The management of Carbapenem Resistant Organisms (CRO) Policy.

This policy describes the key processes and protocols for patients colonised or infected with multi resistant gram-negative organism and an extreme drug resistant organism. It identifies the management of the patient and care delivery requirements.

Key Words:	Infection prevention and control, Carbapenem Resistant Organisms (CRO)	
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Type of Policy	Clinical 	Non-Clinical

Contents

1.0 Quick Look Summary

The aim of this policy is to provide guidance to staff employed by Leicestershire Partnership Trust (LPT) with regards to caring for patients who are known or suspected of having a Carbapenamase Resistant Organism (CRO) infection or who are carriers of the organism.

The purpose of this policy is to ensure that all staff employed by LPT are aware of the correct procedure and precautions to take when caring for patients with known or suspected CRO or XDR organisms.

This policy will ensure that all staff employed by LPT are providing evidence-based care which is in accordance with the health and social care act (2015) and the latest guidance provided by UK Health Security Agency (UKHSA).

1.1 Version Control and Summary of Changes

Version number	Date	Comments
Version 1	April 2021	Development of a new policy to provide key processes and protocols for patients colonised or infected with CRO. It identifies the management of the patient and care delivery requirements. Circulated for comments to the infection prevention and control team and key individuals within LPT and also key individuals outside the organisation that can provide an expertise review. This replaces the previous policy that included all multidrug resistant organisms.
Version 1.1	October 2022	Policy reviewed & updated in line IPC/national guidance issues September 2022.
Version 2.0	April 2024	Policy reviewed and updated in line with current guidance.

1.2 Key individuals involved in developing and consulting on the document

Name	**Designation**
Accountable Director	Anne Scott Director of Nursing, AHP'S & quality Emma Wallis Deputy director of nursing & quality.
Author(s)	Reviewed by Claire King Infection Prevention and Control Nurse
Implementation Lead	Amanda Hemsley Head of infection Prevention and Control
Core policy reviewer group	Infection Prevention and Control assurance Group
Wider consultation	Infection Prevention & Control assurance group members
Trust policy group	Trust policy group members

1.3 Governance

Level 2 or 3 approving delivery group	**Level 1 Committee to ratify policy**
Infection Prevention & Control assurance group.	Quality & Safety Committee

1.4 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.

if you would like any public Trust Policy in an accessible format, please email lpt.corporateaffairs@nhs.net and we can send them to you.

1.5 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

1.6 Duties within the Organisation

Duties regarding this policy can be located in the LPT infection prevention & control assurance policy.

Consent

• Clinical staff must ensure that consent has been sought and obtained before any care, intervention or treatment described in this policy is delivered. Consent can be given orally and/ or in writing. Someone could also give non-verbal consent as long as they understand the treatment or care about to take place. Consent must be voluntary and informed, and the person consenting must have the capacity to make the decision.

• In the event that the patient's capacity to consent is in doubt, clinical staff must ensure that a mental capacity assessment is completed and recorded. Someone with an impairment of or a disturbance in the functioning of the mind or brain is thought to lack the mental capacity to give informed consent if they cannot do one of the following:

- Understand information about the decision.
- Remember that information.
- Use the information to make the decision.
- Communicate the decision.

1.5 Definitions that apply to this Policy.

Beta lactam antibiotics	B-lactam antibiotics (beta-lactam antibiotics) are a broad class of antibiotics, consisting of all antibiotic agents that contain a β-lactam ring in their molecular structures. This includes penicillin derivatives (penams), cephalosporins (cephems), monobactams, and Carbapenems.
Carbapenem	A group of beta lactam antibiotics normally reserved for serious infections caused by antibiotic resistant Gram-negative bacteria
Carbapenem Resistant Organisms (CRO)	These are extremely drug resistant organisms that are resistant to the Carbapenem group of antibiotics. They also routinely demonstrate resistance to other groups of antibiotics.
Carbapenemase Producing Enterobacteriaceae (CPE)	These are Enterobacteriaceae which have become resistant to carbapenems, a group of powerful antibiotics. The resistance is aided by carbapenemases, which are enzymes made by some strains of the bacteria, which allow them to destroy carbapenem. Antibiotics and so becoming resistant to them and most other penicillin-like antibiotics.
Cohort nursing of infected patients	Grouping of patients who are deemed to be infectious and nursing them within an area of an in-patient facility. It is often. recommended as an overflow strategy when single room isolation is not available.
Colonisation	Colonisation is the multiplication of a micro-organism after it has attached to host tissue or other surfaces but causing no harm to the person. People who are colonised may not display signs. Or symptoms of infection. .
CRO contact	A CRO contact is defined as a patient who has been in direct. e.g., person-to-person) or indirect contact (e.g., contact with a contaminated environment or equipment) with another patient who is affected by CRO (infected or colonised) and is therefore at risk of CRO carriage and should be screened.
Exposure	A state of contact or close proximity to a pathogen, by ingesting, breathing or direct contact, e.g., on skin
Extreme Drug Resistant (XDR)	An extensively drug resistant organism has non-susceptibility to at least one agent in all but two or fewer antimicrobial categories
HealthCare Associated Infection (HCAI)	Healthcare associated infection is any infection acquired as the result of a course of treatment, intervention, or care.
Infection	Where an organism is present at a site and causes an inflammatory response or where the organism is present in a normally sterile site.
Personal Protective Equipment (PPE)	Specialised clothing or equipment worn by employees for protection against health and safety hazards and includes gloves, aprons, gowns, masks, and eye protection.
Invasive device	A device that breaches the skin's normal line of defence i.e. urinary catheters, intravenous devices.
Source Isolation	Isolation for the control of infection is used to prevent infected patients from infecting others.
Standard Precautions	Precautions that are used such as Personal Protective Equipment (PPE) and hand washing to prevent the spread of infection.

