

# Antimicrobial Stewardship Policy

This policy describes how Leicestershire Partnership NHS Trust will ensure that antimicrobials are utilized in the best possible way in order to maximize effectiveness and minimize resistance. It includes systems and processes as well as individual clinical interactions.

Key Words:	Antimicrobial, stewardship, antibiotic, antifungal, antiviral, antimalarial, resistance, stewardship	
Version:	3	
Adopted by:	Trust Policy Committee	
Date this version was adopted:	28 October 2021	
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Name of responsible Committee:	Infection Prevention and Control Committee	
Please state if there is a reason for not publishing on website:	n/a	
Date issued for publication:	October 2021	
Review date:	March 2024	
Expiry date:	1 October 2024 (earlier if significant changes)	
Target audience:	Clinical staff	
Type of Policy	Clinical <input checked="" type="checkbox"/>	Non Clinical <input type="checkbox"/>
Which Relevant CQC Fundamental Standards?	12 Safe care and treatment	

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## Version Control and Summary of Changes

Version	Date	Comment
V1	April 2015	New Policy
V2	May 2017	Appendix 1 (document check list) removed in line with new policy format.
V3	August 2021	Contents transferred into new Policy format. Minor changes to wording to update with latest

**For further information contact:**

**For further information contact:**

Lead Pharmacist for Antimicrobial Prescribing

Member of the Pharmacy team

Member of the IPC team

## Equality Statement

Leicestershire Partnership NHS Trust (LPT) aims to design and implement policy documents that meet the diverse needs of our service, population and workforce, ensuring that none are placed at a disadvantage over others. It takes into account the provisions of the Equality Act 2010 and promotes equal opportunities for all. This document has been assessed to ensure that no one receives less favourable treatment on the protected characteristics of their age, disability, sex (gender), gender reassignment, sexual orientation, marriage and civil partnership, race, religion or belief, pregnancy and maternity.

## Due Regard

LPT will ensure that Due regard for equality is taken and as such will undertake an analysis of equality (assessment of impact) on existing and new policies in line with the Equality Act 2010. This process will help to ensure that:

- Strategies, policies and procedures and services are free from discrimination;
- LPT complies with current equality legislation;
- Due regard is given to equality in decision making and subsequent processes;
- Opportunities for promoting equality are identified.

Please refer to due regard assessment (Appendix 4) of this policy

***For further advice go to the LPT Due Regard Toolkit on the intranet***

## Definitions that apply to this policy

<b>CDT</b>	Clostridium difficile toxin
<b>DIPaC</b>	Director of Infection Prevention and Control
<b>DoH</b>	Department of Health
<b>ESBL's</b>	Bacteria that produce enzymes called extended-spectrum beta-lactamases (ESBLs) are resistant to many penicillin and cephalosporin antibiotics and often to other types of antibiotic.
<b>LPT</b>	Leicestershire Partnership Trust
<b>MRSA</b>	Methicillin Resistant Staphylococcus aureus
<b>PHE</b>	Public Health England
<b>UHL</b>	University Hospitals of Leicester

### 1.0 Purpose

The purpose of this Policy is to encapsulate all the national guidelines and implement these within the Leicestershire Partnership NHS Trust. The Trust needs to ensure that:

1. Infections are being diagnosed promptly and accurately;
2. Appropriate antimicrobials are being used in line with local antimicrobial guidelines. This includes the correct agents, dose, frequency and correct length;
3. After initial assessment, therapy is reviewed and where appropriate treatment is stopped, continued, changed or switched based on clinical and/or microbiological findings;
4. The above is fully documented and audited;
5. Staff have the correct skills to undertake the above activity.

### 1.1 Summary

Antimicrobial is a general term that encompasses agents such as antibiotics, antifungals, antivirals and antimalarial. Over recent decades, resistance to antimicrobials has been a growing concern.

