

# Management of Building/Premises Ventilation Systems

This Policy outlines the Trust's management arrangements for Ventilation Systems within its properties including operational procedures to ensure it meets its statutory obligations.

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Which Relevant CQC Fundamental Standards?		

## Version Control and Summary of Changes

Version number	Date	Comments (description change and amendments)
1	June 2014	Harmonised Policy
2	March 2016	Policy extended due to no legislative updates or changes to arrangements
3	September 2019	Reference to Interserve and LLRFMC removed. Document formatted to current Trust format

**All LPT Policies can be provided in large print or Braille formats, if requested, and an interpreting service is available to individuals of different nationalities who require them.**

Did you print this document yourself?

Please be advised that the Trust discourages the retention of hard copies of policies and can only guarantee that the policy on the Trust website is the most up-to-date version.

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## Management of Ventilation Systems

### Contribution List:

#### Key Individuals involved in reviewing the document

Name	Designation
Health and Safety Compliance Team	

#### Circulated to the following individuals for consultation:

Name	Designation
Members of the Health and Safety Committee	Trust agreeing committee
Members of the Divisional Health, Safety and Security Action Groups	Sub-group of the Agreeing Committee

#### **Trust Associated Policies:**

All Health & Safety Policies;

All Estates & Facilities Policies

Water Management Code of practice

## Definitions that apply to this Policy

All procedural documents should have a definition of terms to ensure staff have clarity of purpose (refer to Policy for Policies for assistance)

In this Management of Ventilations Systems Policy, unless the context otherwise requires, the following words shall have the following meanings.

<b>Environment</b>	The totality of a patient's surroundings when in healthcare premises. This includes the fabric of the building and related fixtures, fittings and services such as air and water supplies.
<b>Ventilation</b>	A means of removing and replacing the air in a space. In its simplest form this may be achieved by opening windows and doors etc. Mechanical ventilation systems provide a more controllable method. Basic systems consist of a fan and collection of distribution ductwork; more complex systems may include the ability to heat and filter the air passing through them. Ventilation equipment may be required in order to remove smells, dilute contaminants and ensure that a supply of 'fresh' air enters a space.
<b>Air Conditioning</b>	Air-conditioning is the ability to heat, cool, humidify, dehumidify and filter air. This means that the climate within a space being supplied by an air-conditioning plant can be maintained at a specific level regardless of changes in the outside air conditions or the activities within the space. Air-conditioning may be required in order to provide comfort conditions within a space.
<b>Due Regard</b>	Having due regard for advancing equality involves: <ul style="list-style-type: none"><li>• Removing or minimising disadvantages suffered by people due to their protected characteristics.</li><li>• Taking steps to meet the needs of people from protected groups where these are different from the needs of other people.</li><li>• Encouraging people from protected groups to participate in public life or in other activities where their participation is disproportionately low.</li></ul>

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## **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.

In carrying out its functions, LPT must have due regard to the different needs of different protected equality groups in their area.

This applies to all the activities for which LPT is responsible, including policy development and review.

## **Analysis of Equality**

An analysis of equality review found the activity outlined in this policy to be equality neutral.

This policy describes the Trust's health and safety arrangements. The factors within the policy will be taken into account in identifying staff to undergo the required training and may disadvantage on the grounds of disability. Steps being taken and implemented to remove any perceived or actual barriers are that the following factors are and will be taken into account in identifying staff to undergo training.

### **1.0 Introduction**

The Ventilation Systems Management Policy applies to all staff employed by Leicestershire Partnership NHS Trust

The organisation has a wide range of teams and services operating from a large number of properties making up our overall estate. The combination of mix and ageing condition of the estate means that the organisation has a number of properties that contain Ventilation systems of varying types and for various purposes including legal and best practice requirements.

The organisation has made a commitment to manage all of its estates and all tasks carried out within in a safe and appropriate manner to reduce the risk to health of all staff, patients and visitors.

## 2.0 Purpose

The purpose of this policy is to establish mandatory requirements for the management of Ventilation Systems.

