

Meticillin Resistant *Staphylococcus aureus* (MRSA) Screening and Management Policy and Meticillin Sensitive *Staphylococcus aureus* (MSSA) Screening for Pre-Operative Elective Orthopaedic Patients.

Department / Service:	Infection Prevention and Control
Originator:	Lara Bailey, Senior Infection Prevention Nurse Tracey Cooper, Director of Infection Prevention and Control
Accountable Director:	Paula Gardner, Chief Nursing Officer
Approved by:	Paula Gardner, Chief Nursing Officer
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Target Organisation(s)	Worcestershire Acute Hospitals NHS Trust
Target Departments	All departments
Target staff categories	All clinical staff

Policy Overview:

This policy provides details on the standards required for the detection and management of MRSA in WAHT in order to protect patients from infection or colonisation with MRSA, prevent the transmission of MRSA and to safely manage and treat patients who are colonised with MRSA.

This policy also provides details on the standards required for the detection and management of MSSA in WAHT in relation to orthopaedic surgery in order to protect patients from infection or colonisation with MSSA.

Key amendments to this document

Date	Amendment	Approved by:
June 2021	The following policies have been amalgamated with revisions where necessary: WAHT-INF-003 – Protocol for the Management of Meticillin Resistant Staphylococcus aureus (MRSA) WAHT-INF-006 – Worcestershire Acute Hospitals NHS Trust Protocol for Meticillin Resistant Staphylococcus aureus (MRSA) and Meticillin Sensitive Staphylococcus aureus (MSSA) Screening including Orthopaedic, Vascular and Head and Neck Surgery. New Document approved.	TIPCC/ Paula Gardner
4 th Dec 2023	Minor amendment with reference to NNU MRSA screening requirement	Julie Booth/Dr Yiannakis
25 th June 24	Document extended for 6 months whilst review of document takes place	Lara Bailey
January 25	Document extended for 6 months due to staff and Operational Pressures. Document to be rewritten	Kerrie Howles/Dr Yiannakis

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Action Cards

**Meticillin Resistant *Staphylococcus aureus* (MRSA) Screening and Management Policy and
Meticillin Sensitive *Staphylococcus aureus* (MSSA) Screening for Pre-operative Elective
Orthopaedic Patients.**

Action Card 1 – MRSA Screening and Management Protocol – HIGH RISK
Action Card 2 - MRSA Screening and Management Protocol – MEDIUM RISK
Action Card 3 - MRSA Screening and Management Protocol – LOW RISK
Action Card 4 - MRSA Screening and Management Protocol – MINIMAL RISK
Action Card 5 - MRSA Topical Decolonisation Treatment

Pathways

Pathway 1 – MRSA Screening for Emergency Admissions to Ward Areas
Pathway 2 – MRSA Screening for Elective Major Vascular Surgery
Pathway 3 – MRSA Screening for Elective Surgery including T&O Procedures
Pathway 4 – MSSA Screening Protocol for Elective T&O Procedures

Supporting Documents

Supporting Document 1 Equality Impact Assessment
Supporting Document 2 Financial Risk Assessment

1. Introduction

Staphylococcus aureus (*S.aureus*) is an organism that is found in the nose or on the skin of humans and is known as a commensal organism. In developed countries, approximately 30% of the population are colonised. In most circumstances this does not cause any harm, however it can cause infections such as bacteraemia and skin and soft tissue infections in the patient population, including those who are undergoing orthopaedic surgery.

Meticillin Sensitive *Staphylococcus aureus* (MSSA) is a form of *S.aureus* that is sensitive to antibiotics commonly used to treat *S.aureus*.

Meticillin Resistant *Staphylococcus aureus* (MRSA) is a form of *S.aureus* that has become resistant to antibiotics commonly used to treat *S.aureus*.

The majority of patients who acquire MSSA/MRSA are colonised, not ill and do not require antibiotic therapy. Depending on patient population, some patients may develop MSSA/MRSA infection which may then become invasive and in some cases contribute to, or result in death (Coia *et al.*, 2006).