Inappropriate and excessive use of antimicrobials can have serious consequences. Infections such as Methicillin Resistant Staphylococcus Aureus (MRSA) and Clostridium Difficile colitis (CDT) are a problem associated with use of antimicrobials and these infections can lead to mortality.

## 2.0 Introduction

Antimicrobial is a general term that encompasses agents such as antibiotics, antifungals, antivirals and antimalarials. They help humans to fight infections and thus aid recovery. Antimicrobials are also helpful in facilitating other procedures and treatments such as surgery and chemotherapy. Without effective antimicrobials, patients could die of infections and procedures could become more risky.

Over recent decades, resistance to antimicrobials has been a growing concern. Antimicrobial resistance is defined as 'loss of effectiveness'. There are a number of micro-organisms (or strains of) which have evolved to become resistant to many of the commonly used antimicrobials, which in the past, the micro-organisms (or strains of) were sensitive to. Furthermore, there are fewer new antimicrobials on the horizon. It is therefore vital that we use our existing antimicrobials wisely and only when absolutely necessary so that when we genuinely need them, they work optimally.

Inappropriate and excessive use of antimicrobials can have serious consequences. Infections such as Methicillin Resistant Staphylococcus Aureus (MRSA) and Clostridium Difficile colitis (CDT) are a problem associated with use of antimicrobials and these infections can lead to mortality.

### Justification for the document

The annual report of the Chief Medical Officer, 2011 states that antimicrobial resistance is increasing whilst development of newer antimicrobials is slowing down. We therefore need to improve antimicrobial stewardship to preserve the effectiveness of our current antimicrobials.

The UK five year antimicrobial resistance strategy for 2013 to 2018 aims to slow the development and spread of antimicrobial resistance across a number of domains: the most important domain for LPT being the judicious use of antimicrobials.

### Antimicrobial Guidelines

**LPT will work to guidelines that have been developed by experts in the wider healthcare community. These guidelines can be accessed via the following link: <http://insite.xuhl-tr.nhs.uk/antibiotic/>**

## 3.0 Duties within the Organisation

### 3.1 The Trust Board

The Trust Board has a legal responsibility for Trust policies and for ensuring that they are carried out effectively.

Trust Board Sub-committees have the responsibility for agreeing policies and protocols.

### **3.2 Chief Executive Officer**

The Chief Executive Officer (CEO) of Leicester Partnership Trust is responsible for ensuring that there are effective arrangements for antimicrobial stewardship. The CEO devolves this responsibility to the Trust's Director of Infection Prevention and Control (DIPaC).

### **3.3 Director of Infection Prevention and Control (Chief Nurse)**

The DIPaC is responsible for LPT's antimicrobial stewardship and for providing assurance to the Trust board and general public. The DIPaC delegates the duties, in so far as they are applicable to the Deputy DIPaC.

### **3.4 Lead Pharmacist – Antimicrobial Prescribing**

The Lead pharmacist for antimicrobial prescribing is responsible for:

- The integration of antimicrobial stewardship into the organisation's clinical governance systems and for ensuring it's implementation;
- Undertaking and facilitating audits;
- Facilitating the development of training packages;
- Working with wider healthcare community to strengthen antimicrobial stewardship.

### **3.5 Directorate Directors and Heads of Service are responsible for:**

Ensuring that comprehensive arrangements are in place regarding adherence to this policy and how policies and procedures are managed within their own Department or Service in line with the guidelines in this policy.

Ensuring that team managers and other management staff are given clear instructions about policy arrangements so that they in turn can instruct staff under their direction.

Distributing information about this policy and associated procedures in a timely manner throughout the Directorate.

Ensure that all staff have access to this policy, either through the intranet or if policy manuals are maintained that this up to date policy replaces previous policies.

Maintain a system for recording that this policy has been distributed to and received by staff within the Directorate and these records are available for inspection upon request for audit purposes.

### **3.6 Medical Director and Clinical Directors are responsible for:**

Ensuring this policy is understood and followed as appropriate to each staff member's role and function.

