Doncaster and Bassetlaw Teaching Hospitals
NHS Foundation Trust

MRSA Screening and Management of Patients with MRSA

This procedural document supersedes: PAT/IC 6 v.9 – MRSA Screening and Management of Patients with MRSA

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AMENDMENT FORM

Version	Date Issued	Brief Summary of Changes	Author
10	19 April 2021	• Executive Sponsor updated • Patients Lacking Capacity added page 6 • Refusal for obtaining MRSA screen updated - section 7 • Unable to isolate paragraph update - section 19 • Data Protection section added – section 33 • Associated Trust Procedural Documents updated • References updated • **Please note: the are no changes to 'The MRSA Screening Programme' section 6**	Beverley Bacon IPC Practitioner
9	18 Sept 2018	• Added Executive Sponsor to front page • Reiterated the need to review invasive devices on a daily basis and remove as no longer clinically indicated sections 8 and 10 • Topical treatment advice for patient under the age of 2 years, page 15 • Update Monitoring and Compliance section page 23 • Update information in both appendix 2 and 3	Beverley Bacon IPC Practitioner
8	25 August 2015	• PVL definition moved up to section 5. • Section 5 definitions of patients requiring MRSA screening, patients not requiring screening in a table format. • Section 7, reason for patient refusing MRSA screening to be documented in patient medical notes. • Screening procedure moved up to section 8 and expanded explanation for taking and labelling swabs adding a picture. Introducing use of blue MRSA screening swabs. • Section 14 information, hyperlink added to new MRSA leaflet. • Section 27 and 28 added to define actions for increased incidence in MRSA cases and identification and management of outbreaks of MRSA. • Equality Impact Assessment table added to Appendix 3 • Paragraphs re-named and re-numbered in line with (CORP/COMM 1). • Updated section on "Equality Impact Assessment" • Appendix 1 GP letter removed. • The Flagging of Notes has been removed, updated with the PAS system as a mechanism of informing staff of known MRSA patients. • Use of Prontoderm Gel added when Mupirocin Contraindicated. • Wound care paragraph added page 15 regarding decolonisation treatment.	Julie Hartley

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1. INTRODUCTION

Staphylococcus aureus is a common cause of infection in hospital and the community causing a spectrum of problems from minor skin and wound infections to serious deep infections such as osteomyelitis, which may be associated with significant mortality.

Staphylococcus aureus can survive on the skin, particularly the anterior nares, skin folds, hairline, perineum and umbilicus, without causing infection. This state is known as colonisation.

Infection occurs if the organism invades the skin or deeper tissues and multiplies to cause localised or systemic disease, for example in septicaemia (blood stream infection).

Most strains of *Staphylococcus aureus* are sensitive to Flucloxacillin but in recent years strains have emerged which are resistant to Flucloxacillin and other commonly used antibiotics. These strains are known as Meticillin Resistant *Staphylococcus aureus* (MRSA). Some strains are known as epidemic (EMRSA) because of their inclination to spread easily.

MRSA is capable of causing the same serious infections as sensitive strains of *Staphylococcus aureus*. Both sensitive and resistant strains of *Staphylococcus aureus* can be:

- transmitted to other patients
- difficult to eradicate from a hospital once established

MRSA is not a danger to healthy individuals, but people may become colonised, acting as carriers. Such individuals may pose a risk of cross infection, especially to vulnerable patients with wounds, pressure sores or invasive devices such as intravenous cannulae, urinary catheters, gastrostomy tubes. Colonisation is only harmful to the health of an individual if it develops in to infection. The majority of patients who acquire MRSA are colonised only and do not require antibiotic treatment.

Contact spread is the most important and frequent mode of transmission and involves either direct person-to-person contact or indirect contact via a contaminated intermediate object or environment.

Clinical Infection with MRSA may occur:

- Endogenously – this occurs when a person already colonised with MRSA spreads the organism from one part of their body to another.
- Exogenously – this occurs when MRSA is spread from person to person by direct contact with the skin or via a contaminated environment or equipment.

2. PURPOSE

The policy content is based on national guidelines for the management of MRSA, and sound infection prevention and control principles.

The purpose of this policy is to ensure patients are screened according to local guidelines and to direct staff on the management of patients who are colonised or infected with Meticillin Resistant *Staphylococcus aureus* (MRSA) and to provide guidance for all staff to:

- Ensure the spread of MRSA within the Trust is minimised.
- Protect patients from infection or colonisation with MRSA.
- Ensure patients who are confirmed to have MRSA are managed safely and appropriately, and receive adequate information about their condition.
- Prevent avoidable MRSA Infections and colonisation acquisition

3. DUTIES AND RESPONSIBILITIES

This policy covers infection prevention and control management issues for Trust staff, this includes:

- Employees
- Agency/Locum/Bank Staff/all other contracted workers
- Occupational Health if Staff require treatment

Each individual member of staff, volunteer or contracted worker within the Trust is responsible for complying with the standards set out in this Policy. They need to be aware of their personal responsibilities in preventing the spread of infection. It is the responsibility of Directors and Managers to ensure compliance with this standard.

All staff working on Trust premises, outreach clinics and community settings, including Trust employed staff, agency and locum staff is responsible for adhering to this policy, and for reporting breaches of this policy to the person in charge and to their line manager.

Board of Directors: is responsible for ensuring the implementation of a Board to Ward culture and to support a Zero Tolerance approach to Health Care Associated Infections.

Division Directors, Associate Medical Directors and Assistant Directors of Nursing
Each Divisional management team is responsible for ensuring the policy is adhered to and for ensuring action is taken if staff fails to comply with the policy.

Consultant Medical Staff: are responsible for ensuring their team read and understand this policy, and adhere to the principles contained in it at all times.

Director of Infection Prevention and Control: is responsible for implementing infection and prevention and control strategies throughout the Trust

The Infection Prevention and Control Team: is responsible for providing expert advice in accordance with this policy, for supporting staff in its implementation, and assisting with risk assessment where complex decisions are required.

Matrons: are responsible for ensuring dissemination of policy within their allocated areas of responsibility. Policy implementation assurance will be checked when applied on the ward.

Ward and Department Managers: are responsible for ensuring all staff have read the policy and implement this when required within their area.