Ventilation is provided in healthcare premises for the comfort and safety of the occupants of buildings. More specialised ventilation will also provide comfort but its prime function will be to closely control the environment and air movement of the space that it serves in order to contain, control and reduce hazards to patients and staff from air borne contaminants, dust and harmful microorganisms.

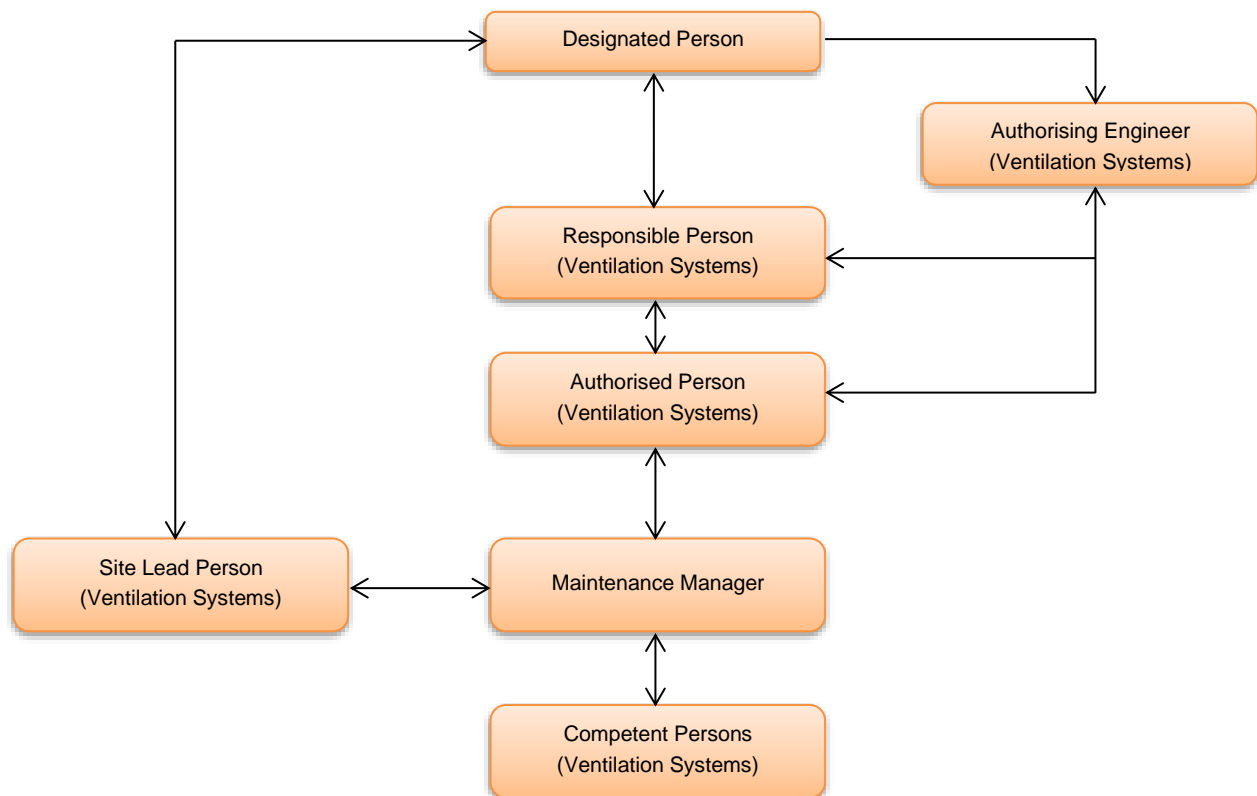
This Policy applies to all premises owned by the Trust or where the Trust holds maintenance responsibilities and to all employees and contractors involved in the construction, management, design, upgrading, refurbishment, extension, maintenance and operation of ventilation plant and equipment.