### **3.7 Pharmacists are responsible for:**

Ensuring that all prescriptions for antimicrobials are reasonable (based on information available) and comply with the local guidelines;

Ensuring that where an antimicrobial prescription is non-compliant, every effort is made to ascertain the rationale for such deviation.

Ensuring that ward stock of antimicrobials are appropriate.

### **3.8. Prescribers are responsible for:**

Ensuring that they comply with all aspects of this Policy.

Ensuring that they maintain their competence in managing infections.

### **3.9 Nursing staff are responsible for:**

Ensuring that the antimicrobial they are administering is appropriate (as per local formulary/guidelines) for the infection being treated.

Ensuring that where an antimicrobial prescription is non-compliant, every effort is made to ascertain the rationale for such deviation.

### **3.10 Antimicrobial Ward Stock and Supply from Pharmacy**

Where necessary, limited range of antimicrobials will be available on ward stock in order to promptly treat patients. These antimicrobials will usually consist of first line treatments for common infections (as recommended in UHL and primary care antimicrobial guidance) including those for patients with penicillin allergy.

The range of antimicrobials on stock will be reviewed annually by the ward pharmacist, technician and matron with advice from the clinician.

Antimicrobials not on ward stock should be promptly ordered from pharmacy so that patients can start their treatment as soon as possible. Before releasing supply, the pharmacist must satisfy themselves that the prescription is appropriate.

## **4.0 Antimicrobial Stewardship Policy**

4.1 Use the START SMART – THEN FOCUS approach – see algorithm below.

### **START SMART**

4.2 Antimicrobials must only be prescribed when there is proven or clinical suspicion of infection. This will necessitate a thorough assessment and investigations.

4.3 Consider obtaining cultures before start of therapy but do not delay treatment if the patient is unwell, deteriorating rapidly or vulnerable.

4.4 The spectrum of activity of antimicrobial chosen should be as narrow as possible but cover the likely pathogens and penetrate the suspected infection site.

4.5 UHL and primary care antimicrobial guidelines must be adhered to when selecting the antimicrobial drug, dose, frequency and length of course. It is

recognized that in some instances this may not be possible owing to patient's drug history, medical history, and allergy status, previous exposure to antimicrobials, previous microbiological /sensitivity information or microbiology advice. These guidelines can be accessed via the following link:

<http://insite.xuhl-tr.nhs.uk/antibiotic/>

4.6 Where facilities within ePrescribing exist, use prescribing protocols which will automatically prepopulate the dose and frequency information once you know which antibiotic is required.

