

UHL Antimicrobial Prescribing Policy

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REVIEW DATES AND DETAILS OF CHANGES MADE DURING THE REVIEW

Review Record			
Date	Issue No.	Reviewed By	Description of change (if any)
11.22	12	C Ashton	Updated to reflect changes in electronic prescribing system and introduction of Microguide. Removal of 10 day exemption for bronchiectasis (full guideline now in place) Clarification that stat doses should be included in the total duration of treatment
See Appendix 3 for all previous review records			

KEY WORDS

Antimicrobial Prescribing Policy, Antibiotic, Antiviral, Antifungal, Stewardship, Code, Resistance

1. INTRODUCTION AND OVERVIEW

- 1.1. This document sets out the University Hospitals of Leicester (UHL) NHS Trusts Policy for prescribing, administration and monitoring antimicrobials.
- 1.2. The prevalence of antimicrobial resistance (AMR) has risen alarmingly over the last 40 years, and few truly novel antimicrobials have been developed. This has led to increased pressure on existing antibiotics and greater challenges in treating patients. Inappropriate use of antimicrobials increases the risk to patients of colonisation and infection with resistant organisms and subsequent transmission to other patients.
- 1.3. Antimicrobials are an essential part of treatment for many patients. However an overall reduction in antimicrobial consumption will reduce the ecological pressure for the emergence of antimicrobial resistant bacteria and fungi. This benefit is more difficult to measure, but may be indicated by reduced isolates of methicillin resistant *Staphylococcus aureus* (MRSA), vancomycin resistant enterococci (VRE) and extended spectrum beta-lactamase (ESBL) positive Gram negative bacilli.
- 1.4. Antibiotic exposure is also the most significant risk factor in the development of *Clostridioides difficile* (previously *Clostridium difficile*) disease. Total antibiotic use is also a significant driver in the emergence of resistance. Consequently, many patients who have derived benefit from antibiotic in the early phase of their prescription are put at subsequent potential harm if the prescription is unduly continued.
- 1.5. Reducing the exposure of individual patients to antibiotics will lessen their risk of *C. difficile* disease. This will be measurable from laboratory reports of *C. difficile* toxin positive diarrhoea in Trust in-patients.
- 1.6. In addition, the Trust suffers financially from unnecessary drug and administration costs, from the effects of *C. difficile* infection on prolonged stay, investigation and treatment costs and unachieved NHS Standard Contract indicators.
- 1.7. Therefore, it is in the interest of both patients and the Trust to ensure that the duration of antibiotic prescriptions is limited. There are very few indications for prolongation of antibiotic prescriptions beyond five days.
- 1.8. It is accepted that there are indications for prolonged antimicrobial prescriptions, and where possible this is recognised in Trust antimicrobial prescribing guidelines. However, not all guidance includes duration of therapy because of the need to tailor treatment to individuals. Patients with these infections should benefit if their clinicians consult with microbiology at an early stage.
- 1.9. The policy will be supported by a communication system between microbiology and pharmacy, to confirm any agreed prolonged treatment.

2 POLICY SCOPE

- 2.1 This policy applies to all members of staff working within UHL who are involved in any aspect of antimicrobial prescribing, administration and monitoring.

2.2 This policy covers all UHL antimicrobial prescribing which relates to patient care throughout the Trust.

3 DEFINITIONS AND ABBREVIATIONS

For the purpose of this policy 'Antimicrobial Prescribing' is when an antimicrobial is prescribed for a patient.

In line with the UHL definitions:

Antimicrobial A general term for natural or synthetic compounds which at certain concentrations inhibit growth of, or kill, micro-organisms. The term antimicrobials is a collective for anti-virals, anti-bacterials, anti-fungals and anti-protozoals

ABBREVIATIONS:

DIP	Director of Infection Prevention
AG	Antimicrobial guidance
CMG	Clinical Management Group
TIPAC	Trust Infection Prevention Committee
AWP	Antimicrobial Working Party
DoH	Department of Health
AIS	Approved Infection Specialist

4 ROLES AND RESPONSIBILITIES

4.1 Executive Responsibility

The Director of Infection Prevention (DIP) has executive responsibility for this policy, supported by the UHL Antimicrobial Working Party.