2.0. Purpose of the policy

The aim of this policy is to provide guidance to staff employed by the Leicestershire Partnership Trust (LPT) with regards to caring for patients who are known or suspected of having a Carbapenem Resistant Organism (CRO) infection or who are carriers of the organism.

The purpose of this policy is to ensure that staff employed by LPT are aware of the correct procedure and precautions to take when caring for patients with known or suspected CRO or XDR organisms.

The policy will ensure that all staff employed by LPT are providing evidence-based care which is in accordance with the Health and Social Care Act (2015) and the latest guidance provided by UK Health Security Agency (UKHSA).

2.1 Introduction

Carbapenems are a class of beta-lactam antibiotic that are active against many aerobic and anaerobic gram-positive and gram-negative organisms which includes Imipenem, Meropenem, Ertapenem and Doripenem. Of all the beta-lactam antibiotics, Carbapenems possess the broadest spectrum of activity and the greatest potency against bacteria. Because of this, they are often reserved for more severe infections or used as "last line" agents.

Carbapenamase Resistant Organism (CRO) are bacteria that are resistant to Carbapenem antibiotics through a range of mechanisms (i.e., enzymes: e.g.KPC, OXA-48, NDM and VIM) which can destroy antibiotics in the group called Carbapenems. This makes the bacteria resistant to the antibiotic. These are categorised as follows:

- CRE - Carbapenem-Resistant Enterobacteriaceae, must be Enterobacteriaceae and resistant to Carbapenems. May or may not produce a Carbapenamase.

- CRO **-** Carbapenem-Resistant organisms, any carbapenem-resistant species (strictly, also those with intrinsic resistance). May or may not produce a Carbapenemase.

- CPE **-** Carbapenemase-Producing Enterobacteriaceae, must be Enterobacteriaceae and produce a Carbapenemase. May or may not be resistant to carbapenems.

- CPO **-** Carbapenamase-Producing Organisms, Any Carbapenemase- producing species (strictly, also those with intrinsic carbapenemases). May or may not be resistant to carbapenems.

Clinically they are all treated the same and can be covered by the umbrella term CRO.

Bacteria lives in the gastro-intestinal tract (gut) of people and animals and contribute to the digestion of food. It only becomes an issue if these bacteria are Carbapenem resistant. Whilst in the gut CRO are harmless and cause no ill effects; this is called colonisation. However, CRO can cause a range of serious infections if the bacteria are outside of the gut, these include wounds, blood stream, urinary tract and respiratory tract infection and infections associated with invasive procedures or devices.

Extensively Drug Resistant (XDR) are bacteria that are resistant to virtually all antibiotics, CRO's are one form of XDR. However, other organisms such as fungi, can also be XDR and the principles of this policy also apply to such organisms. CRO can often be recorded in the patients records as an XDR, it is important to verify if the XDR is CRO.

Hand hygiene and decontamination of the environment are vital factors in the prevention and control of CRO as it can spread between people through direct contact with each other or by touching items or surfaces that the person with CRO may have touched such as tables, toilets, or equipment.

Risk factors for the acquisition of CROs (colonisation) include use of antibiotics and hospital admission, within the UK and abroad in the last 12 months.

3.0 Standards & Procedures

3.1 Screening considerations

During the admission process all patients must be assessed for their risk of colonisation. Patients who have spent at least one night in hospital outside of Leicestershire or abroad or dialysed within the last 12 months are considered to be at **higher risk** and may require source isolation precautions. It is not possible to check the patient status for CRO on HIS or ILAB if they live or were treated out of county, if the patient is assessed and deemed to be high risk then the patient will need to have one negative result on admission to the ward.

(Please refer to appendix 1 CRO screening flow charts)

Patients who have spent one night in a university hospitals of Leicester (UHL) hospital within the last 12 months are considered **low risk** and **do not** require isolation precautions unless the patient is a direct transfer.

Patients who are known to be carriers on admission should not be screened during the admission, they will however require isolation precautions.

3.2 Contact Screening considerations

A CRO contact is defined as a patient who has been in direct (For example contact with contaminated environment or equipment) with another person who is affected by CRO (Infected or colonised) and is therefore at risk of CRO carriage and should be screened.

Patients that have been in contact (I.e., in the same bay on a ward area or ward if the patient has occupied more than one bay) with a patient newly identified with CRO will also require screening to take place.