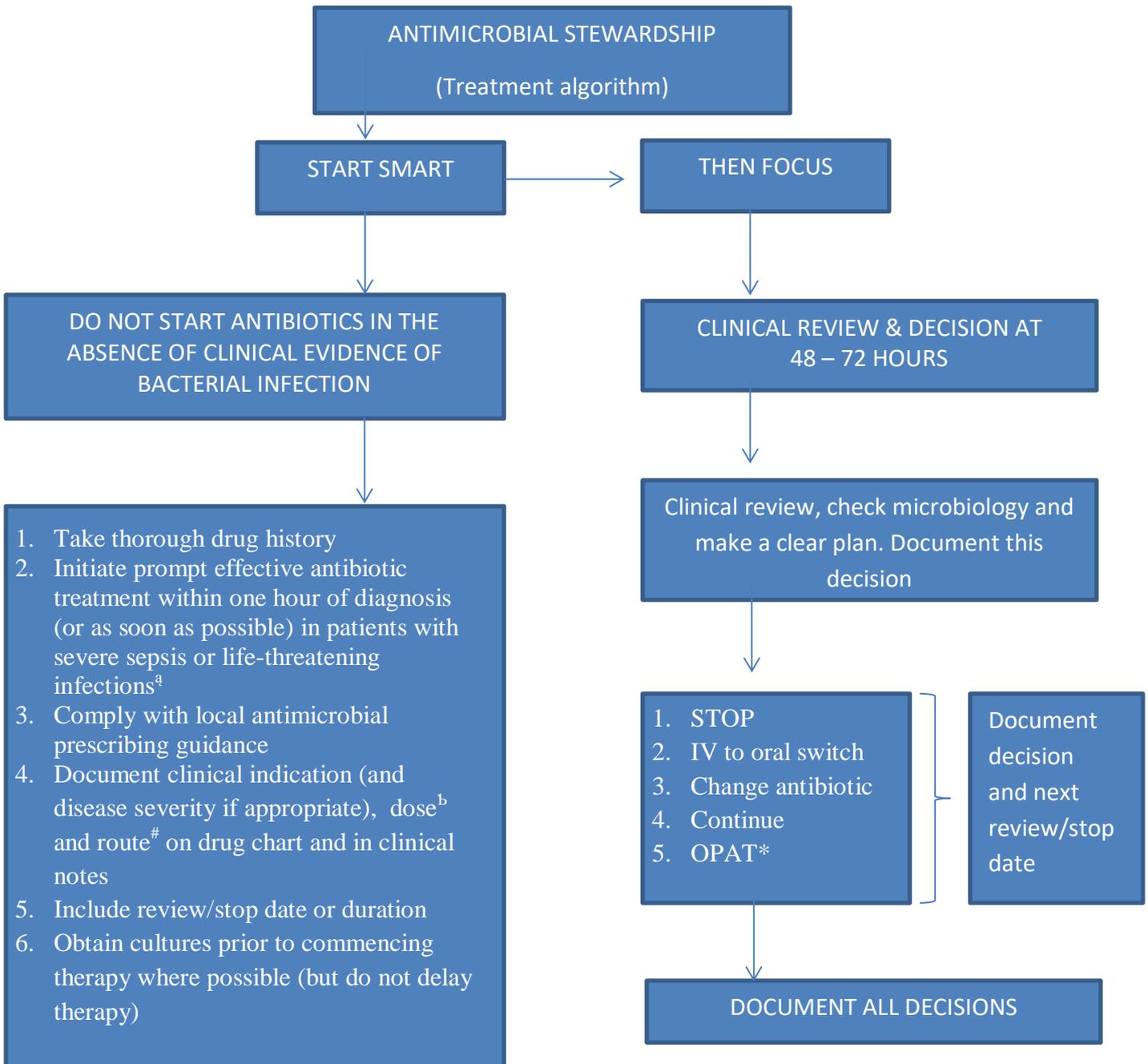
#### **THEN FOCUS**

4.7 Review the clinical diagnosis and the continued need for antibiotics at 48-72 hours (particularly if further test or microbiology results become available).

4.8 Devise a clear plan which may involve the following:

- **Stopping** antimicrobial
- **Changing** to another antimicrobial
- **Continuing** with antimicrobial
- **Switching** from IV to oral

## 5.0 START SMART, THEN FOCUS algorithm



<sup>a</sup> In accordance with surviving sepsis patient safety alert

<http://www.england.nhs.uk/wp-content/uploads/2014/09/psa-sepsis.pdf>

<sup>b</sup> According to weight/age in children refer to local formulary or cBNF

<sup>#</sup> Use appropriate route in line with severity/patient factors

\* Outpatient Parenteral Antibiotic Therapy

## 6.0 Documentation

The following should be documented in the medical notes:

- Thorough assessment. Include consideration of patient's medical history, drug history, allergy status, previous exposure, biochemistry and sensitivity results;
- Diagnosis/impression (including severity if appropriate);
- Rationale for prescribing/not prescribing;
- Name of antimicrobial, dose and length of treatment;
- Rationale for deviating from guidelines (if appropriate);
- Management plan including review date/stop date;
- Discussion with patient, if appropriate.

## 7.0 Antimicrobial Surveillance

On a periodic basis, antimicrobial consumption must be analysed to ensure that there are no worrying trends.

This should be done at the LPT Infection Prevention and Control meeting and Medicines Management Group.

