

# The Newcastle upon Tyne Hospitals NHS Foundation Trust

## Antibiotic Stop / Review Date and Indication Policy

Version No.:	2.0
Effective From:	31 January 2012
Expiry Date:	31 December 2013
Date Ratified:	1 January 2012
Ratified By:	Medicine Management Committee

### 1. Introduction

Correct use of antibiotics requires that prescriptions are reviewed on a regular basis to ensure that the selected agent is still appropriate, continuation of therapy is still necessary and the route is still appropriate.

There have been instances where patients have received unnecessarily long and excessive treatment, as a result of therapy not being reviewed. This can result in:

- increased selection of resistant organisms
- more antibiotic treatment related illnesses e.g. *Clostridium difficile* (*C.difficile*), diarrhoea
- increased risk of adverse effects
- increased expenditure

The Trust has a clear mandate to reduce infections from drug resistant pathogens e.g. MRSA and *C.difficile*. A major part of this battle is the reduction of unnecessary antibiotic use. A recently published study<sup>1</sup> confirmed the increased risk of *C. diff.* diarrhoea with longer course duration for many of the commonly used antibiotic classes. **In general 1-3 days caused a lower risk than 4-6 days which caused a lower risk than 7 or more days; for some classes these differences were significant.** This policy aims to prevent an unintentionally long duration of therapy and hence reduce *C.difficile* risk for patients.

The addition on the medicine chart/e-Record of a stop date / review date or intended duration of treatment every time an order for an antibiotic is made has worked successfully in many hospitals. Pharmacists and nurses facilitate the policy as part of their role on the wards.

The indication for an antibiotic is often not clear or easy to find in the patient's notes and makes monitoring for appropriateness by other clinicians and health professionals difficult. In many cases the prescriber initiating the antibiotic therapy may not be available to regularly review it (due to shift working). It would therefore have clear advantages to have the indication written on the medicine chart/ e-Record for all orders of antibiotic agents at the point of prescribing.

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<sup>1</sup> Pépin et al Clin. Inf. Diseases 2005;41 1254-1260.

Overall, documenting the indication and intended stop date/duration on the drug card will be beneficial to all and help prevent unnecessarily extended antibiotic courses.

## 2. The Policy

This policy is divided into two sections:

### 2.1. Prescribing with the electronic prescribing system

- All prescribers must specify a **stop date** and **indication** on the electronic medicine chart for all orders of antibiotics at the point of prescribing.
- For all prescribing of IV antibiotics and longer courses of oral antibiotics a **review date** must also be specified.
- For all prescribing of prophylactic antibiotics the **reason for prophylaxis** should be stated .e.g. 'PCP prophylaxis'; a stop date is not indicated, hence not required.

### 2.2 Prescribing with paper medicine charts<sup>2</sup>

- All prescribers must write a **stop/review date** and **indication** on the medicine chart for all orders of antibiotics.
- For all prescribing of prophylactic antibiotics the **reason for prophylaxis** should be stated e.g. 'PCP prophylaxis'; a stop date is not indicated, hence not required

## 3. Target Clinical Areas

- All clinical areas

This policy will be audited to ensure that the indication, duration and review of antibiotics are clearly documented.

## Guidance Notes

### 4. Prescribing with electronic prescribing system

#### 4.1 Responsibilities for prescribers

When prompted, write the indication in the "indication field" of the electronic medicine chart for each antibiotic prescribed.

- The indication should be as specific as possible at the time of prescribing e.g. "sepsis ?chest" may be appropriate if source is suspected but not definitive. This should be updated as more information becomes available
- Rarely, for confidentiality reasons, it may not be appropriate for the indication for the antibiotic to be written on the electronic medicine chart

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<sup>2</sup> At the time of writing there were 3 areas within the Trust that are not using electronic prescribing; Paediatrics, two rehabilitation care of the elderly wards 9,17 and the CAV site.

(e.g. HIV). In these cases enter into the indication field “see notes” together with the date so that it is easy to track in the notes; please ensure it is written clearly in the medical notes

When prompted, write the duration in the “intended duration” field of the electronic medicine chart for each antibiotic prescribed.