Specific measures have been shown to be effective in preventing and controlling both MSSA and MRSA, necessary as they can cause serious illness which is harder to treat due to limited therapeutic options and results in additional healthcare costs.

Identification, treatment and management of individuals carrying MSSA/MRSA using interventions such as screening, suppression/decolonisation regimes, patient isolation/cohort and giving appropriate antimicrobial prophylactic regimes can reduce the risk of infection, including bloodstream infection and transmission between patients.

2. Scope of this document

This policy applies to all staff employed or contracted by Worcestershire Acute Hospitals NHS Trust (WAHT) and also to all visiting staff including tutors, students and agency/locum staff and volunteers.

3. Purpose

The objectives of this policy are:

- To prevent the transmission of MRSA within WAHT
- To protect patients from infection or colonisation with MRSA
- To ensure patients who are confirmed to have MRSA are managed safely and appropriately, whilst receiving adequate information about their condition

4. Responsibility and Duties

The Chief Executive – As accountable officer, is responsible for the overall leadership and management of the Trust and its performance in terms of service provision, financial and corporate viability, ensuring that the Trust meets all its quality and safety, statutory and service obligations and for working closely with other partner organisations. The CEO delegates aspects of this responsibility to relevant Executive Directors.

Director of Infection Prevention and Control (DIPC) – is responsible for the management and control of healthcare associated infection (HAI), including implementation of this policy.

Divisional Management Teams – are responsible for monitoring implementation of this policy and for ensuring action is taken when staff fail to comply with the policy.

Ward and Department Managers – are responsible for ensuring that all possible measures are taken to reduce the spread of infection to patients, visitors and staff. All managers are responsible for ensuring this policy is implemented in their areas and for ensuring all staff who work within the area adhere to the principles and standards at all times. All managers are responsible for ensuring that staff have access to up to date training to enable them to adopt safe working practices at all times and are appropriately trained to minimise risks to themselves and others.

Consultant Medical and Surgical staff – are responsible for ensuring that all possible measures are taken to reduce the spread of infection to patients, visitors and staff. They are responsible for ensuring this policy is implemented in their areas and for ensuring all staff who work within the area adhere to the principles and standards at all times. They are responsible for ensuring their junior staff read and understand this policy and adhere to the principles contained in it at all times.

Site Management Team and Bed Managers – are responsible for ensuring patients are placed in accordance with this policy, and for escalating any situations where safe placement cannot be achieved.

On-Call Managers and the On-Call Executive – are responsible for providing senior and executive leadership to ensure implementation of this policy, and for ensuring infection risks are fully considered and documented when complex decisions need to be made regarding capacity and patient flow.

The Infection Prevention Team (IPT) – 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. They are also responsible for the development and dissemination of the policy and for ensuring the policy remains consistent with the evidence-base for safe practice, and for reviewing the policy on a three-yearly basis unless new guidance is published before this time.

Occupational Health – is responsible for ensuring that appropriate individual advice is available for staff who are advised they are MRSA positive.

All staff working on Trust premises, including agency and locum staff – are responsible for adhering to this policy and for reporting breaches of this policy to the person in charge and to their line manager.

5. Definitions

Colonisation – *S. aureus* is found on the skin or mucous membranes; the nose is the most common site of carriage, with the throat, perineum and groin being other common sites. It is also likely to be carried on areas of inflamed skin such as eczema/dermatitis and any wounds such as leg ulcers and pressure sores. In addition, the presence of a medical device which breaches the normal body defences such as peripheral venous cannulae (PVD) or urinary catheters will predispose to *S. aureus* carriage at that site. There are no clinical signs/symptoms of disease.