Where a prescribing error has occurred with antimicrobials, the LPT Medication Error Policy must be followed and the nature of the error fed back to the prescriber and their line manager.

There is a need for training identified within this policy which will be applicable to all prescribers. Key messages around antimicrobial stewardship will be provided via on-line training. For junior doctors rotating, this training will be provided at their induction too by pharmacy team.

A record of the event will be recorded on uLearn.

The governance group responsible for monitoring the training is the Quality Forum

## 8.0 Monitoring Compliance and Effectiveness

Ref	Minimum Requirements	Evidence for Self-assessment	Process for Monitoring	Responsible Individual / Group	Frequency of monitoring
	Prescribing audit to ascertain if correct antimicrobial, dose, frequency and length of therapy has been chosen for the infection		Via Quality Schedule	Medicines Management Committee or IPC	Annual
	Documentation audit to ascertain compliance with the Start Smart - Then Focus approach.		Completed at same time as Quality Schedule audit	Medicines Management Committee or IPC	Annual
	Antimicrobial surveillance for inpatient prescribing			Medicines Management Committee or IPC	Quarterly

## 9.0 Standards/Performance Indicators

TARGET/STANDARDS	KEY PERFORMANCE INDICATOR
Antimicrobial prescriptions are adhering to local guidelines	Correct agent, dose, frequency and length prescribed
START SMART, THEN FOCUS approach followed	Documentation that a full assessment took place and a review undertaken.
Analyse any trends in antimicrobial prescribing	Surveillance report presented to Trust IPC and / or Medicines Management Committee

## Appendix 1

### Training Requirements

#### Training Needs Analysis

<b>Training topic:</b>	Antimicrobial Stewardship
<b>Type of training:</b> (see study leave policy)	<input type="checkbox"/> Mandatory (must be on mandatory training register) <input type="checkbox"/> <u>Role specific</u> <input type="checkbox"/> Personal development
<b>Directorate (s) to which the training is applicable:</b>	<input type="checkbox"/> <u>Adult Mental Health &amp; Learning Disability Services</u> <input type="checkbox"/> <u>Community Health Services</u> <input type="checkbox"/> <u>Enabling Services</u> <input type="checkbox"/> Families Young People Children <input type="checkbox"/> <u>Hosted Services</u>
<b>Staff groups who require the training:</b>	Prescribers primarily working in inpatient settings
<b>Regularity of Update requirement:</b>	Every three years
<b>Who is responsible for delivery of this training?</b>	Module on uLearn
<b>Have resources been identified?</b>	
<b>Has a training plan been agreed?</b>	
<b>Where will completion of this training be recorded?</b>	<input type="checkbox"/> <u>ULearn</u> <input type="checkbox"/> Other (please specify)
<b>How is this training going to be monitored?</b>	

## The NHS Constitution

The NHS will provide a universal service for all based on clinical need, not ability to pay. The NHS will provide a comprehensive range of services

<b>Shape its services around the needs and preferences of individual patients, their families and their carers</b>	<input type="checkbox"/>
<b>Respond to different needs of different sectors of the population</b>	<input type="checkbox"/>
<b>Work continuously to improve quality services and to minimise errors</b>	<input checked="" type="checkbox"/> x
<b>Support and value its staff</b>	<input type="checkbox"/>
<b>Work together with others to ensure a seamless service for patients</b>	<input checked="" type="checkbox"/> x
<b>Help keep people healthy and work to reduce health inequalities</b>	<input type="checkbox"/>
<b>Respect the confidentiality of individual patients and provide open access to information about services, treatment and performance</b>	<input type="checkbox"/>

### Appendix 3

#### Stakeholders and Consultation

##### Key individuals involved in developing the document

Name	Designation
Tejas Khatau	Lead Pharmacist – FYPC&LD Directorate

##### Circulated to the following individuals for comment

Name	Designation
Infection Control Prevention Committee	N/A
Medicines Management Committee	N/A