The DIP should be informed of any non-adherence issues to this policy, specifically:

- Antimicrobial prescribing adherence below the agreed target.
- Antimicrobial prescribing documentation below agreed target.
- Deliberate and consistent non-adherence to Antimicrobial Guidance (AG) by prescribers/Clinical Management Groups (CMGs)

4.2 Trust Infection Prevention Assurance Committee (TIPAC)

4.2.1 The TIPAC will approve the AWP (Antimicrobial Working Party) proposed compliance targets for antimicrobial prescribing, specifically adherence to UHL antimicrobial guidelines, and DoH antimicrobial documentation requirements.

4.2.2 The TIPAC is to be informed of any areas of concern raised by the AWP or the senior Infection Prevention Team.

4.3 UHL Antimicrobial Working Party

4.3.1 The AWP reports directly to the TIPAC.

4.3.2 The AWP is responsible for reviewing this policy.

4.3.3 AWP is responsible for agreeing proposed compliance targets for antimicrobial prescribing, specifically adherence to UHL antimicrobial guidelines, and national antimicrobial documentation requirements.

4.3.4 The AWP is to be informed and review any non-adherence issues to this policy, specifically:

- Antimicrobial prescribing adherence below the agreed target.
- Antimicrobial prescribing documentation below agreed target.
- Deliberate and consistent non-adherence to AG by prescribers/CMGs.

4.4 Corporate and CMG Teams

5.4.1 Clinical and Managerial Leads for Corporate Directorates and Clinical Directors and Heads of Service for Clinical Management Groups are responsible for ensuring all relevant staff that are involved in antimicrobial prescribing, administration and monitoring in their areas are aware of, and fulfil the requirements of this policy.

5.4.2 CMG Clinical Directors and Heads of Service are responsible for the implementation of, and addressing any compliance issues with this policy and for participating in the monitoring of compliance.

4.5 All Prescribers

4.5.1 The responsibility for accurate and appropriate prescribing remains with the prescriber.

4.5.2 It is the prescriber's responsibility to ensure their training is up to date and they have completed the antimicrobial prescribing training package on HELM on induction and annually, as required 'essential to their job role'.

4.5.3 It is the prescriber's responsibility to ensure the prescription is completed correctly according to this policy, to seek microbiological approval for extended courses and to record such approval (as a verification code) on the prescription chart.

4.5.4 It is also the prescriber's responsibility to seek approval for permission to prescribe from the Trust-designated 'restricted list of antimicrobials' from an AIS, prior to starting treatment with any of these agents. This approval must also be sought out-of-hours.

4.5.5 Prescribers should:

- not start antimicrobial therapy unless there is clear evidence of bacterial infection
- comply with local antimicrobial prescribing guidance (if prescribing outside of guidelines to document the reason in the patients notes, and inform the patient)
- obtain samples for microscopy and/or culture prior to commencing therapy where possible (but do not delay therapy, particularly in patients with red flag sepsis or life-threatening infections). take a thorough drug and allergy history (in line with NICE guideline CG183 Drug allergy: diagnosis and management).
- initiate prompt, effective, antibiotic treatment for red flag sepsis or diagnosis of a life-threatening infection in line with UHL sepsis guidelines.
- avoid inappropriate use of broad-spectrum antibiotics. Use antibiotic agent(s) with an adequate spectrum to cover only the expected pathogens for less severe infections; broad-spectrum antibiotics are sometimes not as potent in vitro as their narrower-spectrum counterparts against certain pathogens

- intravenous (IV) administration should be reserved for patients where enteral route is not appropriate
- IV route should be switched to the enteral route of administration promptly in accordance with local IV-to-oral switch guidance
- consider the risk of resistant pathogens such as MRSA, ESBL-producing organisms or carbapenem resistant organisms and seek microbiology advice if not covered in the guidelines.
- prescribe single dose antibiotics for surgical prophylaxis where antibiotics have been shown to be effective. Follow surgical prophylaxis guidelines. Without evidence of current infection (for which treatment should be prescribed), surgical prophylaxis **should not be continued** beyond the duration in the guidelines i.e. max single dose or 24hrs in line with guidelines.
- review microbiology results daily and optimise treatment to pathogen-directed narrow-spectrum treatment promptly where appropriate
- ensure patients' antimicrobial care requiring follow up (e.g. culture results, therapeutic drug monitoring levels to be taken, etc.) is handed over to the relevant team/shift and if out-of-hours to utilise the UHL out of hours handover system.