- In many cases IV antibiotics can be switched to oral after 48hours. However, to ensure that the antibiotic does not inappropriately stop abruptly without a review it is appropriate to prescribe a duration of up to 7 days, in anticipation of a review within 48hours. The minimum duration specified should be enough cover an entire weekend or 72hrs during the week.
- IV antibiotics have a mandatory review date and this automatically defaults to 48hrs. This can be altered, when prompted, at the point of prescribing.
- Review doses should be targeted for lunchtime doses where possible and should avoid weekends unless the patient is due for daily consultant review.
- If the review date has been reached but the patient still requires IV therapy new review and stop dates should be added (the latter should include the prescribing of an oral alternative for the remainder of the clinical treatment as required).
- For long courses, such as those required for endocarditis, osteomyelitis or cystic fibrosis, it is appropriate to prescribe the full duration of therapy. In these cases a weekly review is suggested.
- Where the prescriber is sure that only a short course of IV therapy is required before switching to oral therapy, it is essential that the prescriber ensures an oral course is prescribed to start immediately after the IV course is completed.
- For some infections it may be difficult to endorse a definite stop date until the patient’s condition begins to improve. Antibiotics in these circumstances should have review dates about twice a week (e.g. at consultant ward rounds and / or Fridays).
- Please refer to the IV-Oral switch guideline (in the Trust Guideline to Antimicrobial Therapy)

When an antibiotic is being used on the advice Microbiology / Infectious Diseases this should be documented on the “special instructions” field of the electronic medicine chart by writing “micro advice” or “ID advice”.

### **Standard course lengths\***

Standard order sets are available for the conditions below and can be found by using terms such as pneumonia or COPD in the Physician Order Entry screen. These sets contain the standard regimens for total antibiotic prescription e.g 7 days for complicated hospital acquired pneumonia inclusive of IV and oral combined.

**Clinical judgment is still required; patients may require longer courses for more severe or complicated infections or when they fail to respond quickly. Note that shorter courses of antibiotics equate to a lower risk of *C. difficile* diarrhoea.**

Surgical prophylaxis	single dose in most cases
Non severe community acquired pneumonia (CAP) (CURB65 score 0-2)	5 days
Severe community acquired pneumonia (CAP) (CURB65 score 3-5)	7 days
LRTI / Infective exacerbation of COPD	5 days
Uncomplicated hospital acquired pneumonia	5 days
Complicated hospital acquired pneumonia	7 days
Uncomplicated UTI	3 days
Complicated UTI (including male patients) excluding pyelonephritis	7 days
Non severe wound/soft tissue infection	5 days
<i>Clostridium difficile</i> diarrhoea	10 days

**\*Notes:**

- **If unsure about the appropriateness of the standard course for a particular patient please contact microbiology for advice.**

Conditions that normally require an individualised course:

Acute Prostatitis	Osteomyelitis
Endocarditis	Meningitis/ Brain Abscess
Septic Arthritis	Neutropenic sepsis
Empyema	<i>Staphylococcus aureus</i> bacteraemia
Tuberculosis	Severe or necrotising soft tissue infections
Infected implants/prosthesis	Mediastinitis
Exacerbation of CF/ bronchiectasis	Pyelonephritis

**Missed doses**

Antibiotic doses may be missed for a number of reasons (e.g. no cannula, unable to swallow). Patients should be reviewed clinically and consideration given for re-prescribing additional doses if required.

**4.2 Responsibilities for Nurses**

Query all prescriptions continuing beyond the review dates. Whilst awaiting review, continue to administer the antibiotic. If a patient were prescribed IV because they could not swallow but have subsequently improved their swallowing before the review date, ask a doctor to review with a view to doing an IV to oral switch.

Ask a doctor to review the duration/choice of antibiotic if doses have been missed at the beginning (e.g if drug is not available) or during the prescribed course, especially if the patient is still unwell or it is over the weekend where regular review is unlikely.

