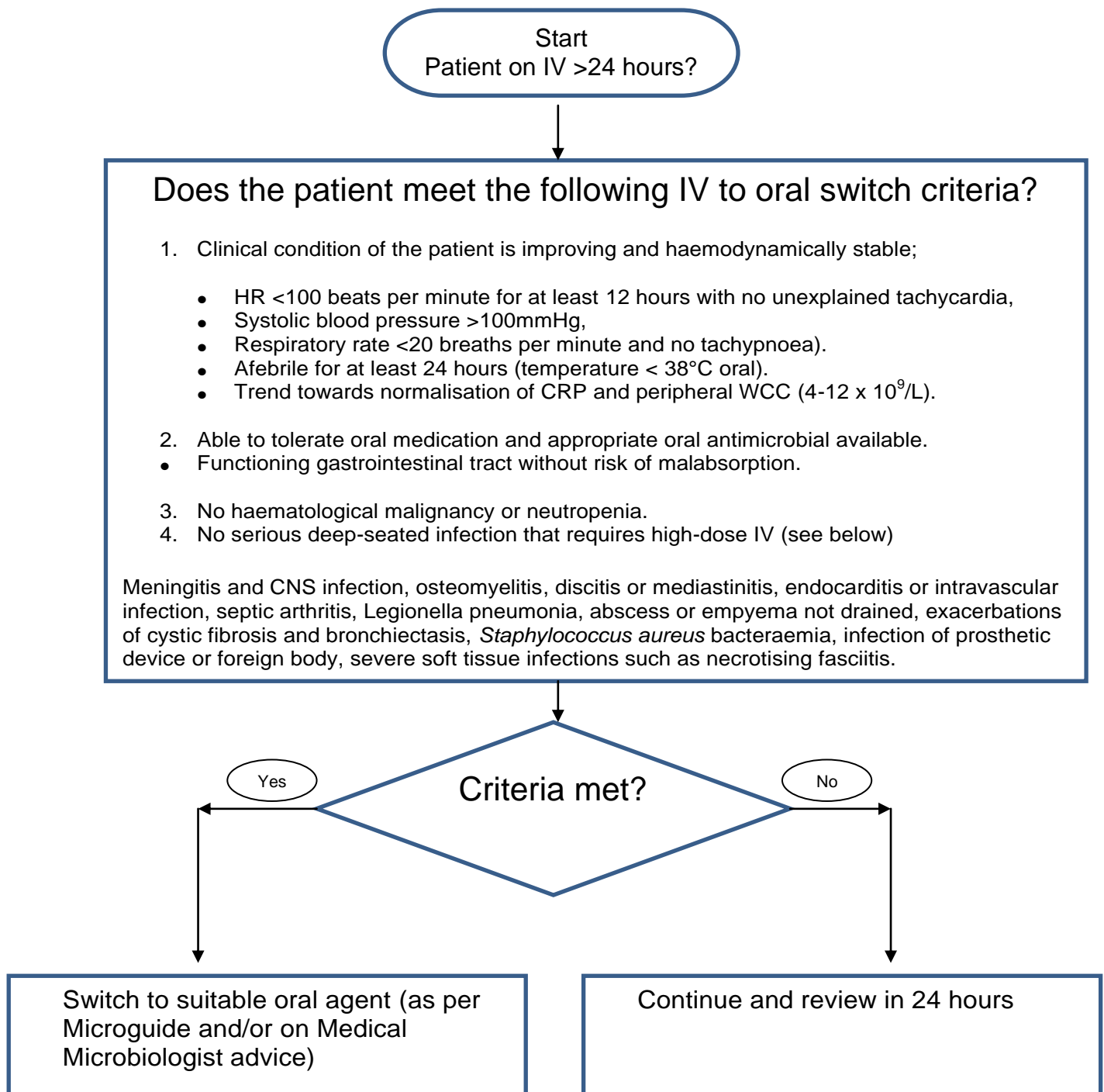


CLINICAL GUIDELINE FOR INTRAVENOUS TO ORAL ANTIBIOTIC SWITCH THERAPY (IVOST) IN ADULTS

Summary



1. Aim/Purpose of this Guideline

1.1. To promote the appropriate route of antibiotic administration for adults. Prompt intravenous to oral antibiotic switching has a positive impact on hospital length of stay, health-care associated infection risk, length of antibiotic therapy and nursing time.