4.5.6 Documentation

- on starting an antimicrobial, document the following on drug chart/electronic prescribing system and in clinical notes*
 - exact clinical indication (rather than stating "long term prophylaxis" or "infection" for example)
 - disease severity if appropriate
 - drug name (use generic name unless clinically appropriate to state brand)
 - dose
 - route
 - intended duration or review date

(* Inclusion of these in both the drug chart and in clinical notes will clarify the patient treatment pathway thus aiding in the improvement of patient outcomes and in medico-legal outcomes such as for *C. difficile* apportionment)

- on reviewing an antimicrobial, review the clinical diagnosis, the continuing need for antimicrobials, define a clear plan of action by documenting one of the seven '**antimicrobial prescribing decisions**' in the clinical notes and implement on the electronic prescribing system or drug chart.
- **Antimicrobial prescribing decisions** are:
 1. **Stop antimicrobials** if there is no evidence of infection or patient has received adequate antimicrobial therapy
 2. **IV to oral switch with documented review date or duration of the oral antimicrobial**
 3. **Change antimicrobial by escalating** to broader spectrum antimicrobial with documented review date or duration
 4. **Change antimicrobial by de-escalating** to narrower spectrum antimicrobial with documented review date or duration
 5. **Change antimicrobial based on culture results** with documented review date or duration
 6. **Continue antimicrobial** with documented review or review date
 7. **OPAT** (outpatient parenteral antimicrobial therapy)

- Where a decision to continue IV antibiotics is made one of the following reasons for this must be documented
 1. Patient not absorbing or NBM
 2. No oral antimicrobial option available
 3. Patient not clinically improving
 4. Deep seated infection
 5. Advised by Microbiologist/ID consultant/Antimicrobial Pharmacist advice
- Where an IV to oral switch, change or continue decision is made, a review date or duration must be documented in the clinical notes even if the previously documented date or duration still remains appropriate.
- A summary of clinical or microbiological findings must also be documented in the medical notes.

4.6 Pharmacists

- 4.6.1 Pharmacists do not take on the responsibilities of the prescriber for ensuring the patient receives appropriate treatment.
- 4.6.2 The role of the pharmacist within this policy is limited to assuring adherence to antimicrobial prescribing duration,
- 4.6.3 Prescribing outside of guidelines or not in line with microbiology advice/results must be challenged by pharmacists and persistent non-adherence must be addressed and escalated appropriately.
- 4.6.4 Pharmacists must check antimicrobial prescriptions against documented approved infection specialist codes, and assure adherence of durations in accordance to the this policy.
- 4.6.5 **TTO prescribing:** If a course duration is not indicated by the prescriber on the TTO prescription, but a duration is documented on the in-patient prescription chart, the pharmacist should endorse the antimicrobial duration on the TTO prescription.
- 4.6.6 It is the pharmacists responsibility to ensure their training is up to date and they have completed the antimicrobial prescribing training package on induction and as required essential to their job role
- 5.6.7 Pharmacists should utilise the *Pharmacists Amending Prescribed Medicines UHL Guideline(C273/2016)* or their prescribing qualification to ensure prescriptions are optimised.

4.7 Nurses / Other staff groups administering antimicrobials

- 4.7.1 Staff administering antimicrobials must to inform prescriber's and highlight to prescribers when antimicrobial durations are exceeded and the prescription needs further intervention to comply with this policy.
- 4.7.2 Where an antibiotic is prescribed on an UHL Inpatient Medication Administration Record that includes the preprinted statement 'STOP after 5 days (unless otherwise stated)' a nurse should not to continue to administer beyond 5 days, unless another duration is stated.
- 4.7.3 **If a duration is not stated on the prescription,** the individual administering the antimicrobial must contact a prescriber to confirm the required duration. Antibiotics should not be administered beyond 5 days, unless another duration is stated.