## 3.0 Organisational Responsibilities

Everyone is responsible for complying with the organisations arrangements for the management of ventilation systems, including the implementation of local management controls. In order to comply with this policy, all staff must be aware of the lines of communication and levels of responsibility, which exist to ensure that all matters of ventilation systems management are dealt with effectively.

In order to ensure that ventilation systems are managed efficiently within the organisation, the following organisational responsibilities have been allocated.

Management Hierarchy of Responsibility for the management of Ventilation Systems



### **3.1 Designated Person**

The Designated Person shall be the Chief Executive of the Trust. LPT have outsourced the management of their ventilation systems. The contract is a self monitoring contract that is overseen by an informed client (NHS Horizons) acting on behalf of LPT. Contract management/monitoring arrangements are set out in the monitoring section of the policy.

### **3.2 Responsible Person (Ventilation Systems)**

The designated Director with responsibility for Estates Management has overall responsibility for all matters relating to ventilation systems management. This responsibility includes ensuring that all ventilation systems management matters are seen as an important priority for the Trust and addressed through comprehensive policies and procedures that are effectively implemented and appropriately resourced within the overall financial position of the Trust.

The designated Director will ensure that financial resources are made available to support this Policy based upon a risk assessment of priorities.

The designated Director has responsibility for ensuring that the aims and objectives of the organisation's Ventilation Systems Management policy are implemented and will nominate a lead officer. The Director with designated responsibility for Ventilation Systems will:

- Publicly endorse the organisation's "Ventilation Systems policy";
- Empower staff to take the necessary actions;

### **3.3 Authorised Person (Ventilation Systems)**

The Authorised Person (AP) shall be an appointed qualified technical engineer who has the key operational responsibility that the Trust complies with its statutory obligations.

The person will be qualified, sufficient experienced and skilled to fully operative the specialist service.

### **3.4 Site Lead Person/Appropriate Managers (Ventilation Systems)**

All managers are responsible for the implementation and monitoring of the policy within their specific area of responsibility, ensuring that:

- Management procedures and safe working practices resulting from them are produced, documented and implemented for their area(s);
- Arrangements with regard to Ventilation Systems are included in induction and regular refresher training for all staff;
- Undertaking regular monitoring and recording their findings;
- Where revalidation/ certification of the performance of a given system is required e.g. local exhaust ventilation then this is undertaken by



competent individuals and provided within the specified / required timescales

### **3.5 Employees**

All employees have an individual responsibility for Ventilation Systems management in line with their duties and working environment. Each employee or agent of the organisation has an individual responsibility to:

- Co-operate with the organisations management in the implementation of this policy;
- Report any poor management of Ventilation Systems to their supervisor/ manager;
- To undergo appropriate training as required.

### **3.6 Maintenance Manager**

Operational Maintenance Managers who are responsible for day to day operational maintenance of LPT properties.

### **3.7 Contractors**

Other employers or individuals providing goods and/or services to the Trust shall be required to comply with Trust policies and procedures with regard to Ventilation Systems management.

Specific requirements for Contractors will be detailed in The Policy for the Control of Maintenance and Construction Activities

### **3.8 Patients and Visitors**

Patients and visitors will be advised of all procedures in place for the Ventilation Systems management and will be expected to comply with all reasonable requests.

### **3.9 Authorising Engineer (Ventilation Systems)**

Authorising Engineers (AE) act as external assessor and is appointed with a brief to provide services in accordance with Health Technical Memorandum guidance. The AE will make recommendations for the appointment of Authorised Persons, monitor the performance of the service, and provide an annual audit report.

### **3.10 Competent Person (Ventilation Systems)**

Trade staff or contractors will have sufficient technical knowledge, training and experience to carry out their defined duties, and to understand fully any dangers involved and will be directed, appointed, or authorised to work (if a contractor), by the Supervisor or Authorised Person (AP) dependant on the

work involved. Maintenance Assistants provide support to this role with direction from more senior grades of staff.

#### **4.0 Implementation**

In order to implement this policy effectively there is a need to encourage all staff to play their part in the organisations overall goal. Senior management will be seen to take the lead in implementing and encouraging effective and efficient operation and maintenance of ventilation systems.