### **4.3 Responsibilities for Pharmacists**

For prescriptions of antibiotics that have already been written:

- Where a review date has been passed the pharmacist should contact the medical team looking after the patient and request that a new review date is added to the electronic medicine chart. The pharmacist may take a verbal order from the medical team looking after the patient, add the review date to e-Record and document this in the medical notes.
- Where the indication was not clear when initiated or has not been fully entered, the pharmacist may take a verbal order from the medical team looking after the patient, update the indication on e-Record accordingly and document this in the medical notes.

## **5. Prescribing with paper medicine charts**

### **5.1 Responsibilities for prescribers**

Write the indication and stop/review date or intended duration in the 'notes' box on the medicine chart for each antibiotic prescribed.

- The indication should be as specific as possible at the time of prescribing e.g. "sepsis?chest" may be appropriate if the source is suspected but not definitive. This should be updated as more information becomes available.
- In some cases the indication will be too large / complicated to fit in the notes section of the medicine chart. In these cases, please write "see notes" in the notes box of the kardex and also add the date so that it is easy to track in the notes; please ensure it is written clearly in the medical notes, .
- Rarely, for confidentiality reasons, it may not be appropriate for the indication for the antibiotic to be written on the medicine chart (e.g. HIV) especially where charts may be seen by patients' visitors. In these cases, please ensure it is written clearly in the medical notes and add "see notes" along with the stop or review date on the medicine chart.
- Mark a stop or review date on the medicine chart (See figure 1 and figure 2 for examples)

The majority of IV antibiotics will require a "review" rather than "stop" date prior to being converted to oral.

Review doses should be targeted for lunchtime doses where possible and should avoid weekends unless the patient is due for daily consultant review.

Antibiotic review should be documented on the medicine chart e.g. crossing through “rv” and endorse a new review date.

- For some infections it may be difficult to endorse a definite stop date until the patient’s condition begins to improve. Antibiotics in these circumstances should have review dates about twice a week (e.g. at consultant ward rounds and / or Fridays).
- Please refer to the IV-Oral switch guideline (in the Trust Guideline to Antimicrobial Therapy)

Following an IV to PO switch, please indicate the duration as either:

- “... days more” i.e. ... days of oral following IV therapy,
- “... days total” i.e. the total required duration of IV and PO together
- or put a stop date (e.g. “stop 14/6/12”).

If the antibiotic is being used on the advice Microbiology / Infectious Diseases this should be documented on the ‘notes’ section of the medicine chart by writing “micro advice” or “ID advice”.

Figure1. Example with stop date (mostly appropriate for oral therapy)

Please state DURATION OF THERAPY for short course treatment e.g. antibiotics				Date	20/6	21/6	22/6	23/6	24/6	25/6	26/6	27/6	28/6				
DRUG (Approved Name) <b>AMOXICILLIN</b>				0800													
Dose <b>1g</b>	Route <b>PO</b>	Start Date <b>20/6</b>	Duration of therapy <b>7 days</b>	1200													
Prescriber's Signature <i>A.Doctor</i>		Notes <b>CAP</b>		1400													
Name <b>A.Doctor</b>				1800													
Date Stopped	Initials	Pharmacy use		2200													

Figure2. Example with review date (mostly appropriate for initial IV therapy):

Please state DURATION OF THERAPY for short course treatment e.g. antibiotics				Date	20/6	21/6	22/6	23/6	24/6	25/6	26/6	27/6	28/6				
DRUG (Approved Name) <b>FLUCLOXACILLIN</b>				0800													
Dose <b>1g</b>	Route <b>IV</b>	Start Date <b>20/6</b>	Duration of therapy	1200													
Prescriber's Signature <i>A.Doctor</i>		Notes <b>Cellulitis REVIEW 48hrs</b>		1800													
Name <b>A.Doctor</b>				2200													
Date Stopped	Initials	Pharmacy use															

**Standard course lengths**

Please refer to the standard course lengths shown in section 4a.

## **Missed doses**

Antibiotic doses may be missed for a number of reasons (e.g. no cannula, unable to swallow). Patients should be reviewed clinically and consideration given for re-prescribing additional doses if required.