4.8 Approved Infection Specialists

4.8.1. Approved infection specialists (AIS) are defined as members of staff who are listed in the Antimicrobial Verification Code Workbook.

The following professional groups can be assigned as an Approved Infection Specialist:

- Medical Microbiologists and junior doctors working in microbiology
- Infectious Disease Consultants
- Junior doctors working in Infectious Diseases who have completed Combined Infection Training and have passed FRCPath Part 1
- Antimicrobial pharmacists qualified as independent prescribers
- Clinical scientists working in Microbiology who are undergoing higher specialist training and have been agreed by Head of Service for Microbiology

4.8.2 It is AIS's responsibility to ensure their training is up to date and they have completed the antimicrobial prescribing training package on induction and annually.

4.8.3 To uphold and follow the principles in section 5.5 and section 6.

4.8.4 AIS's must issue verification codes, in accordance to the antimicrobial verification code guidance:

- for all newly initiated restricted antimicrobials (in and out of hours)
- for extensions of durations (greater than 5 days or duration in guideline, or previous validation code expired) (in-hours only)

4.8.5 The format of the code must not be altered and be vigilantly adhered to ensure the pharmacist can correlate the code with the antimicrobial prescription. A new code should be issued if a course duration is extended (i.e if the duration from a previously issued validation code has expired)

4.9 Antimicrobial Pharmacists

4.9.1 To oversee, in conjunction with UHL Clinical Audit team, the monitoring and compliance of antimicrobial prescribing and documentation to this policy.

4.9.2 To compile compliance reports for Antimicrobial Working Party (AWP), TIPAC and CMGs.

4.9.3 To maintain the Antimicrobial Verification Code Workbook including the list of AISs

4.9.4 To provide feedback to DIP and Senior Infection Prevention Team any issues or trends of non-compliance with this policy.

4.10 All UHL Staff Members

4.10.1 All members of staff are responsible for being aware of this policy and the antimicrobial guidance available on the 'Guide To Antimicrobial Use' insite page and on the guidelines app (Microguide).

4.10.2 All UHL staff are responsible for informing relevant managers and clinical leads if there are any implementation or compliance issues with this policy and for participating in the monitoring of compliance as applicable.

5 POLICY IMPLEMENTATION AND ASSOCIATED DOCUMENTS

5.1 Key principles of antimicrobial prescribing

5.1.1 Follow appropriate UHL antimicrobial guidelines where possible, available on the 'Guide To Antimicrobial Use' and in the antimicrobial prescribing app.

- 5.1.2 Use the electronic prescribing 'Infection management' group ordersets for prescribing where available.
- 5.1.3 If advice is required from a microbiologist please ensure that when making a microbiology referral, you have discussed the clinical situation with a senior doctor in your team. If an urgent telephone referral is made, ensure you have available essential clinical information, such as patient identification details, recent procedures and current and recent antimicrobial therapy.
- 5.1.4 Do not start antibiotics in the absence of clinical evidence of bacterial infection. Ensure the use of antibiotics is appropriate and the benefit of prescribing will outweigh any potential risks (e.g. *C.difficile* infection).
- 5.1.6. Before starting antimicrobials, every effort must be made to collect the appropriate samples for microbiological investigation. Prescriptions for antimicrobials must then be reviewed when these results are available.
- 5.1.7 Refer to the Antimicrobial Prescribing App (Microguide) for information on antimicrobial guidelines.
- 5.1.8 Use narrow spectrum agents when possible and in conjunction with microbiology results.
- 5.1.9 Only antimicrobials listed as formulary should be prescribed. If you wish to prescribe a non-formulary antimicrobial, please contact your ward pharmacist, or on-call pharmacist if out of hours.
- 5.1.10 Review all antimicrobial prescriptions daily. Review IV antimicrobials on the post-take ward round (and at 48 hours.)
- 5.1.11 Antimicrobials with narrow therapeutic indexes must be monitored closely and in accordance with guidance (refer to Antimicrobial Assays section on the 'Guide To Antimicrobial Use' on Insite and on the antimicrobial prescribing App).
- 5.1.13 FOR ANTIBIOTICS:**
Antibiotic prescriptions must be reviewed by a senior member of the clinical team (ST3 or above) between 24 and 72 hours. The clinical diagnosis and the continuing need for antibiotics should be reviewed and a clear plan of action documented in the medical notes including the 'Antimicrobial Prescribing Decision' (see section 5.5.6). Patients must not routinely receive more than 48 hours IV therapy unless clinically indicated. Switch to an oral equivalent if clinically appropriate, after a maximum of 48 hours.