Microbiologists: As part of their role provide expert advice to senior staff out of hours. They will also be responsible in alerting the IPC team of any difficulties in isolation out of hours.

PATIENTS LACKING CAPACITY

Sometimes it will be necessary to provide care and treatment to patients who lack the capacity to make decisions related to the content of this policy. In these instances staff must treat the patient in accordance with the Mental Capacity Act 2005 (MCA 2005).

- A person lacking capacity should not be treated in a manner which can be seen as discriminatory.
- Any act done for, or any decision made on behalf of a patient who lacks capacity must be done, or made, in the persons Best Interest.
- Further information can be found in the MCA policy, and the Code of Practice, both available on the Extranet.

4. SURVEILLANCE OF MRSA

Surveillance will be performed in order to monitor trends in MRSA and facilitate prevention and control measures.

- The Infection Prevention and Control Team will perform surveillance for new MRSA isolates routinely as part of the alert organism surveillance. Clinical areas will be informed of all newly-identified MRSA-positive colonised and infected patients by the laboratory report form/Infection Prevention & Control Team (IPCT).

- When provisional or confirmed results are phoned to wards by the on call Consultant Microbiologist decolonisation agent is to be commenced immediately.

- The IPCT will perform enhanced surveillance of MRSA Bacteraemia in line with Department of Health requirements and working collaboratively across the health economy. The lead clinician and senior nursing staff will undertake a Post Infection Review (PIR), in collaboration with IPCT and Consultant Microbiologist within 10 working days.

- MRSA surveillance data will be reported and reviewed by the Infection Prevention and Control Committee. Clinical Governance Groups are responsible for implementing local action plans to improve practice and progress will be monitored by the Infection Prevention and Control Committee.

All new MRSA bacteraemia samples are reported to Public Health England (PHE) via the HCAI Data Capture System (DCS) Mandatory Surveillance website

The Chief Executive is responsible for confirming and timely ‘signing off’ via the HCAI data capture system that data submitted by the Trust is accurate. This function may be delegated to the Executive Lead for Infection Prevention and Control.

5. PANTON VALENTINE LEUKOCIDIN (PVL)

Panton Valentine Leukocidin (PVL) is a toxic substance produced by some strains of *Staphylococcus aureus* (SA), which is associated with an increased ability to cause disease. The incidence is low at present.

PVL can be produced by both meticillin sensitive and meticillin resistant strains of S. *aureus.* At present in the UK the majority of isolates are meticillin sensitive.

The infection control measures used to prevent the spread of PVL-positive MRSA are the same as for any type of MRSA infection; this includes screening and the decolonisation regime.

PVL MRSA affects healthy children and young adults and is usually community acquired. Staff should wear face masks during intubation and chest physiotherapy. Closed suction should be used.

Patients identified on screening as having a PVL producing strain of MRSA may need specific screening and treatment. In this instance advice should be sought from the IPCT as family members may require screening.

6. MRSA SCREENING – OPERATIONAL GUIDANCE

The MRSA Screening Programme for the Trust is underpinned by the "Implementation of modified admission MRSA Screening Guidance" (2014) Department of Health. It is the responsibility of the ward manager / Matron to ensure patients are screened according to DBTH Trust policy.

MRSA screen is the process whereby carriers of MRSA bacterium are identified by testing samples taken from the nose and groin (and any open wounds/ invasive devices) of patients before admission if planned.

The modified/ reduction in screening does not affect those patients admitted to the Trust as an **emergency** whether on a medical or surgical ward- these patients will all continue to be screened for MRSA on admission.

6.1 Patients Requiring MRSA Screening

1. All patients admitted to hospital either as an emergency or transferred from other hospitals and or healthcare facilities in the UK or from abroad will be screened for MRSA with the **exception** of the following which are exempt from MRSA screening.

6.2 Patients NOT Requiring MRSA Screening

Patient Group	Exceptions
Day case ophthalmology	History of MRSA colonisation – see 6.3
Day case endoscopy /Cystoscopy/Radiology	
Day cases attending for pain management therapy	
Radiological patients	
Minor dermatology procedures	
Day case dental	
Termination of pregnancy	
Children/Paediatrics	Unless patient a high-risk group e.g. those with lines, or likely to need high dependency care. Those children with long-term conditions such as cystic fibrosis, who are regularly admitted as emergencies should have MRSA screens on each admission.
Maternity/Obstetrics	Except for elective caesareans and any high risk cases or admitted to hospital within the last 12 months.
Other exclusions	Agreed following a formal risk assessment with the IPC team

6.3 Pre-assessment MRSA Screening (Elective admissions)

Pre-assessment units and elective patients will still screen patients if they have any of the following criteria and are deemed high risk:

- patient's with past/present history of MRSA colonisation
- reside in Nursing/Care homes
- have a long term invasive devices present e.g. urinary catheter or Percutaneous Endoscopic Gastrostomy (PEG).
- have a significant wound e.g. pressure ulcer.
- are planned to stay on critical care/high dependency units
- elective orthopaedic
- are likely to have a stay on haematology or oncology

7. REFUSAL FOR OBTAINING MRSA SCREEN

Patients who refuse, MRSA screening or refuses decolonisation/ risk reduction measures should have the consequences explained to them, particular that they may not receive the appropriate treatment and medication in the event of them being a carrier of MRSA.
These patients should be admitted to a single room and the reason for screening refusal and discussions related to the above clearly documented in the medical notes; and the patient's medical Consultant must be informed.

8. SCREENING PROCEDURE & SWAB REQUIREMENTS

Specimens must be correctly labelled with patient details. The laboratory will reject *incompletely labelled* specimens.

- Clinical details must include current antibiotic therapy.
- Specimen requests must clearly identify the reason for the screening request and the name of the person taking the screen.
- Specimens requested without an indication for screening may be rejected by the laboratory.

Labelling of Screening Swabs

It is important that screening swabs are clearly labelled with the following definitions to enable performance data to be reported correctly, the following definitions have been agreed:-

Admission screening: Includes all acute emergency admissions, this will include patients that may have been previously positive during another admission episode.

Elective Screening: Includes identified patients screened during the pre-assessment process.

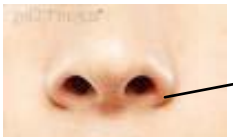
Follow-up screening: Includes the re-screening or follow up swabs for MRSA patients that were found to be either positive on admission or during the hospital stay from a clinical specimen.