To screen patients initially one CRO PCR rectal swab will be required from all patients in the bay, followed by:

- One CRO PCR rectal swab twice weekly for a period of two weeks
- One CRO PCR rectal swab weekly for a period of two weeks during their inpatient stay. (Include wound swab and urine sample if the patient is catheterised)

A rectal swab is a specimen that is taken by gently inserting a swab inside the rectum 3-4cms beyond the anal sphincter, rotating gently and then removing. Normal saline can be used to moisten the swab prior to insertion, the swab should have a small amount of visible faecal matter on it to enable organisms' detection in the laboratory.

Do not send large amounts of faecal material as this will not be processed

Patients identified as contacts do not usually require isolation in a single room unless the subsequent screens are positive, they can be source isolated at the bed space following a transmission risk assessment. However, this may need to be reconsidered prior to the results being received (i.e., in an outbreak situation).

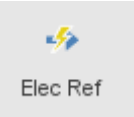
The frequency of screening may increase if the transmission of new cases are detected within the ward area or based on risk assessment of the situation. The closure of the bay or ward may also need to be considered.

It is not recommended that screening of staff takes place.

3.3 Identification of CRO patients

Following a patient being screened for CRO the microbiology department will then identify any positive samples, the ward staff will need to contact the LPT IPC team as soon as the positive result is known to ensure that appropriate precautions are put in place.

Once the IPC team have been notified an alert marker will be placed on the patients record this applies to any patient who has or are identified as a known carrier of a communicable infection.



E-Referral on SystmOne: Patients with a lifelong infection will have this icon  in the demographic box on SystmOne, if missing please contact the IPC Team. The electronic patient system (HISS) will also alert staff of patients previously identified as CRO carriers. The HISS system identifies the patient details and will display SR CRO on screen. The special register within HISS is updated by the microbiology department at UHL and therefore relies upon the samples being processed within Leicester, Leicestershire, and Rutland.

It is imperative that staff check the infectious status of all patients when they first come under their care. If staff do not have access to HISS, they can contact the Infection Prevention and Control Team within LPT who will be able to undertake this for them. However, as discussed above only those samples that have been sent to the microbiology department at UHL will be entered onto HISS.

The IPC team can be contacted via telephone (Answerphone service) on 01162582320 or via the online form which is located on staffnet the link is-

https://staffnet,Leicspart.nhs.uk/support-services/infection-prevention-control/contact-us/pcform

The IPC team will update the demographic alert on systmone with the date of the positive sample so it will be visible in the patient EPR.

Healthcare staff looking after the patient are responsible for informing the patient of their result. A CRO patient information leaflet should be provided to the patient by the ward staff and the name of the infection that they have these can be found on staff net.

Information regarding the patients CRO infection status should also be clearly documented on the ward handover sheet and the Hotel service/domestics handover sheet to ensure all staff groups aware and take the appropriate precautions.

4.0 Management and isolation of the patient

4.1 Isolation

Patients identified as high risk must be placed in a single side room with source isolation precaution in place until they have had one negative CRO PCR rectal swab is returned. If the patient is found to be positive, then the patient will need to continue with source isolation precautions in place and further swabbing will need to be discontinued.

Patients who are re-admitted and have previously been identified as a carrier of CRO must be placed in single side room with source isolations precautions in place until point of discharge, **no further swabbing is required during their stay.**

If single rooms are not available for every screened or known CRO positive patient, then a Risk assessment must be undertaken to determine where to care for the patient.

Single rooms must be prioritised based on the following criteria:

- Patient characteristics, particularly those presenting an increased risk of secondary transmission, such as diarrhoea, incontinence, wounds with uncontrolled drainage or are colonised in the respiratory tract and are coughing.
- Patient level of self-care
- Patients' concordance with isolation precautions
- Cognitive impairment which may affect concordance.

Where cohorting of patients is not feasible, the management of CRO positive patients may sometimes require the application of source isolation precautions and contact (transmission based) precautions in a multi-occupancy bay. Patients should then remain under contact precautions for the duration of their inpatient stay.

Patients within the same bay should be regarded as CRO contacts and have CRO screens as per contact screening guidance and when moved to other wards or acute care providers.

Close contacts should be risk assessed to determine patient placement whilst awaiting screening results e.g., faecal incontinence. If they are discharged home before screening is performed/completed, then close contacts should have their patient record flagged for CRO screening on readmission to acute care hospitals.

Risk assessments should be regularly reviewed e.g., wards that have a concurrent norovirus outbreak and have a patient colonised with CRO being managed in an open bay will need to revise the appropriateness of this approach.

FRSM mask are required to be worn by patients and staff in all areas where there is an increased incidence/outbreak of infection. Patients will need to be risked assessed for their ability to wear a mask and the outcome of the risk assessment should be clearly documented in their systmone records.

Gloves and aprons should be worn and a risk assessment for the wearing of face masks and eye protection should be undertaken if there is a risk of exposure to blood or body fluids (These may need to be worn for other potential infections i.e., covid-19)

4.2 Treatment

Antimicrobial treatment must be discussed with the microbiology team to ensure that appropriate antibiotics are used if necessary for a patient with CRO infection.

Colonisation with CRO is not treated with antibiotics.

4.3 Movement and transfer of patients with CRO

Patient movement between hospital departments or wards (e.g., X-ray) should be minimised and must only occur where there is a clinical need. The receiving department must be informed prior to their visit so that appropriate source isolation precautions can be taken.