5.2 Documentation

5.2.1 In-patient prescription chart (including electronic prescribing) AND medical notes

Refer to documentation requirements under section 4.5.6

5.2.1 All Other Antimicrobial Prescriptions

- Ensure the minimum level of information below, is documented on the prescription chart and medical notes, whenever an antimicrobial is prescribed:
 - Antimicrobial prescription – name of the antimicrobial/s prescribed, dose, frequency, route of administration
 - The specific indication
 - Duration - this should be explicitly stated on the patient's prescription.

5.3 Restricted list

5.3.1 Some antimicrobials cannot be prescribed or initiated for treatment for any length of time without prior AIS approval because of factors including:

- High risk of unwanted effects, eg *C difficile* infection or tissue toxicity
- Limited availability
- Limited Evidence
- Cost effectiveness
- Unique mechanism of action to be reserved for the treatment of organisms resistant to standard antimicrobials

5.3.2 These antimicrobials, along with details of their restrictions, which may vary according to clinical area, are listed in the Antimicrobial Formulary Information and Restricted List which can be found on Microguide.

5.3.3. Prior to prescribing a restricted antimicrobial outside of a guideline or exemption stated in the 'Antimicrobial Formulary Information and Restricted List', Prescribers must discuss the case with an AIS to ensure the antimicrobial is the most appropriate choice and gain approval to prescribe an antimicrobial. This approval must be sought even out of hours.

5.3.4 Approval to use a 'Restricted Antimicrobial' must be recorded (as a AIS code) on the antimicrobial prescription and the patient's case notes by the prescriber, and will be subject to validation by a pharmacist.

5.4 Repeat Prescribing

Repeat prescribing is defined as, "the prescribing of an antimicrobial within 48 hours of cessation of a previous antimicrobial of the same class".

The number of days an antimicrobial of the same class is prescribed, using repeat prescribing, is to be classed as a single-duration episode. The duration is the total number of days the same class of antimicrobial has been administered on the two courses, combined (including IV and enteral doses). If the same class of antibiotic is prescribed within 48 hours of another antibiotic being stopped, the total number of days the antibiotics are administered must not exceeded more than 5 days or approved duration in the guidelines.

5.5 Antibiotic Duration Policy

The duration of all antibiotic prescriptions must not exceed a maximum of five days, unless:

- 1) a different course is specifically stated in the Trust's antimicrobial guidelines for the infection being treated (refer to Microguide' on INsite and Appendix 1 and 2)
- 2) an extended course has been discussed by the prescriber with an AIS and approved, and a verification code documented.

- 3) as part of an OPAT TTO or OPAT outpatient clinic prescription (verification code not required for OPAT prescriptions durations exceeding those in guidelines).

The duration of a regular antibiotic prescription must take the number of stat prescribed and administered i.e. the duration prescribed as regular must only be for the outstanding number of doses for complete the course. For example:

Amoxicillin IV 1g stat prescribed and administered, then prescribe amoxicillin IV 1g eight hourly for 14 doses.

The duration prescribed on a TTO must take into account the number of in-patient treatment days already administered (IV and enteral combined) i.e. **the duration prescribed on the TTO would only be the outstanding number of days** required to complete the course.

In-patient prescriptions

If prescription duration is not given on the prescription chart, a five day course will be assumed, and a pharmacist will stop the prescription at five days (or sooner if outlined in the Guideline for that condition) if it has not already been stopped by the prescriber.

5.5.1 Antibiotic dispensing

If a prescription duration is explicitly given and it is less than five days, or longer than five days but in accordance with relevant Trust antimicrobial guidelines, then the prescription will be dispensed for the indicated (and remaining) duration only.