Infection – Distinct from carriage, infection implies an invasive process to a greater or lesser degree and some degree of tissue inflammation. Common infections caused by the organism include skin infections such as boils and impetigo, cellulitis, osteomyelitis and infective endocarditis. Within healthcare settings, *S. aureus* often cause infection related to medical devices such as intravenous (IV) lines. There are

signs and symptoms of infection – this is usually evident by fever, a rise in the white blood cell count/ CRP or purulent drainage from a wound or body cavity.

Comparing the signs and symptoms of infection and colonisation

Sign and symptom	Colonisation	Infection
Erythema (redness)	No	Yes
Pyrexia (raised temperature)	No	Yes
Cellulitis (inflammation of tissue around the wound)	No	Yes
Odour	Yes	Yes
Positive swab result	Yes	Yes
Purulent discharge (pus)	No	Yes
Excess exudate (fluid)	Yes	Yes
Local pain	No	Yes
Local oedema	No	Yes

Definition for acquisition:

- Trust attributable: MRSA isolated for the first time (new isolate) from day 3 onwards (where day 1 is the day of admission). Contaminated blood cultures taken at any time are also Trust attributable.
- Non-Trust attributable: MRSA isolated for the first time before day 3 of admission (where day 1 is the day of admission).

Bacteraemia – MRSA can enter the bloodstream from a local site of infection, wound or via an invasive device such as a urinary catheter or central line, subsequently leading to a blood stream infection (BSI). It is considered unacceptable for a patient to acquire an avoidable MRSA BSI while receiving care in a healthcare setting.

Any MRSA bacteraemia detected in a patient who has been in hospital for more than 2 days will be investigated by the clinician and ward manager caring for the patient, using Post Infection Review (PIR) methodology. The PIR will be conducted by a multidisciplinary clinical team that will review the bloodstream infection event and identify the factors that contributed to it.

The PIR process will:

- help identify factors that may have contributed to a MRSA BSI case;
- help to identify any parts of the patient's care pathway which may have contributed to the infection, in order to prevent a similar occurrence;
- help providers of healthcare and CCGs to identify any areas of non-optimal practice that may have contributed to the MRSA BSI;
- help to identify promptly the lessons learned from the case, thereby improving practice for the future;
- Identify the organisation best placed to ensure that any lessons learnt are acted on. The completed PIR is then sent to Public Health England by the Infection

Prevention Team. Following the investigation for hospital cases of MRSA bacteraemia where appropriate the patient will be informed of the outcome of the investigation in line with Duty of Candor requirements.

Screening – the process of obtaining microbiological swabs to identify the presence of MSSA/MRSA.

Clearance – *S. aureus* carriage is normal for many people but in healthcare it can be useful to attempt to clear carriage with topical antimicrobials. Patients colonised with MSSA are normally prescribed decolonisation therapy prior to orthopaedic surgery or vascular surgery involving the insertion of metalwork or implants. Patients colonised with MRSA are normally prescribed decolonisation therapy unless there is a clear indication not to.

For the purpose of infection control management, previously colonised patients can be regarded as clear if they have three clear screens from all appropriate sites taken at least 48 hours apart and whilst not receiving topical or systemic antibiotic therapy that would suppress the growth in culture.

6. Main Policy

6.1. Screening

To focus and maximise the clinical impact for patients who are most likely to benefit, it is recommended that the current practice of MRSA screening of acute and elective admissions to NHS hospitals in England is streamlined to (ARHAI, 2014):

- All patients admitted to high risk units (defined below)
- All patients previously identified as colonised with or infected by MRSA

In addition: local risk assessment should be used to define other potential high MRSA risk units/specialities.

High Risk Specialities/Units:

- Vascular
- Renal/dialysis
- Neurosurgery
- Cardiothoracic surgery
- Haematology/Oncology
- Orthopaedics/Trauma
- All Intensive Care Units (ICUs), High Dependency Units (HDUs) and Coronary Care Units (CCUs)

- NNU – screening of intrahospital transfers and babies from known positive mothers.