Patients with a CRO alert (on Systmone) must be transferred on a clean chair or trolley from the ward to the department they will be attending and not on the bed from their side room as this must receive a deep clean before it is taken out from the patients' room.

Staff in the receiving department who are having direct contact with patients that have CRO must wear a disposable apron and disposable nitrile gloves. PPE must be disposed of as clinical waste. After PPE has been discarded hands must be decontaminated using soap and water followed by alcohol sanitiser. All equipment including the wheelchair or trolley used by the patient must be cleaned and decontaminated with chlorclean solution.

Patients with CRO should have an alert on their records who require transfer to an acute trust or another community hospital, the receiving hospital must be informed and the ambulance service prior to transfer and the Inter-Care transfer form must be completed (See appendix 5) The infection prevention and control teams must be informed at both the discharging and receiving hospital.

Patients newly isolated with CRO that are for discharge to a nursing/residential home or discharged home with home care providers should be given the appropriate information for the handover of care. A full handover to the home or provider must be actioned prior to discharge, in order that the correct precautions can be implemented.

4.4 Visitors

High risk patients and patients with a diagnosis of CRO can receive visitors, all visitors will need to be informed by staff of the importance to wash their hands before leaving the side room and to use alcohol hand sanitiser outside of the side room.

Visitors **are not** routinely expected to wear gloves and aprons unless they are providing personal care. Nursing staff must demonstrate to visitors providing personal care how to don and doff gloves and aprons and where and how to dispose of them.

Visitors must be reminded to not use patient toilet facilities

4.5 Closure of bays or wards

Bay or ward closure may be recommended when a patient with CRO has not been isolated in a single room and there is evidence of transmission.

The decision to close a bay or ward will be made by the Infection Prevention and Control team in conjunction with microbiology and the operational/site team in accordance with the LPT Managing increased incidence or outbreak of infection policy.

4.6 outpatient areas

Patients with a diagnosis of CRO that attends an outpatient area where an invasive procedure is performed (e.g., catheterisation, aspiration of body fluids, local anaesthetic procedure, and wound review/dressing change) enhanced isolation precautions **must be followed**.

Outpatient areas including imaging, physiotherapy, and occupational therapy where there are no invasive procedures being undertaken and phlebotomy, intramuscular/intravenous injections, standard precautions must be followed but isolation is **not required**.

4.7 Care of deceased patients

Standard precautions must be in place during the care of a deceased patient, there is no specific risk from the body to relatives, mortuary staff or undertakers.

Plastic body (Cadaver) bags are **not** necessary, any lesions that leak should be covered with impermeable dressings. For further information please refer to the LPT care of deceased policy and guidelines.

4.8 Cleaning and decontamination following patient discharge.

Environmental decontamination is critical following the transfer, discharge, or death of a colonised or infected patient. Points of particular importance (but not limited to) include:

- Mattresses, as sheets are not an effective barrier to passage of contamination patient-to-mattress or mattress-to-patient.
- Bed frames, handrails and mattress covers should be cleaned then disinfected and the integrity of the cover assessed, if the mattress cover is damaged or there are signs of any ingress then the mattress should be condemned. Pillows should be disposed of if the integrity of the cover is damaged or the pillow itself is soiled.
- Toilet brushes and their holders should be disposed of as part of the discharge/terminal clean.

Many surfaces within drainage systems will be colonised by micro-organisms in a slime layer which is referred to as ‘Biofilm’ Antibiotic-resistant bacteria can be long-term residents within these ‘Biofilms and studies have demonstrated that hospital sinks and associated drainage systems can harbour antimicrobial resistant bacteria including CRO. Therefore, it is important that wastewater and other liquids are not disposed of down hand wash basins and are disposed of correctly.

4.9 Caring for patients within their own homes.

There is not a need for patients with CRO to have source isolation precautions implemented when they are nursed in their own homes. Standard precautions must however be in place at all times such as good hand hygiene practices and the correct use of Personal Protective Equipment (PPE), as is the case with any patient cared for by LPT staff who is known to have an infection. These measures, when used correctly will reduce the risk of transmission to staff and other patients. Please refer to the LPT infection prevention and control hand hygiene policy and the LPT infection prevention and control team Personal Protective Equipment (PPE) policy for further guidance.

All waste produced with these patients by a healthcare activity with a member of LPT staff must be disposed of as clinical waste and should not go into the normal domestic waste stream. Consideration will need to be given to setting up a special waste collection if deemed necessary.

5.0 Duties within the Organisation

Duties with regarding this policy can be located in the LPT infection prevention and control assurance policy.

Consent

• Clinical staff must ensure that consent has been sought and obtained before any care, intervention or treatment described in this policy is delivered. Consent can be given orally and/ or in writing. Someone could also give non-verbal consent as long as they understand the treatment or care about to take place. Consent must be voluntary and informed, and the person consenting must have the capacity to make the decision.

• In the event that the patient's capacity to consent is in doubt, clinical staff must ensure that a mental capacity assessment is completed and recorded. Someone with an impairment of or a disturbance in the functioning of the mind or brain is thought to lack the mental capacity to give informed consent if they cannot do one of the following:

- Understand information about the decision.
- Remember that information.
- Use the information to make the decision.
- Communicate the decision.

