PDI Sani-cloth CHG 2%		
Bionector (bung)		
Statlock/Griplock Dressing		
IV3000/Tegaderm IV Dressing or alternative		
Tubifast pieces		
Gloves (if Self-administering)		
Clinell Universal Sanitising Wipes (if Self-adminstering		

Please provide a minimum of 14 days' worth of Consumables

Supplied by:
Date:

Appendix I – Procedure for Follow Up and Monitoring Post Discharge

Once a patient has been discharged the OPAT Nurse will ensure appropriate follow up and monitoring of the patient is provided, working together with clinicians, microbiologists and antibiotic pharmacists and will:

- Ensure bloods are taken weekly as documented within the patient management plan, review results and flag up any results that aren't within range to the discharging Consultant team /microbiologists or antibiotic pharmacists to review as appropriate. Arrange change of dose/therapy on a new prescription if required, ensuring district nurse teams are informed by telephone.
- Ensure Therapeutic drug monitoring is undertaken (if required), following our Trust Guidance for therapeutic monitoring. If results are out of range discuss with Antibiotic pharmacist/Microbiology/Consultant team and arrange change of dose/therapy on a new prescription, provision of supplies and any further monitoring if required, ensuring district nurse teams are informed by telephone.
- Inform the patient of any changes made to prescriptions or the management plan by telephone.
- Attend related follow up appointments with Clinicians to ensure improvement of infection, timely completion of treatment and removal of PICC line if treatment is to be stopped. Arrange any extension of treatment on a new prescription as requested by the clinical team, ensuring district nurse teams are informed by telephone.
- Act as a point of call for district nursing teams and patients if they have any queries/concerns within working hours.
- Arrange for extra clinic appointments or readmission through the OPAT pathways (see section 2.9) if thought necessary by the responsible clinical team.
- Liaise with the District Nurses to manage patients with blocked PICC lines
- Ensure all necessary documentation relating to OPAT Management of the patients discharge is complete
- Provide follow up phone contact for patients who are self administering or other patients where concerns have been raised but admission not deemed necessary by the responsible team/OPAT team