Routine screening: Includes specific high risk patients who are routinely screened at weekly intervals. Currently these include:

Department of Critical Care,
Intensive Care Unit,
Neonatal Unit
Special Care Baby Unit
Patients' with invasive devices e.g. Central Venous Access Devices, urinary catheters.
(Please continue to review the need for invasive devices on a daily bases and remove as soon as no longer clinically indicated).
Patients who have been in hospital greater than 30 days
or at the request of the IPC team.

PLEASE NOTE BLUE TOPPED SWABS ARE USED DRY FOR MRSA SCREENING

1. **Nose**: Use one dry swab inside both anterior nares (fleshy-part of the nose).



This is the anterior nares. Put swab 0.5 – 1cm into the front of each nostril, not to the sides. There is no need to introduce the swab further into the nose. 1 swab for both nostrils

2. **Groin**: Use one dry swab for both sides of the groin.

3. **Skin Lesions/wounds**: one swab from each site; clearly identifying sites. These include leg ulcers, pressure sores, surgical and trauma wounds, cuts and grazes.

4. **Insertion sites** for devices in-situ at time of screening i.e. tracheostomy, central vascular access devices (CVADs) and other line insertions.

5. **Urinary Catheters**: CSU from patients who have urinary catheters in situ at the time of screening.

6. **Any other site that has been previously positive if the patient has had MRSA previously**, i.e. sputum if productive.

7. **Intensive care units (DCC/ITU)** will also undertake a throat swab on admission and on a weekly basis (please see follow up screening).

9. CONTACT SCREENING

If a patient is identified to be MRSA positive after a period of time in hospital it will be necessary to screen the patient contacts. This usually includes all patients who have been resident in the bay of the newly identified patient greater than 48 hours. Advice will be provided by the IPCT; based on a risk assessment of the patients at risk and the clinical area.

If **one** new ward acquired MRSA is identified then a review will be undertaken by IPCT / ward manager to identify any deficiencies in infection prevention and control practice.

10. FOLLOW-UP SCREENING

It is the responsibility of the ward staff, nurses and doctors, to be aware of each patient's MRSA status and at what stage of treatment they are.

Delays in screening patients' means they remain isolated in side rooms for unnecessary periods of time. The detrimental psychological effect of being isolated in a single room is well documented, so staff should make every effort to ensure that complete sets of screening samples are taken on time and the progress of results and treatment is documented.

An IPC Source Isolation IPOC should be used to record and monitor a patient's progress.

Once a patient has had one negative MRSA screen from all previously positive sites, a further two negative screens will be required (48 hours apart) before isolation precautions can be discontinued (three in total).

For follow-up screening of all patients who are MRSA positive – see appendix 1 or as advised by the IPCT.

Patients who have been in Hospital greater than **30 days** should have a repeat MRSA screen.

Patients with Invasive devices i.e. central venous access, urinary catheters. PEGs, Tracheostomy, will be screened on a weekly basis. **PLEASE NOTE: continue to review the need for invasive devices on a daily bases and remove as soon as no longer clinically indicated.**
Regular Attendees, Patients who are regular attendees e.g. patients having chemotherapy, patients using the Haemodialysis service, will be screened on admission to the service and thereafter will be screened on a monthly basis or as agreed in conjunction with the IPCT.

11. STAFF SCREENING FOR MRSA

National guidance states that routine screening of all staff is **not** currently recommended although contact tracing on the advice of the Consultant Microbiologist or the Director of Infection Prevention and Control may be advised based on clinical evidence and risk.

Where there are concerns about MRSA in staff, these will be handled by the Occupational Health & Well Being Department in a confidential manner and strictest medical confidence.

12. OBTAINING SCREENING RESULTS

It is the responsibility of the department sending the specimen to check the result and ensure this is clearly documented in the clinical records. Ward and Department Managers must ensure that they have a robust system in place for confirming relevant patients are screened.

MRSA MANAGEMENT:

13. DOCUMENTATION OF MRSA STATUS

All Doncaster and Bassetlaw patients from whom MRSA has been identified, the IPCT will record this information on the electronic Patient Administration System (PAS). The Infection Prevention and Control team receive a daily inpatient list of all patients colonised with MRSA and inform the ward and commence management.

The MRSA status of all patients must be accurately recorded in medical and nursing notes using the approved Infection Prevention and Control IPOC, including information on topical decolonisation therapy and specimen results. Ensure that the IPOC is kept up to date and appropriate information communicated between departments. This is the responsibility of the medical and nursing teams caring for the patient, and is essential to ensure safe, effective care.

14. INFORMATION/COMMUNICATION

This policy will be placed on the Infection Prevention and Control section of the intranet. In order that information contained within it is available to primary and community care providers, patients and public it is available on the Trust website on the internet.

A MRSA information leaflet for patients, staff and relatives which answers some frequently asked questions about MRSA is available in ward areas and via the intranet/internet.

Once MRSA is confirmed it is the responsibility of the staff providing care to this patient to inform them of the positive results. This may either be a nurse or doctor. A leaflet explaining MRSA is available from stationary supplies The IPCT is also available by prior arrangement, for further advice to both staff and patients.

The patient needs to be informed that he / she is carrying a common bacterium, which is more resistant than usual to antibiotics, but several antibiotics are available to treat infections if necessary. Most patients carrying MRSA will not require antibiotic treatment. However, measures need to be taken to prevent the spread of MRSA to other vulnerable patients. Such measures will often involve a single room. It is not always possible to establish where the patient acquired MRSA.

In order to facilitate safe care accurate information on MRSA status must be recorded and communicated to other wards and departments for example radiography and ambulance personnel.

Accurate information on MRSA status including information on topical decolonisation and specimen results, must be recorded and communicated to staff in primary and community care upon transfer to another organisation or discharge home. This can be communicated by using the Trust discharge letter.

In patients newly diagnosed with MRSA, it is the responsibility of the discharging clinician to inform the patient's General Practitioner (GP) of an MRSA diagnosis in the patient's discharge letter.

15. ANTIBIOTIC THERAPY

As antimicrobial use is a recognised risk factor for MRSA acquisition, all patients should have their antibiotic therapy reviewed. Any unnecessary agent should be stopped.