## Due Regard Screening Template

Section 1	
Name of activity/proposal	Antimicrobial Stewardship
Date Screening commenced	10/08/2021
Directorate / Service carrying out the assessment	Medical
Name and role of person undertaking this Due Regard (Equality Analysis)	Tejas Khatau
<b>Give an overview of the aims, objectives and purpose of the proposal:</b>	
<b>AIMS:</b> Preserve antimicrobials	
<b>OBJECTIVES:</b> Monitor antimicrobial usage to ensure it complies with local guidelines	
Section 2	
Protected Characteristic	If the proposal/s have a positive or negative impact please give brief details
Age	
Disability	
Gender reassignment	
Marriage & Civil Partnership	
Pregnancy & Maternity	
Race	
Religion and Belief	
Sex	
Sexual Orientation	
Other equality groups?	
Section 3	
<b>Does this activity propose major changes in terms of scale or significance for LPT? For example, is there a clear indication that, although the proposal is minor it is likely to have a major affect for people from an equality group/s? Please <u>tick</u> appropriate box below.</b>	
Yes	No
High risk: Complete a full EIA starting click <a href="#">here</a> to proceed to Part B	Low risk: Go to Section 4.
Section 4	
<b>If this proposal is low risk please give evidence or justification for how you reached this decision:</b>	
<b>Signed by reviewer/assessor</b>	Tejas Khatau
<b>Date</b>	10/08/2021
<i>Sign off that this proposal is low risk and does not require a full Equality Analysis</i>	
<b>Head of Service Signed</b>	
<b>Date</b>	

## Appendix 5

### DATA PRIVACY IMPACT ASSESSMENT SCREENING

<p><b>Data Privacy impact assessment (DPIAs) are a tool which can help organisations identify the most effective way to comply with their data protection obligations and meet Individual's expectations of privacy.</b></p> <p><b>The following screening questions will help the Trust determine if there are any privacy issues associated with the implementation of the Policy. Answering 'yes' to any of these questions is an indication that a DPIA may be a useful exercise. An explanation for the answers will assist with the determination as to whether a full DPIA is required which will require senior management support, at this stage the Head of Data Privacy must be involved.</b></p>		
<b>Name of Document:</b>	<b>Antimicrobial Stewardship</b>	
<b>Completed by:</b>	Tejas Khatau	
<b>Job title</b>	<b>Lead Pharmacist</b>	<b>Date 10/08/2021</b>
<b>Screening Questions</b>	<b>Yes / No</b>	<b>Explanatory Note</b>
1. Will the process described in the document involve the collection of new information about individuals? This is information in excess of what is required to carry out the process described within the document.	No	
2. Will the process described in the document compel individuals to provide information about them? This is information in excess of what is required to carry out the process described within the document.	No	
3. Will information about individuals be disclosed to organisations or people who have not previously had routine access to the information as part of the process described in this document?	No	
4. Are you using information about individuals for a purpose it is not currently used for, or in a way it is not currently used?	No	
5. Does the process outlined in this document involve the use of new technology which might be perceived as being privacy intrusive? For example, the use of biometrics.	No	
6. Will the process outlined in this document result in decisions being made or action taken against individuals in ways which can have a significant impact on them?	No	
7. As part of the process outlined in this document, is the information about individuals of a kind particularly likely to raise privacy concerns or expectations? For examples, health records, criminal records or other information that people would consider to be particularly private.	No	
8. Will the process require you to contact individuals in ways which they may find intrusive?	No	
<p><b>If the answer to any of these questions is 'Yes' please contact the Data Privacy Team via <a href="mailto:Lpt-dataprivacy@leicspart.secure.nhs.uk">Lpt-dataprivacy@leicspart.secure.nhs.uk</a></b></p> <p><b>In this case, ratification of a procedural document will not take place until review by the Head of Data Privacy.</b></p>		
<b>Data Privacy approval name:</b>		
<b>Date of approval</b>		

Acknowledgement: This is based on the work of Princess Alexandra Hospital NHS Trust