## **5.2 Responsibilities for Nurses**

Request that the doctor writes the stop/review date and indication on the medicine

chart for all orders of antibiotic agents (if prophylaxis indicate in notes box reason e.g. "prophylaxis PCP")

Query all prescriptions continuing beyond the stop / review dates. Whilst awaiting review, continue to administer the antibiotic. If a patient were prescribed IV because they could not swallow but have subsequently improved their swallowing before the review date, ask doctor to review with a view to doing an IV to oral switch.

## **5.3 Responsibilities for Pharmacists**

For prescriptions of antibiotics that have already been written:

- The pharmacist should contact the medical team looking after the patient and request that a stop / review date and an indication are written in the 'notes' box on the medicine chart, if omitted. The pharmacist may take a verbal order from the medical team looking after the patient and add the stop / review date (see figure 3 and figure 4) and indication to the chart and document this in the medical notes

For standard course lengths or where locally agreed protocols apply:

- The pharmacist may add the stop date and alter the administration boxes to ensure nurses do not give a longer course than was intended (see figure 4) and document that they have done this in the medical notes.

If the prescription is written in the presence of a pharmacist, request a stop / review date and indication as part of the prescription writing process.

If a review date has been documented by the doctor, the pharmacist should highlight and endorse 'R/V' around the appropriate administration box. If possible, choose a weekday lunchtime dose:



**THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST**  
**IMPACT ASSESSMENT – SCREENING FORM A**

This form must be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval.

Policy Title:	<b>Antibiotic Stop / Review Date and Indication Policy</b>	Policy Author:	Kathy Gillespie on behalf of The Antimicrobial Steering Group
		Yes/No?	You must provide evidence to support your response:
1.	Does the policy/guidance affect one group less or more favourably than another on the basis of the following: (* denotes protected characteristics under the Equality Act 2010)	No	
	• Race *	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender *	No	
	• Culture	No	
	• Religion or belief *	No	
	• Sexual orientation including lesbian, gay and bisexual people *	No	
	• Age *	No	
	• Disability – learning difficulties, physical disability, sensory impairment and mental health problems *	No	
	• Gender reassignment *	No	
	• Marriage and civil partnership *	No	
2.	Is there any evidence that some groups are affected differently?	No	
3.	If you have identified potential discrimination which can include associative discrimination i.e. direct discrimination against someone because they associate with another person who possesses a protected characteristic, are any exceptions valid, legal and/or justifiable?	No	
4(a).	Is the impact of the policy/guidance likely to be negative? (If “yes”, please answer sections 4(b) to 4(d)).	No	
4(b).	If so can the impact be avoided?	N/A	
4(c).	What alternatives are there to achieving the policy/guidance without the impact?	N/A	
4(d)	Can we reduce the impact by taking different action?	N/A	

<b>Comments:</b>	<b>Action Plan due (or Not Applicable):</b>
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Name and Designation of Person responsible for completion of this form: Kathy Gillespie..... Date: 29<sup>th</sup> December 2011.....

Names & Designations of those involved in the impact assessment screening process:.....

(If any reader of this procedural document identifies a potential discriminatory impact that has not been identified on this form, please refer to the Policy Author identified above, together with any suggestions for the actions required to avoid/reduce this impact.)

*For advice on answering the above questions please contact Frances Blackburn, Head of Nursing, Freeman/Walkergate, or, Christine Holland, Senior HR Manager. On completion this form must be forwarded electronically to Steven Stoker, Clinical Effectiveness Manager, (Ext. 24963) [steven.stoker@nuth.nhs.uk](mailto:steven.stoker@nuth.nhs.uk) together with the procedural document. If you have identified a potential discriminatory impact of this procedural document, please ensure that you arrange for a full consultation, with relevant stakeholders, to complete a Full Impact Assessment (Form B) and to develop an Action Plan to avoid/reduce this impact; both Form B and the Action Plan should also be sent electronically to Steven Stoker within six weeks of the completion of this form.*