6.0 Monitoring Compliance and Effectiveness

Compliance with this policy is outlined in the LPT infection prevention and control Assurance policy.

7.0 References and Bibliography

Centre for Disease Control and Prevention: Management of Multidrug-Resistant organisms in Healthcare Settings 2006

DH. Antimicrobial resistance empirical and statistical evidence-base. A report from the department of health antimicrobial resistance strategy analytical working group (2016)

LPT hand hygiene policy including Bare Below the Elbows policy (2022)

LPT Personal Protective Equipment for use in healthcare policy

(2023)

LPT Management of a patient requiring source isolation

precautions policy (2024).

LPT Cleaning and decontamination of equipment, medical

devices, and the environment, including the management of

blood and body fluid spillages (2022)

LPT Care of the deceased policy and Guidelines (2019)

NHS England (2024) National Infection Prevention and Control Manual for England (V2.9)

NHS Ayrshire & Arran: Extended Spectrum Beta-Lactamase (ESBL) Producing Organisms Infection Control Guidance (2010)

NHS North Yorkshire and York Community and Mental Health Services: North Yorkshire Community Infection Prevention and Control Policies and Guidance. Multi- Resistant Gram-Negative Bacteria including ESBL's (Extended Spectrum Beta Lactamase) (2008)

Public Health England. Toolkit for managing carbapenemase-producing Enterobacteriaceae in non-acute and community settings Centre for Disease Control and Prevention: Guidance for Control of Carbapenem-resistant Enterobacteriaceae (CRE) 2012 CRE Toolkit (2015)

Public Health England 2020: Framework of actions to contain Carbapenamase- producing Enterobacterales.

8.0 Fraud, Bribery and Corruption consideration

The Trust has a zero-tolerance approach to fraud, bribery and corruption in all areas of our work and it is important that this is reflected through all policies and procedures to mitigate these risks.

- Fraud relates to a dishonest representation, failure to disclose information or abuse of position in order to make a gain or cause a loss. Bribery involves the giving or receiving of gifts or money in return for improper performance. Corruption relates to dishonest or fraudulent conduct by those in power.
- Any procedure incurring costs or fees or involving the procurement or provision of goods or service, may be susceptible to fraud, bribery, or corruption so provision should be made within the policy to safeguard against these.
- If there is a potential that the policy being written, amended or updated controls a procedure for which there is a potential of fraud, bribery, or corruption to occur you should contact the Trusts Local Counter Fraud Specialist (LCFS) for assistance.

Appendix 1 How to conduct a risk assessment for CPE in non-acute settings.

At all risk levels ensure the following:

- **standard infection control precautions are maintained at all times**
- **effective environmental hygiene and cleaning:** prevention of faecal and environmental contamination is crucial; remain alert to episodes that risk direct transmission to others and/or environmental contamination; ensure timely and thorough cleaning
- **hygiene advice to individual and family/contacts** it is important to inform individuals and those around them to ensure they take appropriate personal hygiene measures to prevent the spread of infection, especially when using the toilet.

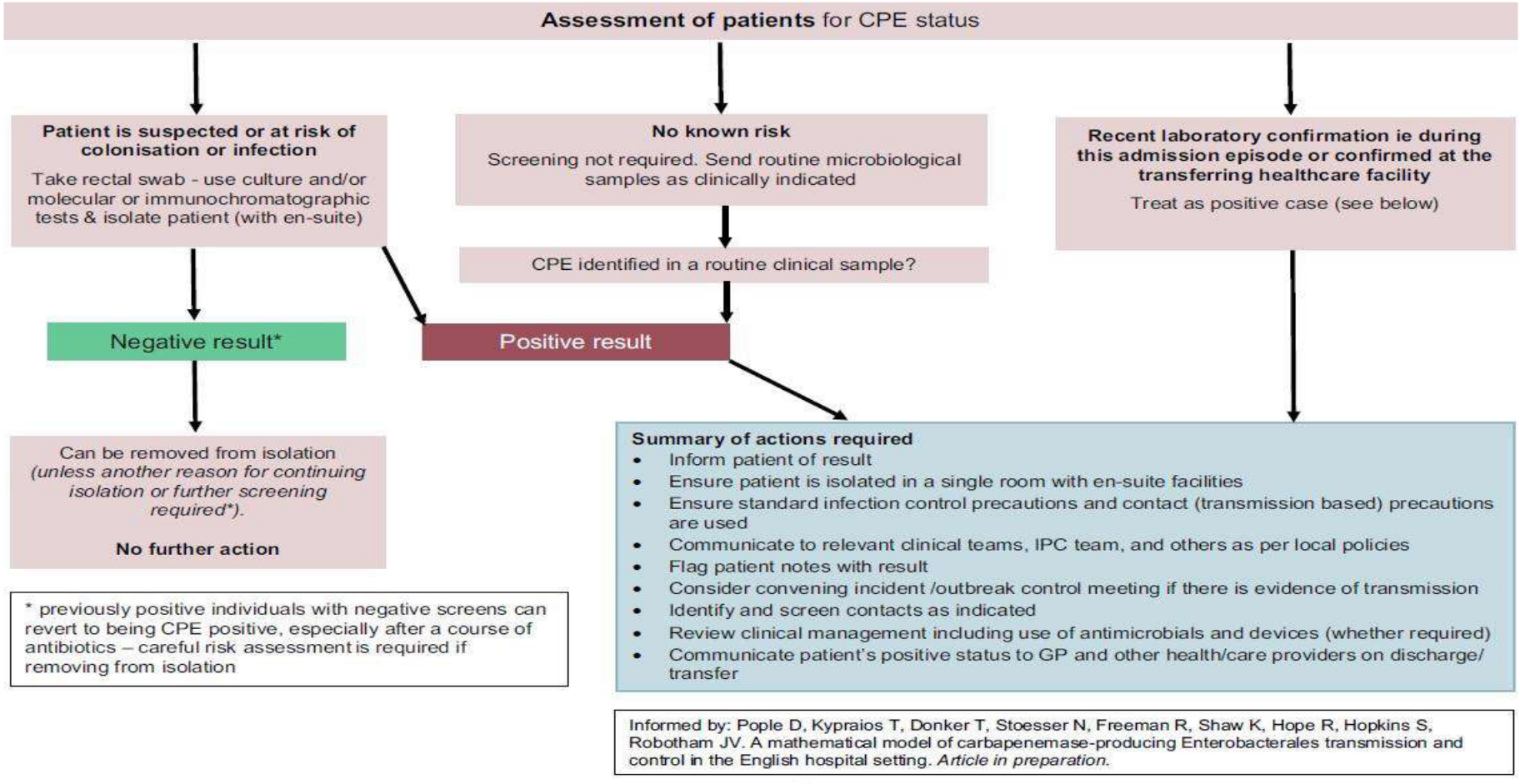
Risk assessments must include consideration of the care environment, eg nursing care setting, specialist or general-rehabilitation, haemodialysis unit, EMI, dementia care unit, community hospital or hospice, mental health trust, residential care, domiciliary care, or detention centre/prison.