Nursing staff are responsible for ensuring prescribed antimicrobial agents are given at the correct time and correct dosage. This includes topical decolonisation agents see guidance below.

16. HIGH RISK INPATIENTS & PRONTODERM TREATMENT REQUIREMENTS

Hospital Admission

Medical admissions. All high risk medical patients:

- Patients with past/present history of MRSA colonisation
- reside in Nursing/Care homes
- have long term invasive devices present e.g. PEG urinary catheter
- have a significant wound e.g. pressure ulcer.
- are planned to stay on critical care/high dependency units

must be commenced on Prontoderm foam which should be continued throughout their stay in hospital regardless of their results. In the event of manufacturing issues an alternative will be advised by the IPCT.

- **Patients identified as High-risk.** Those in high risk areas or specialties such as emergency orthopaedic or trauma admissions should be isolated/cohorted accordingly until a negative result is received. Again, all these patients **must** be commenced on Prontoderm foam which should be continued throughout their stay in hospital regardless of their results Precise selection of high-risk patients should be based on local evidence. For Doncaster and Bassetlaw Hospitals this will include:-

  - Intensive care unit patients
  - Renal inpatients and following risk assessment those attending the Renal Dialysis units
  - Orthopaedic patients including elective/ young trauma
  - Vascular patients
  - Previously known MRSA carriers who have not achieved 3 consecutive negative screens who cannot be isolated /cohorted.

  - Patients admitted from Nursing/Residential homes who cannot be isolated/cohorted
  - Those identified as high risk by the IPCT such as patients with Invasive devices i.e. central venous access, urinary catheters. PEGs

If a patient is to receive emergency surgery, prophylactic antibiotics should be considered in line with microbiological guidance.

To reduce the risk of infection to both staff and patients, staff must not work in clinical areas while they have exposed broken skin. Skin which is broken should be covered with a waterproof dressing. Where this is not possible or where the broken area is on the hands no clinical work may be undertaken until the area is healed. Advice must be sought from Occupational Health & Well Being Department. This is especially important in high risk environments such as Theatres and Intensive Care Units.

17. MRSA DECOLONISATION TREATMENT

All patients found to be MRSA positive must be considered for topical decolonisation in an attempt to eradicate MRSA, and reduce the subsequent risk of infection or transmission to other patients.

Topical applications are used to eradicate or minimise the carriage of MRSA on patients in hospital or prior to surgery. Correct use and compliance is essential to increase decolonisation success (see Appendix 1 and 2).
Successful decolonisation is unlikely in patients with chronic wounds, permanent tracheostomy, and long-term indwelling devices. Where these risk-factors for long-term carriage are present the patient should be managed on an individual basis.

If it is impossible to clear a patient of MRSA prior to the admission for surgery, if they have already had multiple decolonisation attempts previously, or if they have other factors which make successful decolonisation therapy unlikely. This should be commenced 48 hours pre-operatively in order to reduce the level of MRSA at the time of the procedure.

Elective orthopaedic patients must commence MRSA decolonisation topical treatment of both Prontoderm foam and nasal Bactroban (Mupirocin 2% in a paraffin base) 5 days prior to admission. This will be provided by pre-assessment team.

Trauma orthopaedic patients should commence MRSA decolonisation topical treatment on admission. If result from admission screen comes back MRSA negative the nasal bactroban must be discontinued. If results from admission screen reported positive then to continue with as known MRSA pathway.

17.1 NASAL TREATMENT

Currently Bactroban (Mupirocin 2% in a paraffin base) is the preferred antibacterial nasal ointment used for treatment, but alternatives may be prescribed/recommended on the advice of the Infection Prevention and Control Team.

- Apply to both nostrils 3 times per day for 5 days.
- Apply using the little finger or a cotton bud.
- Close the nostrils by pinching the sides of the nose together, to spread the ointment.

Second line treatment is Nasal Naseptin: **(not to be used on patients who have a nut allergy)**

- Apply to both nostrils four times a day for 10 days.
- Apply using the little finger or a cotton bud.
- Close the nostrils by pinching the sides of the nose together, to spread the ointment.

At no time should the tube be inserted into the nostril as this will contaminate it, reducing the efficacy of the treatment.
If patient remains positive after having one course of nasal ointment, a second course may be advised by the Infection Prevention and Control Team.

If a patient remains positive following 2 courses of nasal treatment management advice will be given by the Infection Prevention and Control Team.

If a patient has a nasal invasive device such as nasal cannula or nasogastric tube then treatment with Bactroban nasal ointment may be withheld or changed to the Trust second line treatment Naseptin four times a day for 10 days.
Screen all sites as indicated, 48 hours after completion of topical treatment or as indicated by the IPCT.

PLEASE NOTE
For all patients under the age of 2 years old, contact a member of the Infection Prevention and Control Team for nasal treatment advice

17.2 INTACT SKIN

Currently Prontoderm foam is the preferred treatment option, but alternatives may be prescribed / recommended at times. For neonates Octenisan remains the preferred choice.

Prontoderm Foam:
This is a ready to use leave on product - **DO NOT DILUTE OR WASH OFF**

Body
All patients with history of MRSA must be commenced on Prontoderm foam and continued throughout their stay in hospital regardless of their results.

- Patients should be washed or shower as normal, paying attention to the area around the groin, armpits and perineum.
- Dry with clean towel.
- Apply foam to the whole body and leave to dry. **DO NOT RINSE OFF** (see Appendix 2).

Hair

a) Wash hair with shampoo as normal.
b) Towel-dry with clean towel.
c) Apply enough foam to cover scalp and comb through.

If you are unable to wash the patients' hair apply form directly onto hair and comb through.

PLEASE NOTE
For all patients under the age of 2 years old, contact a member of the Infection Prevention and Control Team for treatment advice

17.3 NON-INTACT SKIN

Advice relating to specific wound management should be sought from the Skin Integrity Nursing Team where appropriate. If a wound is displaying signs of infection, obtain a swab of the area and send for "Culture and Sensitivity" to the Microbiology department. If systemic treatment is required seek advice from the Consultant Microbiologist.

17.4 MANAGEMENT OF MRSA IN WOUNDS AND INVASIVE DEVICES INSERTION SITES

Chronic Wounds, such as leg ulcers.
Consider use of wound dressings that have good anti-staphylococcal activity: options.