1.2. IV to oral switch programs, as part of a hospital-wide antibiotic stewardship strategy, have been shown in a meta-analysis to decrease hospital length of stay, without adversely affected patient mortality.

2. The Guidance

Switch to oral antimicrobial agents should be considered for patients who meet all of the following inclusion criteria (Mertz, D et al 2009):

- Still on intravenous therapy after > 24 hours.
- Clinical condition of the patient is improving and haemodynamically stable:
 - HR <100 beats per minute for at least 12 hours with no unexplained tachycardia.
 - Systolic blood pressure >100mmHg.
 - Respiratory rate <20 breaths per minute and no tachypnoea).
 - Afebrile for at least 24 hours (temperature < 38°C oral).
 - Trend towards normalisation of CRP and peripheral WCC (4-12 x 10⁹/L).
- Able to tolerate oral medication and appropriate oral antimicrobial available.
- Functioning gastrointestinal tract without risk of malabsorption.
- No haematological malignancy or neutropenia.
- No serious deep-seated infection that requires high-dose IV (see below).

Serious or deep-seated infections:

- Meningitis and other CNS infections.
- Osteomyelitis, septic arthritis and other bone or joint infection (e.g. discitis)*.
- Mediastinitis*.
- Endocarditis or intravascular infection.
- Abscess or empyema not drained.
- Exacerbations of cystic fibrosis and bronchiectasis.
- *Staphylococcus aureus* bacteraemia.
- Infection of prosthetic device or foreign body.
- Severe soft tissue infections such as necrotising fasciitis.
- *Treatment for osteomyelitis and septic arthritis can be considered for change to oral therapy after 10 to 14 days of intravenous therapy.

2.1. Medical staff are expected to review IV antibiotic prescriptions on a daily basis and to assess the patient for their eligibility for a switch from their IV antibiotic to a suitable oral antibiotic, chosen in accordance with the Trust's Antimicrobial Guidelines.

2.2. Nursing staff caring for patients on intravenous antibiotics are expected to ensure the need for continuing IV antibiotics have been reviewed by the medical team each day.

2.3. Pharmacists reviewing inpatient medication records are expected to ensure IV antibiotics are still warranted using this guideline and to discuss an IV to oral switch with the medical team if an IV to oral switch is appropriate.

3. Monitoring compliance and effectiveness

Element to be monitored	Whether patients meeting the IV to oral switch criteria are appropriately switched to oral antibiotics.
Lead	Antibiotic Pharmacist.
Tool	The criteria in this guideline.
Frequency	Monthly audit that will feed in to the Infection Prevention and Control Annual Report.
Reporting arrangements	Hospital Infection Control Committee.
Acting on recommendations and Lead(s)	Antimicrobial Stewardship Management Committee a subgroup of the Medicines Practice Committee.
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned within three months. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders.

4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the ['Equality, Diversity & Human Rights Policy'](#) or the [Equality and Diversity website](#).

4.2. Equality Impact Assessment:

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1: Governance Information

Document Title	CLINICAL GUIDELINE FOR INTRAVENOUS TO ORAL ANTIBIOTIC SWITCH THERAPY (IVOST) IN ADULTS			
Date Issued/Approved:	14/10/16			
Date Valid From:	14/10/16			
Date Valid To:	14/10/19			
Directorate / Department responsible (author/owner):	Neil Powell Antimicrobial Pharmacist			
Contact details:	01872 252590			
Brief summary of contents	Guidance on IV to oral antibiotic switch therapy.			
Suggested Keywords:	IVOST, antibiotic stewardship, antibiotic, antibiotics, antimicrobial, antimicrobials, IV, intravenous, switch, oral.			
Target Audience	RCHT	PCH	CFT	KCCG
	✓			
Executive Director responsible for Policy:	Medical Director			
Date revised:				
This document replaces (exact title of previous version):	New Document			
Approval route (names of committees)/consultation:	MPC Antibiotics Stewardship Management Committee			
Divisional Manager confirming approval processes	Medical Director			
Name and Post Title of additional signatories	'Not Required'			
Name and Signature of Divisional/Directorate Governance Lead confirming approval by specialty and divisional management meetings	{Original Copy Signed}			
	Name:			