6.1.1 Purpose of MRSA screening

- Identify MRSA in those patients most at risk of carrying MRSA to reduce the potential transmission of MRSA within WAHT and the number of hospital acquired cases, ensuring the delivery of clean safe care to all our patients
- Identify MRSA in those patients undergoing a procedure that puts them at increased risk of MRSA infection. A decolonisation regime can be commenced to reduce or eradicate carriage of MRSA to minimise the risk of infection.
- Check for MRSA clearance following decolonisation treatment
- Outbreak control under the guidance of the IPT. Screening may include patients and staff.

6.1.2 Screening Protocol

Please refer to Pathway 1 and Action Cards 1 – 4 for screening protocol and management for each clinical area according to risk i.e. High-Risk, Medium-Risk, Low-Risk and Minimal-Risk respectively.

The nasal and skin swabs should be moistened with sterile water or normal saline. Use a fresh sachet or vial of saline/sterile water for each patient.

Patients are to be screened:

- Pre-operatively (if following an elective pathway),
- On admission (day 0)

If a negative screen result is received, patients are to be re-screened:

- As clinically indicated
- On day 14 (for patients with exfoliating and poor skin conditions – e.g. eczema, psoriasis or a high Waterlow Score due to fragile skin)
 - NB: this remains under review alongside HCAI BSI cases
- On day 28 (if remains as an inpatient)
- Every 28 days thereafter (if remains as an inpatient)

6.1.3 Pre-Operative Screening

The following patients **require** MRSA screening prior to elective surgical admission:

- Patients having orthopaedic surgery (**MRSA screen is valid for 28 days**)
- Patients having vascular surgery (**MRSA screen is valid for 28 days**)
- Patients going to Ward 1 at Kidderminster Treatment Centre

- Patients having other surgery where one night ward stay is anticipated (**MRSA screen is valid for 18 weeks**)
- Patients having day case surgery (i.e. same day discharge is anticipated) who have risk factors for MRSA (see Appendix A)
- Patients having day case surgery where there is a risk of overnight stay
- Where the Surgical Consultant feels the risks of MRSA infection would be significant for the patient.

The following patients are **exempted** from pre-operative MRSA screening:

- Day case surgery where there is a very high probability of same day discharge
- Cases under local anaesthetic only where there is a very low risk of conversion to general anaesthetic (i.e. simple excision of skin lesions or pain injections)

6.1.3.1 MRSA

Patients who require elective implant surgery such as Orthopaedics and Vascular Surgery are at increased risk of MRSA infection. Please refer to Pathways 2 and 3 for screening protocol and management in these instances.

Infection post-operatively in these patients may have serious consequences; therefore these patients must be screened for MRSA before admission and in the pre-admission clinic.

Screening may extend to other surgical specialities if Consultants decide to request pre-operatively for their elective patients.

Attempts should be made to eradicate MRSA carriage prior to surgery. If the surgery is urgent and must go ahead prior to decolonisation, the Surgeon must risk assess.

The patient with a history of MRSA, even if clear at the time of surgery, should be given antimicrobial prophylaxis specific for MRSA.

6.1.3.2 MSSA

Furthermore, patients who require elective Orthopaedic surgery are also at increased risk of MSSA infection. Please refer to Pathway 4 for screening protocol and management in these instances.

Attempts should be made to eradicate MSSA carriage prior to surgery. If the surgery is urgent and must go ahead prior to decolonisation, the Surgeon must risk assess and consider antimicrobial prophylaxis specific for MSSA.

6.1.4 Post-Decolonisation Screening

Screening is required on completion of treatment for infection or colonisation to check for clearance.

Negative screens are required as per screening protocol (Action Cards 1-4).
Clearance screens should be taken no less than 48 hours apart.

If clearance of colonisation is not achieved, a second course of topical decolonisation treatment can be attempted, however, more than 2 courses of Mupirocin is not advised as resistance may develop. In such an instance, advice should be sought from the Consultant Microbiologist.