- Products as advised by Skin Integrity Nurse Specialist.
- In general there should be no need to select a specific dressing to tackle MRSA in wounds healing by primary intention.
- The wound should be monitored regularly, and if there is evidence of cellulitis, further wound breakdown, or delayed healing advice should be sought from medical staff as antibiotics may be required.
- If a patient is positive in a wound only on admission screening nasal decolonisation treatment is not required. Prontoderm washes must be given daily and the wound must be treated with the correct dressing as advised by the wound team. Repeat swabs of the wound must be taken when the wound is redressed at least weekly. Clearance swabs of the wound are not required.

PEG Sites, Suprapubic Catheter Sites

- Insertion sites for indwelling devices such as PEG tubes and suprapubic catheters can become colonised with MRSA and potentially cause deep infection.
- Where sites are well-healed they can be treated as 'normal' skin during topical decolonisation for MRSA, and washed using decolonisation solutions.
- If the insertion site is infected with MRSA medical advice should be sought regarding antibiotics treatment.
- Use of an appropriate dressing with anti-staphylococcal activity on the site/around the device should also be considered. Advice must be taken from Pharmacy on the compatibility of the dressing to be used and the material the device is made from, due to the possibility that some chemical agents may damage indwelling devices and cause them to rupture.

Infected IV Insertion Sites in Patients Known to Have MRSA

- Remove line and re-site if access is still required.
- Swab the site for culture and sensitivity.
- Dress the site using an appropriate dressing; if the patient has MRSA a dressing with anti-staphylococcal activity should be selected if possible.
- Document the VIP score of the site, and actions taken including choice of dressing.

18. INFECTION CONTROL PRINCIPLES

The infection control measures to prevent spread of MRSA are the same whether the patient is colonised or infected with MRSA. Carefully selected treatment is necessary to treat the infection and if possible to eradicate colonisation.

The management of patients with MRSA requires standard infection control measures with particular emphasis on:

- single room isolation or cohort nursing in hospital
- Isolation precautions
- hand decontamination
- environmental cleaning

Any breach of the above infection control measures may result in the transmission of the organism to other patients or staff who may then become colonised and subsequently colonise or infect others.

On each successive admission all such patients **must** be admitted into a single room, and a full screen obtained. All such patients should be commenced on Prontoderm foam daily (see section 16), until results from admission screen are available and if MRSA positive additional agent such as Bactroban will be advised. The Infection Prevention Control Practitioners must be notified of all such admissions as soon as possible

Blood culture sampling

- It is imperative that when taking a blood culture sample staff adhere to policy PAT/IC 11 Collection and Handling of pathology specimens. Before taking a blood culture decide if clinically relevant, will it change your course of treatment? If in doubt discuss with a senior colleague. When taking a blood culture adopt an **A**septic **N**on **T**ouch **T**echnique and meticulously decontaminate the patients skin using the FREPP. Please ask for assistance with the procedure if the patient is uncooperative or is known to be MRSA colonised. **Staff taking blood cultures must be certified as competent by the clinical skills team or recognised assessors.**

19. ISOLATION CARE

Isolation in a single room is routinely advised to minimise the risk of cross infection to other vulnerable patients.
Occasionally admission to a single room may be contra-indicated due to:

- The severity or nature of the patient's illness.
- A single room on the ward is unavailable

The decision is based on a clinical risk assessment which must be documented in the patient's notes (IPOC). The risk assessment must be undertaken daily and include the clinical risk of cross infection to other patients in the area, and the safety of the index case. Advice should be sought from the IPCT.

Unable to isolate as no single room available on the ward **must** be escalated to the Clinical Site Manager. All instances of "inability to isolate" should be recorded by the ward clinical team using the established clinical incident reporting process.
Failure to isolate should be recorded and reported as above, but *not* communicated to the on-call Microbiologist.

20. ISOLATION PRECAUTIONS

The patient must be cared for in a single room, preferably with ensuite facilities. If ensuite facilities are not available a toilet / commode must be designated for the individual patient. The following contact precautions must be followed, including where patients are being cared for in a bay:

- Standard infection control precautions (PAT/IC 19), including hand decontamination are required to minimise the risk of cross infection. Hands should be adequately decontaminated before and after patient contact, and on leaving an isolation facility. Hand decontamination is through hand washing using a liquid soap and water, or by the application of an alcohol based hand rub. An alcohol based hand rub can be used alone if hands are visibly clean.
- A disposable apron should be worn by all staff having direct contact with the patient.
- The wearing of gloves does not negate the necessity for hand decontamination following a task or episode of care.
- The single room door must be kept shut during procedures that generate aerosols, such as chest physiotherapy, or bed making.
- A Trust approved isolation sign must be placed on the door of the isolation room. If the patient is nursed in an open bay they must be isolated as soon as possible.
- Fans should be discouraged in the vicinity of an MRSA positive patient.
- Visitors from other wards and departments, e.g. physiotherapists, radiographers, other medical teams, students, should discuss necessary precautions with the nurse in charge before approaching the patient.
- Jugs and glasses should be washed with hot water and neutral detergent and dried with disposable towels.
- No special precautions are required for returning equipment which requires sterilising.
- General visitors are not required to wear gloves and disposable aprons. However, they must be requested to wash their hands with soap and water or use alcohol hand gel on leaving the room/bay.

21. DECONTAMINATION

Decontamination of the Environment
The MRSA positive patient's environment must be kept clean and uncluttered to minimise dust accumulation and to facilitate effective environmental cleaning. Surplus equipment must be kept to a minimum and horizontal surfaces must be cleaned and disinfected twice daily. Specific direction on appropriate cleaning and disinfection can be found in the Cleaning & Disinfection of Ward Equipment Policy (PAT/IC 24).

Hotel Services staff should wear disposable gloves, appropriate to the task and a yellow disposable apron. A yellow mop and bucket should be used and decontaminated, rinsed and thoroughly dried after use. A disposable mop head must be used. Cleaning equipment must not be stored in the isolation rooms.