If the individual is colonised: single room with en-suite facilities including toilet or designated commode is recommended; where a single room is not available, it is recommended that a designated toilet or commode is made available. No curtailment of communal activities is required where standard precautions and effective environmental hygiene are being maintained and there is no risk of transmission to others.

If the individual is infected: conduct a risk assessment with your IPC advisor and/or PHE contact to discuss possible isolation (with defined end-of-isolation criteria) consider the mental and physical health and wellbeing of the individual when deciding to isolate.

Always communicate the positive status of an individual when transferring the individual between care settings.

Care needs	Guidance for risk assessment
HIGH RISK For example, the individual has diarrhoea, faecal incontinence, smearing or 'dirty protests' discharging wound, long term ventilation, confusion/dementia, device(s) in situ, undergoing invasive procedures	• Identify if there is an immediate risk of infecting/contaminating others and the shared environment. • Discuss management with GP/clinician in charge, IPC nurse • Consider the mental and physical health and wellbeing of the individual and the level of supervision required
MEDIUM RISK For example, the individual requires assistance with hygiene, mobility or physical rehabilitation	No immediate risk of infecting others identified: • Standard infection control precautions are maintained • Hygiene advice is provided to individual and family/contacts as appropriate • Maintain effective environmental hygiene If unsure, contact your usual IPC advisor or PHE via the local Health Protection Team or Consultant in Public Health Infection, or local Community IPC Team where available
LOW RISK For example, the individual is independent and self-caring	



This flowchart should be used for the assessment of patients with CRO (titled CPE on the header

Contact Screening flow chart for patients who are suspected of or at risk of colonisation or infection due to contact with a person who has a confirmed CRO infection.

Patient is identified as being suspected of or at risk of colonisation or infection due to contact with a person who has a confirmed CRO infection (see below definition of contact)

All identified contacts will need to have source isolation precautions put in place (identified contacts do not usually require isolation in single room unless subsequent screens are positive, they can be source isolated at the bedside following a transmission risk assessment (However this may need to be reconsidered, prior to results being received (I.e., in an outbreak)

- All staff will need to wear appropriate PPE when in contact with the patient and their environment (including gloves and aprons) Risk assessment for the wearing of face mask and eye protection if there is a risk of exposure to blood or body fluids.
- Staff will need to wash hands with soap and water after contact with the patient and their environment and following doffing of PPE.
- All linen and waste to be treated as infectious and will need to be disposed of in appropriate waste streams.
- Any equipment used will need to be cleaned with a chlorine-based solution after use (or according to the manufacturers guidelines)

Contact the infection prevention and control team to inform them on:

Telephone: 01162952320 Email: lpt.IPCteam@nhs.net

CRO contact screening of all patients will be required.

- Twice weekly for 2 weeks
- Weekly for 2 weeks
- Weekly screening will need to continue if the patient remains in contact with the person identified with a positive CRO infection. (I.e., if the positive patient has been unable to be moved to SR and remains in open bay, or the patient is being cohorted due to an outbreak.

- Swabs will need to be taken using red topped rectal swabs (These can be obtained by contacting ULH microbiology team. Please do not use any other types of swabs as these will not be processed.
- Gently insert the swab inside the rectum 3-4cms beyond the anal sphincter, rotating gently and removing.
- Normal saline can be used to moisten swab prior to insertion.
- Swab should have a small amount of visible faecal matter on it to enable organisms to be detected in the laboratory.
- Do not send large amounts of faecal material as this will not be processed.