Other prescriptions

If no indication, or course length (or verification code, if applicable) is documented, a maximum of a 5 day course will be dispensed (and if relevant will be inclusive of the number of days the patient has already received of that antibiotic as an in-patient).

If the 5 day supply ends on a weekend or bank holiday, an additional amount can be supplied to cover until, and inclusive of the next working day, after the weekend/bank holiday.

5.5.2 Antibiotic extended durations

If a prescriber wishes to extend the prescription of antibiotic to more than five days when this varies from Trust guidance, or when no relevant guidance exists, the prescriber will be required to discuss the indication with an AIS, and obtain approval verification code. An ICE referral to microbiology can be made for non-urgent requests.

The verification code must be documented on the antibiotic prescription and the case notes by the prescriber, and will be subject to validation by a pharmacist.

For in-patient prescriptions, if further treatment beyond this date is considered necessary, the prescriber will need to seek further approval, and document the revised advice. Without this approval the pharmacist will stop therapy according to the original advice.

5.5.3 Antimicrobial exceptions

Prescriptions for patients on the Infectious Diseases ward (IDU) at LRI and outpatients under the OPAT service are exempt from requiring verification codes for restricted antimicrobials and extended durations as their treatment is under regular review by an AIS.

5.5.4 AIS approval for antibiotic extended durations

Approval for extended antibiotic durations can be sought from any AIS.

Microbiology have a medical microbiologist available for consultation and approval of extended prescriptions, Monday to Friday during working hours. For non-urgent referrals complete an ICE microbiology referral form; referrals received before 4pm will receive a same day response. ICE referrals received after 4pm will be rejected and not responded to; the clinician will need to call for urgent advice or delay placing the ICE request until the next working day. For urgent referrals and out of hours contact the on-call microbiologist via switchboard.

Where treatment is in line with guidelines or prescribed on the advice of an AIS, requests for extension of treatment beyond five days or Trust guidance does not need to be sought out of hours (including Saturday and Sunday) if a prescriber has identified that it is clinically appropriate to continue. Approval will be required on the next working day for any further extension of treatment.

An on-call microbiologist is available for consultation and approval to initiate 'restricted antimicrobials' out of hours. See section 6.3 of this policy.

6 EDUCATION AND TRAINING REQUIREMENTS

No new skills are required for implementing this policy as this will be covered by existing education and training provided on the prescribing and administration of medicines. It is part of UHL essential to job role training that all UHL prescribers undertake UHL e-learning antimicrobial prescribing training on induction and annually.

7 PROCESS FOR MONITORING COMPLIANCE

POLICY MONITORING TABLE

Element to be monitored	Lead	Tool	Frequency	Reporting arrangements Who or what committee will the completed report go to.
Compliance with policy	Lead Antimicrobial Pharmacist	Trust Wide Antimicrobial Prescribing Audit	Annual	TIPAC, CMG Clinical Directors, Heads of Nursing
Antimicrobial Consumption	Lead Antimicrobial Pharmacist	RxInfo and ePACT2 issue data	Monthly	CMG Clinical Directors, Heads of Nursing