Once a patient is moved or discharged, the immediate area or single room must be thoroughly decontaminated. All equipment should be decontaminated or disposed as appropriate by nursing staff. Consumables such as paper hand towels and toilet rolls should be disposed of as clinical waste. The bed should also be stripped and decontaminated by nursing staff before the room is 'terminally cleaned' by the service staff. Material curtains must also be changed and laundered and any blinds must be cleaned and disinfected. It is acceptable to leave disposable curtains in place.

If an electric fan has been used, these must be taken out of use until correctly decontaminated. This may involve contacting the Estates department to dismantle the fan so that cleaning can take place.

Decontamination of Equipment
Where possible equipment should be disposable or be able to withstand disinfection. Advice relating to specific equipment can be sought from the Cleaning & Disinfection of Ward Equipment Policy (PAT/IC 24). It is best practice to designate equipment to an isolated patient.

22. WASTE MANAGEMENT

All waste must be disposed of directly into a foot operated bin, categorised as clinical waste, in accordance with national regulations and local policy (CORP/HSFS 17). Once waste bags are 2/3 full, the neck should be secured with a tie and the bag removed to the disposal area.

23. LINEN

All linen should be considered to be contaminated/infected, including bedding and adjacent curtains, and should be managed in accordance with the Trust Bagging Procedure for Linen Policy (PAT/IC 21).

Contaminated linen should be placed in the red alginate bag, which once tied, this can be stored temporarily while awaiting collection in an area such as the dirty utility/disposal, which is not a public area.

Bed linen, towels and clothing must be changed daily whilst the patient is being treated.

24. MOVEMENT OF THE PATIENTS WITHIN THE TRUST

Transfer of MRSA patients to other wards/departments should be minimised to reduce the risk of cross infection. However, this should not compromise other aspects of care, such as rehabilitation, investigation or treatment.
Transport of the infected or colonised patient should be carefully managed. All staff should ensure the receiving area is aware of the patient's MRSA status beforehand so that infection control measures can be implemented. These measures should include:

- Staff in direct contact with the patient should wear disposable plastic aprons to protect their clothing. The apron must be removed when contact with the patient has finished and disposed of as clinical waste.

- Before transferring a patients to a department e.g. medical imaging ensure the bed has been thoroughly cleaned and clean linen insitu.

- Where the patient is leaving one ward to be admitted to another, they should be transferred to a bed with clean linen. Where ever possible, the patient's original bed and bed linen should be left behind on the ward for decontamination (see Cleaning & Disinfection of Ward Equipment Policy PAT/IC 24).

- All used linen should be dealt with as infected.

- Staff must encourage/assist patients to change their clothing daily.

- All open lesions should be occluded with an impermeable dressing.

- After contact has finished, staff must decontaminate their hands thoroughly using liquid soap and water or by alcohol based hand rub.

Patients Visits to Outpatients and Specialist Departments

- MRSA positive patients can be placed anywhere on the list providing contact precautions are adhered to, and equipment is decontaminated after use.

- Staff in direct contact with the patient should wear disposable plastic aprons to protect their clothing. The apron must be removed when contact with the patient has finished and disposed of as clinical waste.

- If the patient is being transferred on a trolley or wheelchair this must be thoroughly decontaminated before being used for another patient.

- The patient should spend the minimum amount of time in the department, being sent for when the department is ready and not left in a waiting area with other patients.

- Where possible, staff should contain patient activity to one area.

- The room should be cleared of surplus equipment, e.g. trolleys, mobile equipment.
- All equipment and horizontal surfaces that may have become contaminated should be decontaminated using approved disinfectant.
- Any used linen should be dealt with as infected.
- After contact has finished, staff must decontaminate their hands thoroughly using liquid soap and water followed by alcohol based hand rub.

Transfers to other Hospitals or Healthcare Facilities

- MRSA should not be a barrier to good clinical care and therefore transfers to other hospitals or care facilities should not be delayed or prevented. However, any unnecessary movement should be avoided.

Prior to transfer it is the responsibility of the transferring team to inform the receiving hospital of the patients MRSA status.

25. THEATRES

MRSA should not prevent a patient having surgery if this is required. MRSA positive patients can be placed anywhere on the operating theatre list provided all surfaces and equipment are cleaned between cases.

Routine cleaning measures should be adequate and no waiting time is necessary between procedures.

Airflows in ultra-clean theatres make a minimum time unnecessary.

MRSA positive patients may be recovered in recovery units, providing contact precautions are adhered to, and equipment in contact with the patient is cleaned after use using.

It is the responsibility of the nurse in charge of the ward/department to inform the operating department of the patient's MRSA status, so as to allow the person in charge of the theatre to co-ordinate theatre protocols.

Prior to the arrival of the patient in theatre staff must ensure that all extraneous items of furniture and equipment are removed from the anaesthetic room and the operating theatre to be used.

Any surfaces in direct contact or in close proximity to the patient in the anaesthetic room, operating theatre or recovery should be decontaminated after use and prior to being used for the next patient.

26. DECEASED PATIENTS

The infection control precautions for handling deceased patients are the same as those used whilst the patient is alive. Any lesions should be covered with impermeable dressings.

The robust zippered cadaver bags are not necessary unless there is body fluid leakage from the patient.

27. INCREASED INCIDENCE OF MRSA CASES

If two MRSA cases are identified within a month on the same inpatient area then an incident meeting within 5 working days will be undertaken by the IPCT, Matron and ward manager with a detailed action plan. This may include screening all the patients on the ward to identify other carriers.

28. MANAGEMENT OF OUTBREAKS/INCIDENCES

An MRSA Outbreak is defined as two or more Unit acquired cases in a high risk area and usually more than two cases in other areas.

If three MRSA cases are identified within a month then a ward is deemed unable to control the infection without special enhanced measures and a temporary closure may be instituted until a formal outbreak review meeting has been undertaken and measures implemented.

Screening of patients and staff will be initiated by the IP&C Team following a risk assessment and outbreak meetings**.**

SCBU - Screen all babies on the Unit if MRSA has been detected from one or more babies (this will be initiated by the IP&C Team). The decision to screen staff and further screening of the babies will be carried out following a risk assessment by the IP&C Team.

An immediate terminal clean of the patients' environment will be required upon notification of a positive discharge/weekly screen. This includes a cloth curtain change, disposal curtains do not require changing. IP&C will advise on whole ward/unit clean following a risk assessment.