#### **5.0 Infection Prevention and Control**

It is the responsibility of the Infection Prevention and Control Team to provide input for all matters relating to the hospital environment, maintenance of hospital buildings and engineering systems and to work with the Facilities Management Services Team including:

- Provide education for maintenance staff and management on infection control and reduction in Healthcare Associated Infections (HCAI's)
- Provide guidance and support when advice on controlling the environment is required
- Provide advice on risk assessments for controlling the environment decisions.

#### **6.0 Maintenance of Ventilation Systems**

All ventilation air handling units (AHU), plant, ductwork and systems shall be included in the planned preventative maintenance (PPM) system Inspections and maintenance shall be carried out in accordance with the following:

Heating and ventilation systems Health Technical Memorandum 03-01:  
Specialised ventilation for healthcare premises Part A & B.

Health and Safety Commission's Approved Code of Practice and guidance document

'Legionnaires' disease: the control of Legionella bacteria in water systems' (L8). Health Technical Memorandum 04-01 – 'The control of *Legionella*, hygiene, "safe" hot water, cold water and drinking water systems'.

The general frequency of inspections and verification for ventilation systems shall consist of:

- All ventilation systems are to be subject to a programme of routine inspection and maintenance which shall be as a minimum frequency of annually.
- Ventilation systems serving critical care areas shall be inspected and maintained quarterly with actual performance measured and verified

annually by competent individuals Local Exhaust Ventilation (LEV) systems to be examined and tested every 14 months.

- Annual checks/tests to be carried out in order to demonstrate the continuing efficiency of the fire detection and fire containment equipment/systems/arrangements used within the ventilation system continue to provide the required levels of protection.
- A summary schedule of ventilation systems is shown in Appendix A.

## **7.0 Records**

In order that ventilation systems can be correctly operated and maintained it is essential that “as-fitted drawings”, operating manuals, maintenance instructions and commissioning manual are available. Log books should be kept for each ventilation system consisting of maintenance records, test and validation data. Copies of inspection and servicing records should be retained and available for inspection locally.

## **8.0 System Modification and Changes**

When considering building refurbishments and/or the modification of any ventilation system it is essential that these changes do not adversely affect the performance of the rest of the system and the benefits / protection provided to building users. As such careful consideration must be given to this as testing and measurement may be required prior to design and/or works where existing records may not provide the required level of detail.

Where changes are made to ventilation systems all records should be updated as prescribed records section 7.0 of this policy and this must include any new operating parameters/ arrangements, complete with any new automated control strategies.

## **9.0 Training**

A Training needs analysis has been undertaken and this policy has identified specific training requirements.

All training delivered within the Trust will be part of an endorsed model of training relevant for the service area.

The governance group responsible for monitoring the training is Health and Safety Committee.

### **9.1 Training (Estates and Maintenance Staff)**

Personnel carrying out maintenance of Ventilation Systems will receive suitable training which includes information about any significant hazards arising due to their maintenance activities which may either affect them personally or any other person who may be affected by their actions or omissions. Training records shall be kept up to date for all staff.

The Estates and Facilities provider will maintain these and make available on request.

Role	Training Requirement
Authorised Person	Ventilation and air conditioning for the authorised person (HTM 03)
Competent Person	Ventilation and air conditioning for the competent person (HTM 03)
Site Lead Person	Ventilation Systems Overview

## **9.2 Training (Users/System Operators)**

For these systems to be able to perform their intended purpose and be of benefit to the users / occupiers of the various facilities especially where these systems is of a specialist nature (eg lev's and operating theatres) it is essential that the users are aware of how to operate the systems, and how to ensure that the correct environmental conditions are present for any prescribed time prior to commencing with their intended activities.

## **10.0 Policy Monitoring and Review**

This policy shall be reviewed at a minimum frequency of bi-annually. It should also be reviewed when substantial changes occur in the organisational structure of the organisation or property portfolio or when significant changes to legislation occur.