Signature of Executive Director giving approval	{Original Copy Signed}		
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet & Intranet	✓	Intranet Only
Document Library Folder/Sub Folder	Pharmacy		
Links to key external standards	Start Smart then Focus		
Related Documents:	Start Smart then Focus Health and Social Care Act 2008		
Training Need Identified?	No		

Version Control Table:

Date	Version No.	Summary of Changes	Changes Made by (Name and Job Title)
23rd August 2016	V1.0	Initial Issue	Neil Powell

All or part of this document can be released under the Freedom of Information Act 2000

This document is to be retained for 10 years from the date of expiry.

This document is only valid on the day of printing

Controlled Document:

This document has been created following the Royal Cornwall Hospitals NHS Trust Policy on Document Production. It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2: Initial Equality Impact Assessment Form

Name of the strategy / policy /proposal / service function to be assessed (hereafter referred to as <i>policy</i>) (Provide brief description):	
Directorate and service area: Pharmacy CSSD	Is this a new or existing Policy? New
Name of individual completing assessment: Neil Powell	Telephone: 01872 252590
1. Policy Aim* Who is the strategy / policy / proposal / service function aimed at?	To promote the appropriate route of antibiotic administration for adults.
2. Policy Objectives*	To assess appropriateness of intravenous antibiotic therapy using this guideline to guide switch decisions.
3. Policy – intended Outcomes*	Reduce intravenous antibiotic course lengths thereby reducing the risks of healthcare-associated infections, length of hospital stay and antibiotic consumption.
4. *How will you measure the outcome?	Point prevalent audits of patients on intravenous antibiotics.
5. Who is intended to benefit from the policy?	Patients through reduced HCAI risk and length of hospital stay, nursing staff through reduced time administering antibiotics, the wider healthcare system through reduced length of hospital stay.
6a) Is consultation required with the workforce, equality groups, local interest groups etc. around this policy?	No
b) If yes, have these *groups been consulted?	
C). Please list any groups who have been consulted about this procedure.	

7. The Impact			
Please complete the following table:			
Are there concerns that the policy could have differential impact on:			
Equality Strands:	Yes	No	Rationale for Assessment / Existing Evidence
Age		No	
Sex (male, female, trans-gender / gender reassignment)		No	

Race / Ethnic communities /groups		No	
Disability - Learning disability, physical disability, sensory impairment and mental health problems			
Religion / other beliefs		No	
Marriage and civil partnership		No	
Pregnancy and maternity		No	
Sexual Orientation, Bisexual, Gay, heterosexual, Lesbian		No	
<p>You will need to continue to a full Equality Impact Assessment if the following have been highlighted: You have ticked "Yes" in any column above and No consultation or evidence of there being consultation- this <u>excludes</u> any <i>policies</i> which have been identified as not requiring consultation. or Major service redesign or development</p>			
8. Please indicate if a full equality analysis is recommended.			No
9. If you are not recommending a Full Impact Assessment please explain why:			
Signature of policy developer / lead manager / director		Date of completion and submission	
Names and signatures of members carrying out the Screening Assessment	1. 2.		

Keep one copy and send a copy to the Human Rights, Equality and Inclusion Lead,
c/o Royal Cornwall Hospitals NHS Trust, Human Resources Department, Knowledge Spa,
Truro, Cornwall, TR1 3HD

A summary of the results will be published on the Trust's web site.

Signed: _____

Date: _____