29. TRAINING AND SUPPORT

The training requirements of all staff will be identified through a training needs analysis. Role specific education will be delivered by the service lead or nominated person. Please refer to the Mandatory and Statutory Training Policy (CORP/EMP 29) for details of the training needs analysis, as staff will require different levels of training.

Infection prevention and control must be included in individual Annual Professional Development Appraisal and any training needs for infection prevention and control addressed.

It is an expectation for all clinical staff to attend IPC training as per local Training Needs Analysis, which will be captured by the Training and Education Department via Electron Staff Records (ESR) system.

30. MONITORING COMPLIANCE WITH POLICY

Monitoring	Who	Frequency	How Reviewed
The policy will be reviewed in the following circumstances:-	APD Process Group IPCT	Every three years routinely, unless: • When new national or international guidance are received. • When newly published evidence demonstrates need for change to current practice. • Action required from Root Cause Analysis Serious Incident Investigation Report	Approved Procedural Document (APD) database Policy will be approved and ratified by the Infection Prevention and Control Committee
Compliance with policy to negate cross-infection	The Infection Prevention and Control Practitioners	Weekly	"Alert organism review" to monitor adherence with the policy.
Training needs for infection prevention and control	Ward and Department Managers Training and Education Department	Annually	Staffs Professional Development Appraisal Attendance will be captured by the Training & Education Department via ESR system
Compliance with MRSA Screening-Operational Guidance	Performance	Monthly	MRSA screening audits

31. DEFINITIONS

Alert organisms and conditions are those identified as posing a public health risk to patients, staff and visitors defined by the Department of Health (DoH 1995).

Source isolation is the physical separation of one patient from another in order to prevent spread of infection.

Colonisation is the presence of micro-organisms on or in the body without causing tissue damage e.g. a chronic leg ulcer will always have bacteria present, but these are only colonising the wound if there are no signs of infection.

Infection is the presence of micro-organisms on or in the body where damage occurs e.g. where a wound displays symptoms of infection such as heat, swelling, pus, redness.

Anti-Microbial Resistance is a natural evolutionary response of microbes to anti-microbial exposure. The principle of anti-microbial resistance has been described as 'survival of the fittest'. Where anti-bacterial agents kill susceptible bacteria, resistant organisms survive and multiply and may infect/colonise other patients. Resistance can arise via mutation, gene transfer or by the development of inherently resistant species. The importance of these processes varies with the organism, the anti-microbial agent and the clinical setting.

HCAI - A Health Care Associated Infection can be defined as an infection that occurs as part of health care treatment. Staff, patients and the public are more aware than ever of the risks of HCAI, including MRSA, which is one of the most common multi-resistant.

Best Interest - There is no single definition of Best Interest. Best Interest is determined on an individual basis. All factors relevant to the decision must be taken into account, family and friends should be consulted, and the decision should be in the Best interest of the individual. Please see S5 of the MCA code of practice for further information.

32. EQUALITY IMPACT ASSESSMENT

The Trust aims to design and implement services, policies and measures that meet the diverse needs of our service, population and workforce, ensuring that none are disadvantaged over others. Our objectives and responsibilities relating to equality and diversity are outlined within our equality schemes. When considering the needs and assessing the impact of a procedural document any discriminatory factors must be identified.

An Equality Impact Assessment (EIA) has been conducted on this procedural document in line with the principles of the Equality Analysis Policy (CORP/EMP 27) and the Fair Treatment For All Policy (CORP/EMP 4).

The purpose of the EIA is to minimise and if possible remove any disproportionate impact on employees on the grounds of race, sex, disability, age, sexual orientation or religious belief. No detriment was identified. (See Appendix 3).

33. DATA PROTECTION

Any personal data processing associated with this policy will be carried out under 'Current data protection legislation' as in the Data Protection Act 2018 and the UK General Data Protection Regulation (GDPR) 2021.

For further information on data processing carried out by the trust, please refer to our Privacy Notices and other information which you can find on the trust website: https://www.dbth.nhs.uk/about-us/our-publications/information-governance/

34. ASSOCIATED TRUST PROCEDURAL DOCUMENTS

This policy should be read in conjunction with other Trust Policies and protocols for the prevention and control of HCAI in line with the Health and Social Care Action 2008. In particularly:

- Cleaning and Disinfection of Ward Based Equipment – PAT/IC 24
- Care after Death and Bereavement Policy: Operational Policy for Staff to follow in the event of a Patient Death - PAT/T 60
- Glove Use Policy (Latex) – CORP/HSFS 13
- Hand Hygiene – PAT/IC 5
- Laundry Policy – Bagging Procedure for Linen PAT/IC 21
- Mental Capacity Act 2005 - Policy and Guidance, including Deprivation of Liberty Safeguards (DoLS) - PAT/PA 19
- Pathology Specimens - Collection and Handling of Pathology Specimens – PAT/IC 11
- Privacy and Dignity Policy – PAT/PA 28
- Spillages of Blood and Other Body Fluids – PAT/IC 18
- Waste Management Policy and Manual - CORP/HSFS 17
- Fair Treatment for All - CORP/EMP 4
- Equality Analysis Policy – CORP/EMP 27