## Appendix A – Ventilation systems

Ventilation systems include (but are not restricted to) the following summary:

### System / Type Typical Area of Use General (Extract)

- Operating theatres
- Hospital wards and departments
- Toilets
- Bathrooms
- Kitchens
- Mortuary

### General (Supply)

- Operating theatres
- Hospital wards and departments
- Office areas

### Ultra Clean Ventilation Systems

- Operating theatres

### Local Cooling / Refrigeration Units

- Laboratories
- Clinical areas
- Specialist areas

### Local Exhaust Ventilation (LEV)

- Operating theatres (exhaled gas)
- Laboratories
- Dental
- Mortuary
- Workshops
- Specialist areas

### Fume Cupboards

- Pharmacy
- Laboratories

### Microbiological Safety Cabinets

- Laboratories

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**Policy Monitoring Section**

**NHSLA Criteria Number & Name** (if applicable):

*Where applicable NHSLA duties outlined in the policy will be evidenced through monitoring of the other minimum requirements.*

Reference	Minimum Requirements to be monitored	Evidence for self assessment	Process for Monitoring	Responsible Individual / Group	Frequency of monitoring
Not Applicable	<p>Authorising Engineers Annual Report</p> <p>External review undertaken and reported on compliance presented to NHS Horizons</p> <p>Authorised Persons Annual Review</p> <p>Appointment of Authorised Person</p> <p>Authorising Engineer Annual Review</p>		<p>Quarterly Statutory Compliance Report received into the Health and Safety Committee who monitor KPIs for compliance and performance on behalf of LPT for the external facilities management contract</p> <p>Annual Statutory Compliance Report</p> <p>Corresponding remedial action plans</p> <p>Authorised Person Annual Review</p> <p>Reports received through Contract Management Panel</p>	Health and Safety Committee	Quarterly /Annually

			Authorising Engineer Appointment Record  Authorised Persons report of annual review		
Not Applicable	Incident Reports		Review of incidents received	Risk Assurance Team	Quarterly

*Where monitoring identifies any shortfall in compliance the group responsible for the Policy (as identified on the policy cover) shall be responsible for developing and monitoring any action plans to ensure future compliance.*

(please add as many lines as required)

*Where monitoring identifies any shortfall in compliance the group responsible for the Policy (as identified on the policy cover)*

**An explanation of the requirements is as follows:**

**Reference** – NHSLA standard where applicable.

**Minimum Requirements to be monitored** – for NHSLA policies these are laid out in the standards. For all other policies these will have to be determined by the policy owner.

**Evidence for self assessment** – the paragraph references and page numbers for the minimum requirements within the policy.

**Process for monitoring** – how the minimum requirement will be monitored eg audit.

**Responsible Individual / Group** – usually a group; who is responsible for monitoring the minimum requirements.

**Frequency of monitoring**- how often the monitoring should be reviewed.

## Policy Training Requirements

The purpose of this template is to provide assurance that any training implications have been considered

<b>Training topic:</b>	Management of Ventilation Systems
<b>Type of training:</b>	√ Mandatory training, to be covered as part of the health and safety component
<b>Division(s) to which the training is applicable:</b>	<ul style="list-style-type: none"> <li>√ Adult Learning Disability Services</li> <li>√ Adult Mental Health Services</li> <li>√ Community Health Services</li> <li>√ Enabling Services</li> <li>√ Families Young People Children</li> <li>√ Hosted Services</li> </ul>
<b>Staff groups who require the training:</b>	<ol style="list-style-type: none"> <li>1. Mandatory – basic ventilation systems awareness for all staff</li> <li>2. Role specific - Technical Posts as identified within the HTMs within the policy</li> </ol>
<b>Update requirement:</b>	Three yearly
<b>Who is responsible for delivery of this training?</b>	<ol style="list-style-type: none"> <li>1. LPT</li> <li>2. NHS Horizons</li> </ol>
<b>Have resources been identified?</b>	Text to be included in new starter staff handbook, to commence January 2015
<b>Has a training plan been agreed?</b>	No
<b>Where will completion of this training be recorded?</b>	<ul style="list-style-type: none"> <li>√ Trust learning management system</li> <li>Other (please specify)</li> </ul>
<b>How is this training going to be monitored?</b>	Via Annual Review