6.1.5 Staff Screening

Staff screening should not be undertaken without prior arrangement with the IPT. It may be necessary on the advice of the IPT to screen staff for MRSA colonisation in the event of unexpected cases on the ward.

Staff found to be MRSA positive will be provided advice and support by the Occupational Health Department.

6.2. Decolonisation

Please see Action Card 5 for recommended regimes and utilise Appendix B to record MRSA decolonisation.

6.3. Treatment of MRSA Infection

The prompt commencement of appropriate antimicrobial treatment for those identified with and MRSA infection will reduce the mortality and morbidity associated with this organism.

It is essential that clinicians are able to assess patients effectively to ascertain whether MRSA is causing an infection as opposed to colonisation. Where there is doubt, the clinician should consult with the Infection Control Doctor or Consultant Microbiologist.

The source of the infection should be identified in patients presenting with an MRSA bacteraemia and where possible, the source of infection should be removed e.g. peripheral venous cannulae (PVD).

It is recommended that clinicians consult the antibiotic formulary (Microguide) or a Consultant Microbiologist regarding antibiotics of choice for the MRSA bacteraemia.

6.3.1. Antimicrobial Prophylaxis for MRSA

Patients with MRSA or a history of MRSA who require invasive procedures or surgical interventions should be considered for MRSA prophylaxis as many commonly used prophylactic antibiotic regimes do not cover MRSA.

Vancomycin or Teicoplanin should be administered in the hour before commencing the operation, as close as possible to induction. Further doses may be required if the operation is prolonged or there is heavy blood loss.

6.4. Management of MRSA

6.4.1. Surveillance

Surveillance is undertaken routinely as part of the Trust's annual programme by the IPT and the data must be a recognised element of the clinical governance process. The purpose is to determine whether or not the MRSA is healthcare associated or community acquired. Furthermore, this surveillance enables the IPT to rapidly identify MRSA clusters or outbreaks. Surveillance data should be fed back to hospital staff routinely.

The Trust has systems in place for monitoring MRSA bacteraemia using a recognised Root Cause Analysis (RCA) tool with Post Infection Review (PIR) with the multidisciplinary team (MDT) to produce an action plan for avoiding future events. This will then be disseminated to the wider NHS Trust.

6.4.2. New admissions

Patients admitted to WAHT must be assessed as to their MRSA status as part of the admission assessment.

Staff must ensure that OASIS is checked for an MRSA alert, if one is present then it is the responsibility of admitting staff to inform the patient's clinician as the management of the patient with an MRSA alert will need to be reviewed.

6.4.3. Known MRSA patients

The clinical risk will vary depending on the patient and the speciality/area the patient is being admitted to (see Action Cards 1-4).

In the case of patients undergoing invasive or surgical procedures, MRSA prophylaxis and current status will need to be considered and appropriate steps taken to reduce potential post-operative MRSA infection. Advice must be sought from the Consultant Microbiologist.

If possible, patients with a history of MRSA should have 3 negative screens prior to surgery. Please refer to section 6.1.3 and Pathways 2 & 3 for the process of screening pre-operatively for further information.

All healthcare workers in direct contact with patients known or suspected of having MRSA must maintain strict contact precautions whether or not the patient is isolated.

Patients admitted with a history of MRSA require a full screen on admission to check their current MRSA status.

It is essential that the MRSA status of patients is communicated between healthcare staff on admission, transfer of care and discharge. As a safety precaution to this communication, the IPT alerts MRSA patients on OASIS. Each time the patient is admitted or transferred within WAHT this alert will remind staff that the patient has a history of MRSA.

NB: Not all patients with a history of MRSA will have an MRSA alert on the system.

Examples include:

- Patients who have not previously been admitted to WAHT
- Patients whose MRSA result was processed in a laboratory outside of WAHT

Therefore, it is imperative that the patient is asked if they have a history of MRSA as part of the admission assessment.