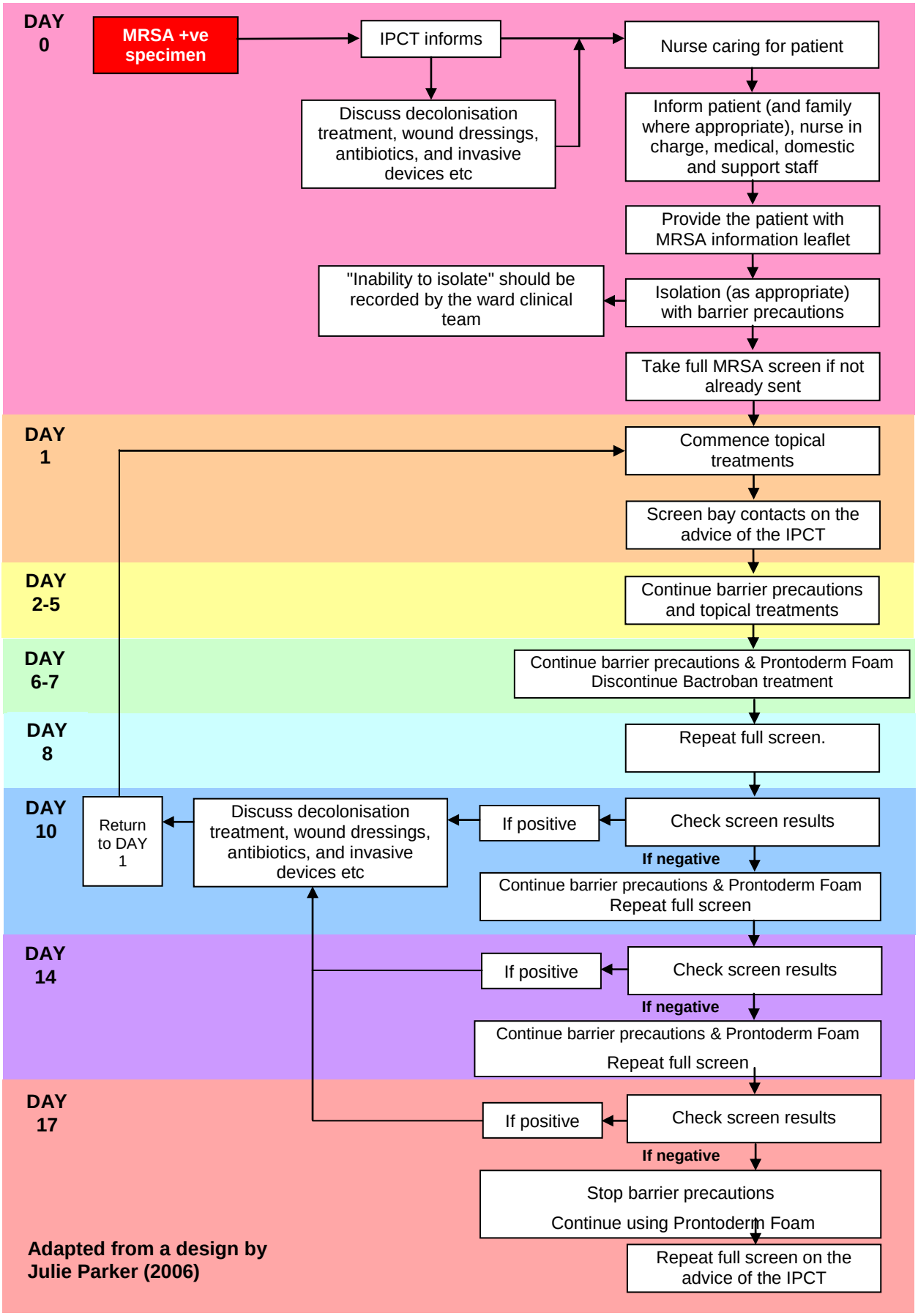
35. REFERENCES

Coia J.E, Duckworth G.J, Edwards D.I, Farrington M, Fry C, Humphreys H, Mallaghan C, Tucker D.R (2006). Guidelines for the control and prevention of meticillin-resistant Staphylococcus aureus (MRSA) in healthcare facilities. *Journal of Hospital Infection* ;63 Suppl 1:S1-44.

DH (2015) The Health and Social care Act 2008: code of practice on the prevention and control of infections and related guidance. *Department of Health.* http://www.gov.uk

Implementation of modified Admission MRSA Screening Guidance for NHS (2014) Department of Health expert advisory committee on Antimicrobial resistance and healthcare Associated Infection (ARHAI) June 2014

Patient MRSA Positive (NOT bacteraemia) APPENDIX 1



Hand hygiene is the key to reducing cross infection

APPENDIX 2 – HOW TO USE OF PRONTODERM FOAM ON INTACT SKIN

Prontoderm foam

Help and encourage use of foam daily, throughout the patients stay.
Ensuring bottles are labelled with patients details and are transferred with the patient.
5 Minutes is all it takes to help us achieve #zerotolerancetoMRSA
#searchanddestroy

Pump it!

Use it!

Apply to all areas daily, after washing

Leave it!

No need to rinse off

Joanne Lee, Mar 2018
Infection Prevention and Control Practitioner

APPENDIX 3 - EQUALITY IMPACT ASSESSMENT PART 1 INITIAL SCREENING

Service/Function/Policy/Project/Strategy	Division/Executive Directorate and Department	Assessor (s)	New or Existing Service or Policy?	Date of Assessment
The screening and management of patients with MRSA	Corporate Nursing, Infection Prevention & Control	Beverley Bacon Infection Prevention & Control Practitioner	Existing Policy	March 2021

1) Who is responsible for this policy? Name of Division/Directorate **Infection Prevention & Control**

2) Describe the purpose of the service / function / policy / project/ strategy? Who is it intended to benefit? What are the intended outcomes?
Policy updated using latest evidence to promote the screening and management of patients with MRSA.
It demonstrates the Trust commitment to provide staff with guidance to maintain safe practice.

3) Are there any associated objectives? Legislation, targets national expectation, standards - Public Health England

4) What factors contribute or detract from achieving intended outcomes? – Nil

5) Does the policy have an impact in terms of age, race, disability, gender, gender reassignment, sexual orientation, marriage/civil partnership, maternity/pregnancy and religion/belief? Details: [see Equality Impact Assessment Guidance] – No

- **If yes, please describe current or planned activities to address the impact** [e.g. Monitoring, consultation] –

6) Is there any scope for new measures which would promote equality? [any actions to be taken] N/A

7) Are any of the following groups adversely affected by the policy?

Protected Characteristics	Affected?	Impact
a) Age	No	Neutral
b) Disability	No	Neutral
c) Gender	No	Neutral
d) Gender Reassignment	No	Neutral
e) Marriage/Civil Partnership	No	Neutral
f) Maternity/Pregnancy	No	Neutral
g) Race	No	Neutral
h) Religion/Belief	No	Neutral
i) Sexual Orientation	No	Neutral

8) Provide the Equality Rating of the service / function /policy / project / strategy – tick outcome box

Outcome 1 ✓	Outcome 2	Outcome 3	Outcome 4

If you have rated the policy as having an outcome of 2, 3 or 4, it is necessary to carry out a detailed assessment and complete a* **Detailed Equality Analysis form in Appendix 4

Date for next review: April 2024

Checked by: Miriam Boyack and Carol Scholey Date: March 2021