All swabs are negative, and patient no longer considered contact then SIPS can be stepped down.

If any swabs are positive, then the patient will need to be source isolated in a single side room with ensuite facilities.

***Contacts are defined as any person that has been in the same bay as another person with a newly identified CRO infection or a person that has had close contact with another person with a newly identified CRO infection through the use of shared facilities such as toilets or bathrooms. ***

Risk assessment tool for isolating CRO-positive patients (when isolation room capacity is limited)

➔ **Ensure Infection Prevention and Control Team are notified.**

	Yes	**No**
Does the patient have diarrhoea? (Type 6/7 on the Bristol stool chart)	Nurse in a single room	**See questions below**

Is the patient…?	**Yes**	**No**
Continent of urine and faeces?	☐	
Alert and orientated?	☐	
Independently mobile?	☐	
☐ **Consider caring for the patient in a bay on a general ward**		

Is the patient...?	**Yes**	**No**
Continent of urine and faeces?		**x**
Alert and orientated?	☐	
Independently mobile?	☐	
☐**Patient to be nursed in a single room**		

Is the patient…?	**Yes**	**No**
Continent of urine and faeces?	☐	
Alert and orientated?		**x**
Independently mobile?	☐	
☐**Take into account clinical environment and risk; consider moving the patient to an alternative area if confused and unable to comply with isolation in a single room**		

Is the patient…?	**Yes**	**No**
Continent of urine and faeces?	☐	
Alert and orientated?	☐	
Independently mobile?		**x**
☐**Patient can be nursed in a bay with a dedicated toilet/commode**		

Appendix 5 Transfer letter/inter-healthcare transfer form

Transfer Letter/Inter-Healthcare Transfer Form	
From: To: Date: Transferring facility e.g., ward, care home etc.: Receiving facility e.g., hospital, ward, care home, district nurse etc.:	
PATIENT DETAILS	**G.P.**
Name: Address: Date of birth …… NHS number …….	
NEXT OF KIN: -	**REASON FOR ADMISSION**
Aware of admission: Yes ☐ No ☐	
PAST MEDICAL HISTORY/ ALLERGIES	**CURRENT MEDICATIONS**
GP/DOCTOR/CONSULTANT- CLINICAL SUMMARY OF TREATMENT	
Print Name on completion: Date: Contact No:	
NURSING SUMMARY: -	
(Activities of daily living)	

Print name on completion:

Contact No: Date:

MULTIDISCIPLINARY TEAM ONGOING ACTIONS AND PLANS

(Aids/ equipment used)

DETAILS OF CURRENT CARE PACKAGE

Who	When	Frequency	Contact

Medication Aid: Yes ☐ No ☐ Type:……
Approximate Weight: -

DNAR order in place within LPT Yes ☐ No ☐
Form sent with patient: Yes ☐ No ☐

100% Continuing Health Care Funding Yes ☐ No ☐
Waterlow Score: -

INTER-HEALTH INFECTION CONTROL INFORMATION: -

Is this patient an infection control risk?
(Please tick the most appropriate box and give confirmed or suspected organism)

Confirmed risk ☐
Organism……
……

Suspected risk ☐
Organism:……
……

No known risk ☐
Organism……
……

Patient exposed to others with infection (e.g.: D&V) Yes ☐ No ☐

If patient has diarrheal illness, please indicate bowel history for last week: - (Assessed with Bristol Stool Chart)

Is the diarrhoea thought to be of an infective nature? Yes ☐ No ☐

Relevant specimen results (including admission screens – MRSA, glycopeptide-resistant enterococcus SPP, C. *Difficile*, multi-resistant *Acinetobacter* SPP) and treatment information, including antimicrobial therapy:

Specimen:				
Date:				
Result:				

Treatment information:

Other information:

Is the patient aware of their diagnosis / risk of infection? Yes ☐ No ☐

Does the patient require isolation? Yes ☐ No ☐
(Please inform the receiving area in advance)

Is the Infection Control Nurse aware of the transfer? Yes ☐ No ☐ If no why not?	
Is EMAS aware of the transfer? Yes ☐ No ☐	
Print Name on completion: : Contact No: Date:	

Transmission Based Precautions

Transmission based precautions are the second tier of basic infection control and are to be used in addition to standard precautions for patients who may be infected or colonised with certain infectious agents for which additional precautions are needed to prevent further infection transmission.

Type of precaution	Definition/when to be used	Isolation	PPE	Transport/movement of patient
Contact	Patients with known or suspected infections that represent an increased risk for contact transmission such as CDT, CRO or MRSA.	• Appropriate patient placement • Single room with en-suite if available	• Gloves • Apron • Gown (only if risk of splash from blood/bodily fluids) *Don PPE before room entry and doff appropriately before exiting the patient's room. Ensure hands are washed using soap and water.*	Risk assessments must be completed for any activities outside the patient's room. Areas visited outside the patient room must be cleaned after use.
Droplet	Patients known or suspected to be infected with pathogens transmitted by respiratory droplets that are generated by a patient who is coughing, sneezing, or talking.	• Appropriate patient placement • Single room with en-suite if available	• Gloves • Apron • Gown (only if risk of splash from blood/bodily fluids) • FRSM to be worn by staff and patient (if able to) *Don PPE before room entry and doff appropriately before exiting the patient's room. Ensure hands are washed using soap and water.*	Risk assessments must be completed for any activities outside the patient's room. Areas visited outside the patient room must be cleaned after use.
Airborne	Patients known or suspected to be infected with pathogens transmitted by the airborne	• Appropriate patient placement • Single room with en-suite if available	• Gloves • Apron • Gown (only if risk of splash from blood/bodily fluids)	Risk assessments must be completed for any