6.4.4. Newly identified MRSA patients

The IPT will flag newly identified MRSA positive patients on OASIS and telephone new MRSA results on in-patients to the ward or department and advise the nurse responsible for the patient's care of appropriate actions to be taken (see also Action Card 5 and Appendix B). The IPT will provide advice and support to the MDT in the management of the patient.

The nurse responsible for the patient's care must document the patient's new MRSA result in the patient's medical notes and is required to provide the patient or their relative with an MRSA Patient Information Leaflet available from the intranet. The discussion held must be recorded in the patient's clinical notes.

If the patient has been discharged prior to the positive result being received, the positive result must be communicated to relevant healthcare professionals. The patient's GP will be notified by the IPT.

6.4.5. Management of MRSA in Wounds and Invasive Devices

Management of MRSA in Wounds:

For chronic wounds, such as leg ulcers, consider the use of wound dressings that have good anti-staphylococcal activity. Advice can be sought from Tissue Viability.

Management of PEG sites and Suprapubic Catheters

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. If the insertion site is infected with MRSA, medical advice should be sought regarding antimicrobial treatment. Advice must also be sought from Pharmacy on the compatibility of any anti-staphylococcal dressings used and the materials the device is made from to avoid potential damage to the device and subsequent rupture.

6.4.6. Visitors

Visitors should be advised of any precautions which may be necessary (for example hand decontamination on leaving the room or cohort area). Protective clothing is not usually necessary unless the visitor is involved in direct patient care in which instance section 6.4.6 applies.

6.4.7. Standard Precautions

All staff must ensure they adhere to the principles contained within the Trust Standard Infection Control Precautions Policy (WAHT-INF-047)

6.4.8. Patient Placement

All MRSA positive patients are required to be isolated in a side room with clinical hand wash basin, en-suite facilities and appropriate isolation signage; this is of particular importance in High-Risk settings (see Action Card 1).

The door to the single room must be kept closed; if this affects patient safety in any way, e.g. the patient is at high risk of falls then a risk assessment must be made and documented in the patient's medical notes as to whether the door must remain open. The door must remain closed during any procedures that may generate *staphylococcal* aerosols i.e. chest physiotherapy, wound dressing or bed-making.

Equipment in the room must be kept to a minimum as a cluttered environment cannot be cleaned easily. The patient must be provided with their own equipment, if this is not possible then such items must be effectively decontaminated following use.

The patient's notes, observation charts and nursing care plan must not be taken into the isolation room.

On occasions when there are insufficient side rooms available to isolate patients individually, a group of MRSA positive patients can be nursed together in a defined area of the ward or department. Advice must be sought from the IPT in these circumstances.

For further information, please refer to the Trust's Isolation and Bed Management Policy WAHT-INF- 045.

6.4.9. Theatre and Procedures

Known or suspected MRSA patients requiring invasive procedures within theatre and procedure departments must be treated as for infected cases. The Theatre Co-Ordinator or Procedure Co-Ordinator must be informed of the patient's MRSA status prior to the surgery/procedure being carried out.

6.4.10. Outpatients

Colonised patients attending out-patient appointments should attend as normal and not be segregated. Gloves and aprons should be worn by staff if performing a clinical examination.

6.4.11. Environmental Cleaning

The room should be cleaned daily using Tristel. Nurses and domestic staff must be aware of their cleaning responsibilities (please refer to Appendix 3 of the Trust Cleaning Policy WAHT-CG-494).

Following discharge of the patient the isolation room requires thorough cleaning and disinfection (please refer to Appendix 4 of the Isolation and Bed Management Policy WAHT-INF-045). As soon as the room is vacated, the nursing staff must inform Facilities via Helpdesk (ext 3333/4444) who will then arrange a team to conduct the discharge clean and change of curtains.

6.4.12. Care of the Deceased

Standard precautions are the same for handling deceased patients with MRSA as those used in life. There is no requirement for the use of a body bag.

Wounds must be covered with an impermeable dressing.