8 EQUALITY IMPACT ASSESSMENT

8.1 The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.

- 8.2 As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

9 SUPPORTING REFERENCES, EVIDENCE BASE AND RELATED POLICIES

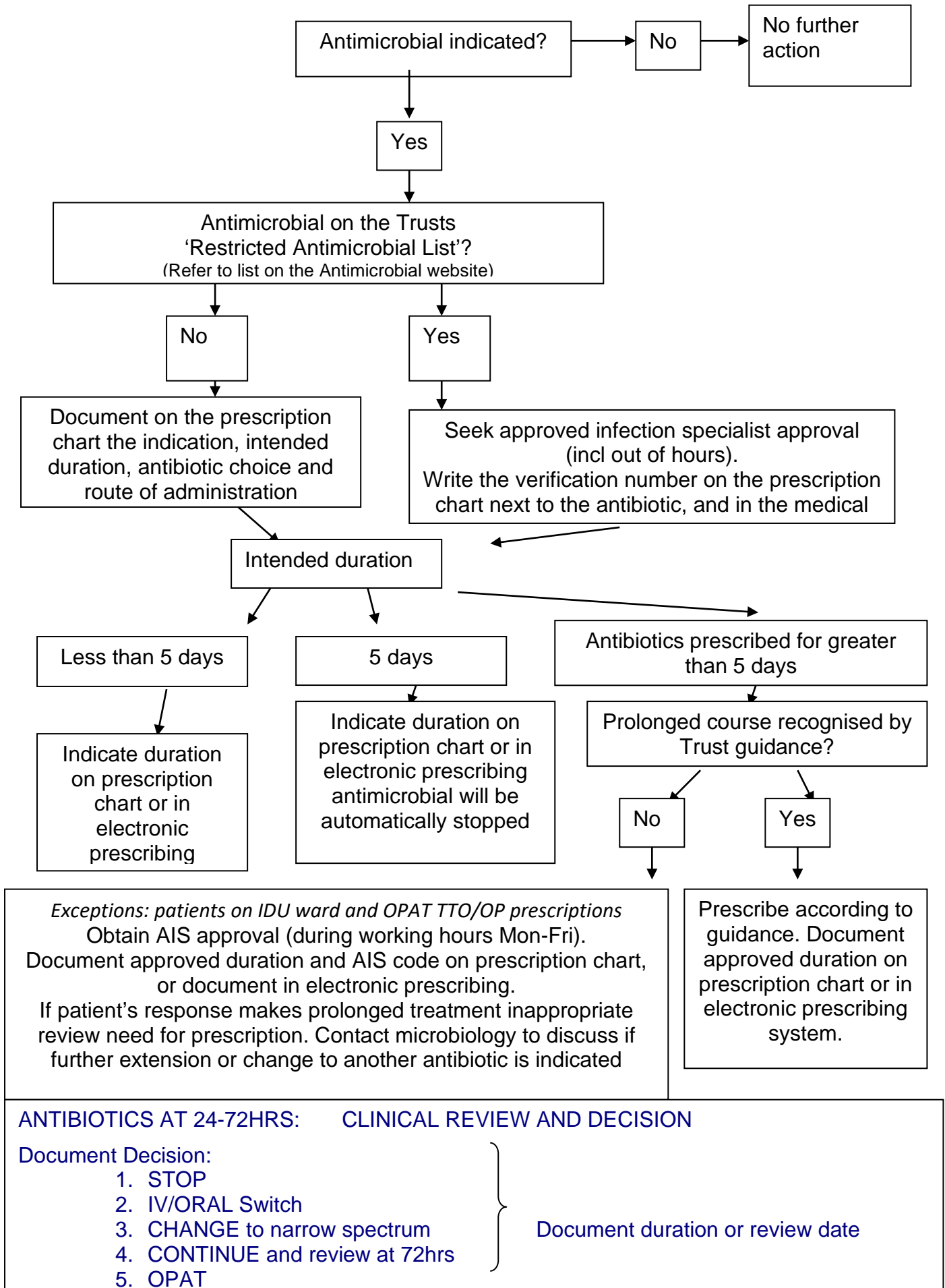
- 9.1 DoH Antimicrobial stewardship 'start smart – then focus'. Guidance for antimicrobials stewardship in hospitals (England) ARHAI Nov 2011.
- 9.2 NICE Quality Improvement Guide Prevention and control of healthcare associated infections.
- 9.3 Letter from the Health Care Commission : Healthcare associated infections, in particular infection caused by Clostridium difficile.
- 9.4 Antimicrobial Prophylaxis for Surgery: An advisory statement from the national surgical infection prevention project. Bratzler et al. Clin Infect Dis 2004;38:1706-15.
- 9.5 Antimicrobial Stewardship: Systems and Processes for Effective Antimicrobial Medicine Use. NICE Guideline [NG15] August 2015

10 PROCESS FOR VERSION CONTROL, DOCUMENT ARCHIVING AND REVIEW

This document will be uploaded onto SharePoint and available for access by Staff through INsite. It will be stored and archived through this system.

This policy will be reviewed by the lead author(s) every 3 years and submitted to AWP for comment prior to submission to PGC for ratification.