	route such as Tuberculosis, Measles, Chickenpox, disseminated herpes zoster.	• Restrict susceptible healthcare personnel from entering room of patients known or suspected to have Measles, Chickenpox, disseminated zoster or Smallpox if other immune healthcare professionals are available.	• FRSM/FFP3 to be worn by staff dependent on infection type* *Discuss with the IPC team *Don PPE before room entry and doff appropriately before exiting the patient's room. Ensure hands are washed using soap and water.*	activities outside the patient's room. Areas visited outside the patient room must be cleaned after use.

Prioritize cleaning and disinfection of the rooms of patients on contact precautions ensuring rooms are frequently cleaned and disinfected (e.g., focusing on frequently touched surfaces and equipment in the immediate vicinity of the patient at least daily or prior to use by another patient If outpatient settings Focusing on frequently touched surfaces and equipment in the immediate vicinity of the patient. Full post infection clean to take place once source isolation has been stepped down and curtains will require changing.

Appendix 7 Training Requirements

Training Needs Analysis

Training topic:	**Infection prevention and control Training**	
Type of training: (See study leave policy)	☐ Not required X Mandatory (must be on mandatory training register) ☐ Role Essential (must be on the Role Essential Training register) ☐ Desirable	
Directorate to which the training is applicable:	X Adult Mental Health X Community Health Services X Enabling Services X Families Young People Children / Learning Disability/ Autism Services X Hosted Services	
Staff groups who require the training:	All clinical staff groups	
Regularity of Update requirement:	Level 1 Infection prevention and control training – 3 yearly Level 2 Infection prevention and control training – 2 yearly	
Who is responsible for delivery of this training?	Infection Prevention and Control Team	
Have resources been identified?	Yes	
Has a training plan been agreed?	Yes	
Where will completion of this training be recorded?	X uLearn ☐ Other (please specify)	
How is this training going to be monitored?	Reviewed at IPC assurance group meetings	
Signed by Learning and Development Approval name		**Date: 23/4/24**

Appendix 8 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.

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

Appendix 9 Due Regard Screening Template

Section 1	
Name of activity/proposal	The management of Carbapenem Resistant Organisms (CRO) policy
Date Screening commenced	10-04-2024
Directorate / Service carrying out the assessment	Enabling services Infection, Prevention and Control team
Name and role of person undertaking. this Due Regard (Equality Analysis)	Claire King Infection Prevention and Control nurse
Give an overview of the aims, objectives, and purpose of the proposal:	
AIMS: The Aim of this policy is to provide guidance to staff employed by the Leicestershire Partnership Trust (LPT) with regards to caring for patients who are known or suspected of having a Carbapenamase Resistant Organism (CRO) infection or who are carriers of the organism.	
OBJECTIVES: The objective of this policy is to ensure that all staff employed by LPT are aware of the correct procedure and precautions to take when caring for patients with known or suspected CRO or XDR organisms. This policy will ensure that all staff employed by LPT are providing evidence-based care which is in accordance with the Health and Social Care Act (2015) and the latest guidance provided by UK Health Security Agency (UKHSA).	
Section 2	
Protected Characteristic	If the proposal/s have a positive or negative impact, please give brief details
Age	None Identified
Disability	None Identified
Gender reassignment	None Identified
Marriage & Civil Partnership	None Identified
Pregnancy & Maternity	None Identified
Race	None Identified
Religion and Belief	None Identified
Sex	None Identified
Sexual Orientation	None Identified
Other equality groups?	None Identified
Section 3	
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.	
Yes	No
High risk: Complete a full EIA starting click here to proceed to Part B	Low risk: Go to Section 4.
Section 4	
If this proposal is low risk, please give evidence or justification for how you reached this decision:	

Signed by reviewer/assessor	Claire King	Date	10-04-2024
Sign off that this proposal is low risk and does not require a full Equality Analysis			
Head of Service Signed		Date	

Appendix 10 Data Privacy Impact Assessment Screening

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.
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.

Name of Document:	The Management of Carbapenem Resistant Organisms (CRO) policy	
Completed by:	Claire King	
Job title	Infection Prevention and control Nurse	Date10-04-2024

Screening Questions	**Yes / No**	**Explanatory Note**
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.	N	
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.	N	
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?	N	
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?	N	
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.	N	
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?	N	
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	N	

information that people would consider to be particularly private.		
8. Will the process require you to contact individuals in ways which they may find intrusive?	N	
If the answer to any of these questions is 'Yes' please contact the Data Privacy Team via Lpt-dataprivacy@leicspart.secure.nhs.uk **In this case, ratification of a procedural document will not take place until review by the Head of Data Privacy.**		
Data Privacy approval name:		
Date of approval		

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