6.5. Transfer and Discharge of Colonised or Infected Patients

6.5.1. Transfer within the Trust

Wherever possible, transfers must be kept to a minimum. However, this should not compromise patient care in any way.

When transferring patients to other wards, the receiving ward must be informed of the patient's MRSA status before transfer so that arrangements can be made regarding contact precautions and a side-room is available if required.

When patients are ready for transfer from ICU or HDU areas to a general ward, if a side room is required but not available, please contact the IPT for advice. ICU and HDU beds should not be blocked.

As an added control measure, the receiving ward must check for an MRSA alert on all transferred patients as part of the admission procedure. If an MRSA alert is seen on a patient transferred with no prior communication regarding MRSA, please contact the transferring ward and the IPT.

Staff involved in the transportation of the patient must wear gloves and apron when preparing the patient for transfer. Staff must wash their hands and dry thoroughly after transferring the patient.

Any lesions/wounds on the patient should be covered with an impermeable dressing where possible.

Following transfer and before use with another patient, the trolley or chair must be thoroughly decontaminated.

Where the patient is leaving one ward to be admitted to another, they should be transferred to a bed with clean linen. The patient's original bed and bed linen should be left behind on the ward for decontamination, unless the patient is not well enough to be transported by other means.

6.5.2. Transfer to another Hospital

When a patient is transferred to a hospital in another Organisation, the receiving ward/department must be informed of the patient's MRSA status prior to transfer. This communication is vital as the receiving Organisation will not have access to our systems.

6.5.3. Ambulance Transportation

The Ambulance service must be notified in advance by the responsible clinician or delegated ward staff of the patient's MRSA status.

Most patients can be transported with other patients in the same ambulance without any special precautions other than changing any linen used by the patient.

However, if the patient being transported has a heavily discharging wound that cannot be contained with an impermeable dressing or the patient has widespread exfoliating skin lesions advice should be sought from the IPT. It may be necessary to transport this patient alone.

Patients at particular risk from MRSA acquisition must not be transported in the same ambulance as a known MRSA patient.

6.5.4. Discharge of Patients

MRSA patients should be discharged promptly from hospital as soon as their condition allows.

The patient's GP must be informed and any other healthcare agencies involved in providing care to the patient. This should take place as part of the discharge planning and is the responsibility of the clinical team.

If the patient is discharged to a Nursing or Residential Home, the medical and nursing staff should be informed in advance. MRSA colonisation should not prevent discharge to a Nursing or Residential Home.

Patients should not be routinely screened prior to discharge into the community.

The patients and their relatives should be provided with appropriate advice in relation to the risk posed by MRSA in the home setting.

6.6. Outbreak Identification and Management

The IPT monitors MRSA acquisition within the Trust. Increases in MRSA acquisition are readily identified and action taken.

Action taken is dependent upon the numbers involved, the speciality or area and the background of MRSA.

Any outbreaks identified will be managed according to the Trust's Policy for Outbreak Reporting and Control, including Major Outbreaks WAHT-INF-044.

7. Implementation

7.1. Plan for implementation

An implementation plan will accompany any policies submitted for approval to TIPCC, as per the Trust Policy for Policies. This will ensure awareness of roles and responsibilities, and training requirements are identified.

7.2. Dissemination

- Instruction to all clinical staff of revised policy via weekly Trust Brief.
- Ward and departmental based clinical staff via Infection Prevention Link Nurses.
- Updated policy to be made available via the Trust Key Documents intranet page.

7.3. Training and awareness

It is a mandatory requirement that all new Trust employees must attend a Trust corporate induction programme, which includes IPC training. It is the responsibility of the line manager to ensure that IPC issues are covered in all local inductions and that this is documented.

It is a mandatory requirement that all clinical and non-clinical staff update their infection control training annually, either by attendance at a formal session, or using and completing online or eLearning resources. It is the line manager's responsibility to ensure that this occurs.