## Due Regard Screening Template

Section 1		
Name of activity/proposal	Management of Ventilation Systems	
Date Screening commenced	August 2014	
Directorate / Service carrying out the assessment	Health and Safety Compliance Team	
Name and role of person undertaking this Due Regard (Equality Analysis)	Vijay Patel	
<b>Give an overview of the aims, objectives and purpose of the proposal:</b>		
<b>AIMS:</b> To set out the arrangements for the management of ventilation systems.		
<b>OBJECTIVES:</b>		
1) Provide ventilation for the comfort and safety of occupants in buildings 2) Where specialist ventilation, provide comfort but also to control the environment and air movement of space that it serves in order to contain, control and reduce hazards to patients, staff and others from air borne contaminants, dust and harmful micro-organisms 3) Ventilation systems meet legal and best practice guidance.		
<b>PURPOSE:</b> To establish mandatory requirements for the management of ventilation systems		
Section 2		
Protected Characteristic	Could the proposal have a positive impact Yes or No (give details)	Could the proposal have a negative impact Yes or No (give details)
Age	No	No
Disability	No	No
Gender reassignment	No	No
Marriage & Civil Partnership	No	No
Pregnancy & Maternity	No	No
Race	No	No
Religion and Belief	No	No
Sex	No	No
Sexual Orientation	No	No
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 tick appropriate box below.</b>		
Yes		No
High risk: Complete a full EIA starting click <a href="#">here</a> to proceed to Part B	<input type="checkbox"/>	Low risk: Go to Section 4.
<b>Section 4</b>		
<b>It this proposal is low risk please give evidence or justification for how you reached this decision:</b>		
All staff receive appropriate training therefore risks will be eliminated.		

*Sign off that this proposal is low risk and does not require a full Equality Analysis:*

**Head of Service Signed:** Bernadette Keavney

**Date:** September 2019



# The NHS Constitution

## NHS Core Principles – Checklist

**Please tick below those  
principles that apply to this policy**

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

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

## Appendix F

### PRIVACY IMPACT ASSESSMENT SCREENING

<p><b>Privacy impact assessment (PIAs) 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. The first step in the PIA process is identifying the need for an assessment.</b></p> <p><b>The following screening questions will help decide whether a PIA is necessary. Answering 'yes' to any of these questions is an indication that a PIA would be a useful exercise and requires senior management support, at this stage the Head of Data Privacy must be involved.</b></p>			
<b>Name of Document:</b>	Health and Safety Personal Protective Equipment Policy		
<b>Completed by:</b>	Christian Knott		
<b>Job title</b>	Health and Safety Advisor	<b>Date</b>	12/02/19
			<b>Yes / No</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.			<b>No</b>
2. Will the process described in the document compel individuals to provide information about themselves? This is information in excess of what is required to carry out the process described within the document.			<b>No</b>
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?			<b>No</b>
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?			<b>No</b>
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.			<b>No</b>
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?			<b>No</b>
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.			<b>No</b>
8. Will the process require you to contact individuals in ways which they may find intrusive?			<b>No</b>
<p><b>If the answer to any of these questions is 'Yes' please contact the Head of Data Privacy Tel: 0116 2950997 Mobile: 07825 947786</b>  <a href="mailto:Lpt-dataprivacy@leicspart.secure.nhs.uk">Lpt-dataprivacy@leicspart.secure.nhs.uk</a>  <b>In this case, adoption n of a procedural document will not take place until approved by the Head of Data Privacy.</b></p>			
<b>IG Manager approval name:</b>			
<b>Date of approval</b>			

Acknowledgement: Princess Alexandra Hospital NHS Trust