**APPENDIX 1
UHL IN-PATIENT ANTIMICROBIAL DURATION ALGORITHM**



Patients on the Infectious Disease ward, LRI, and OPAT TTO and Out-patient Clinic prescriptions are exempt from requiring verifications codes for extended duration or restricted antimicrobials.

APPENDIX 2

Approved antibiotic durations greater than 5 days, not included in guidelines on antimicrobial website

Refer to antimicrobial guidelines on UHL 'Guide To Antimicrobial Use' on INsite for approved antibiotic durations > 5 days, those approved durations not included in any current antimicrobial guidelines are stated below:

- The list indicates the total treatment course duration. If a patient's treatment course was initiated during their in-patient stay, the days of treatment prescribed on a TTO should be the remaining days to complete the treatment course
- Longer antibiotic courses than indicated in the table may be required for specific patients with severe or chronic infections. These cases should be discussed with a microbiologist, or Infectious Disease Consultant and the agreed antibiotic plan and verification code documented by the prescriber on the patients prescription chart.
- All UHL Restricted Antimicrobials must be discussed with a microbiologist prior to initiating, and a verification code documented on the prescription chart when the antimicrobial is prescribed.
- In conjunction with this policy, obtaining microbiology advice and/or a verification code is **not mandatory** if a longer duration is recommended in UHL approved antimicrobial guidelines.

Approved durations for antimicrobials prescribed for the following indications	
Chest Infections in Cystic Fibrosis patients	14 days
Empyema	Maximum duration 28 days
Tuberculosis treatment	Minimum 6 months

APPENDIX 3
Version, review record

Review Record			
Date	Issue No.	Reviewed By	Description of change (if any)
4.08	2	K.Parsons	Incorporation of the Antimicrobial Prescribing Statement into this policy. Removed appendix B of restricted antimicrobials list, and replaced with a referral to the copy on antimicrobial website. Audit section updated
4.09	3	K.Parsons	Layout reformatted to make clear which sections are applicable to antimicrobials, and to both antimicrobials and antifungals. Addition of contents page
10.09	4	K.Dawson	Inclusion of TTO prescribing and durations Addition of repeat prescribing
1.10	5	K.Dawson	Amendment of verification code only to be documented on prescription chart rather than also the medical notes as previously (Approved by ICC). Ward 23 LRI to be included as exclusion along with IDU from requiring validation codes. Amendment of microbiology and pharmacists responsibilities to reflect new verification code system
1.11	6	C. Whittingham	Clarification of nurses role – where a preprinted automatic stop is present on a prescription and there is no duration documented on the prescription by the prescriber, nurses will stop administering the antimicrobial at 5 days. Addition of requirement for prescriptions to adhere to the Leicestershire Medicines Code and for prescribers name and bleep or contact number to be documented.
8.11	7	C. Whittingham	Ward 23 exclusion removed
9.11	8	C. Whittingham	Addition of recommendations for applying the policy within ePMA
3.13	9	K. Dawson	Format change into new PGC template Minimum documentation requirements to be applicable to antifungals not just antibiotics. Minimum documentation requirements to be recorded in medical notes as well as prescription charts. Addition of DoH recommendations (Ref 1). Amendment of extended duration list to only include those not stipulated in guidelines. Updated to reflect Trust new divisional structure.
7.15	10	K. Dawson & C Ashton	Appendix 2 updated to reflect Trust new guidelines. Clarification to sections 5.6 and 5.9. 5.6. addition to 5.6.1 of 'Prescribing outside of guidelines or in line with microbiology advice/results should be challenged and persistent non-adherence addressed and escalated appropriately.' 5.9 addition of '5.9.2 To uphold and follow the principles in section 5.5.5.'
7.15	10	K. Dawson	Addition of Start Smart then Focus Mar 15 recommendations in

			section 5.5. Addition of OPAT being exempt from verification code for extended duration and use of restricted antibiotics.
5.18	11	C Ashton	Addition of documentation requirements in line with Sepsis and AMR CQUIN, change in Microbiology referral information to align with new referral system.
10.22	12	C Ashton	Updated to reflect changes in electronic prescribing system and introduction of Microguide. Removal of 10 day exemption for bronchiectasis (full guideline now in place) Clarification that stat doses should be included in the total duration of treatment