Different modalities are available to facilitate compliance with mandatory training requirements. These include attendance at formal lectures, ad hoc teaching, and access to online training. Records of staff training are kept centrally on the ESR database and locally by Directorates as required.

8. Monitoring and compliance

Please refer to the table below with regard to the manner in which the Trust will monitor compliance with this Policy.

Trust Policy

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the Policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: <i>(Responsible for also ensuring actions are developed to address any areas of non-compliance)</i>	Frequency of reporting:
	WHAT?	HOW?	WHEN?	WHO?	WHERE?	WHEN?
	Compliance with MRSA Screening Operational Guidance	MRSA screening audits Ward and Department audits	Monthly	Ward Managers IP Link Practitioners	Trust Infection Prevention and Control Committee (TIPCC)	Monthly
	Measurement of the appropriateness of decolonisation treatment (correct agents/dosages for correct time) and follow up.	Ward and Department audits. Retrospective clinical audit.	Monthly	Ward Managers Antimicrobial Pharmacists	TIPCC	Monthly
	Incidence of SSI and causative organism. Blood stream infection	Root Cause Analysis (RCA)	As arises	Multidisciplinary Team (MDT)	Divisional Reports, TIPCC, DATIX	As arises
	Review of patients with MRSA colonisation/infection	Audit	Weekly	IPT Ward Managers	Divisional Reports and TIPCC	Monthly

Trust Policy

	Monitoring of outbreaks	Alert system	As arises	MDT	Divisional Reports, TIPCC, DATIX	As arises
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9. Policy Review

This policy will be reviewed every three years or earlier if regulations change by the named individual on the front of the policy and circulated for comment prior to approval by the Trust Infection Prevention and Control Committee (TIPCC).

Dissemination of the document will be as per the Trust Policy for Policies (WAHT-CG-827). Reference to the relevant Infection Prevention policies will also be made during induction, annual and other update sessions for staff. The policies will be available to view on the Trust Key Documents page on the intranet.

10. References

	Code:
Isolation and Bed Management Policy	INF-045
Cleaning Policy	CG-494
Outbreak Reporting and Control, including Major Outbreaks	INF-044
Standard Infection Control Precautions Policy	INF-047
Infection Control Policy	CG-043
DoH (2014) 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. [Online] Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/345144/Implementation_of_modified_admission_MRSA_screening_guidance_for_NHS.pdf	
Coia <i>et al</i> (2006) Guidelines for the control and prevention of meticillin-resistant <i>Staphylococcus aureus</i> (MRSA) in healthcare facilities. <i>Journal of Hospital Infection</i> 63 (S): 1-44.	
Department of Health (DoH) (2009) Emergency Admissions MRSA Screening Pathway 2010 [Online] Available from: https://webarchive.nationalarchives.gov.uk/20120118171852/http://hcai.dh.gov.uk/files/2011/03/Powerpoint_Emergency_admissions_MRSA_Screening_pathway_FINAL_100825-.pdf	
DoH (2015) Code of Practice for the NHS on the prevention and control of healthcare associated infections and related guidance.[Online] Available at: https://www.gov.uk/government/publications/the-health-and-social-care-act-2008-code-of-practice-on-the-prevention-and-control-of-infections-and-related-guidance	
DoH (2014) 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. [Online] Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/345144/Implementation_of_modified_admission_MRSA_screening_guidance_for_NHS.pdf	
Loveday <i>et al</i> (2013) The patient experience of the MRSA screening process and the impact of an MRSA positive result: a qualitative	

study. <i>Antimicrobial Resistance and Infection Control</i> , 2:56. https://doi.org/10.1186/2047-2994-2-S1-P56	
Nalini et al (2008) A Preoperative Decolonisation Protocol for <i>Staphylococcus aureus</i> Prevents Orthopaedic Infections [Online] Available from: https://journals.lww.com/clinorthop/Fulltext/2008/06000/A_Preoperative_Decolonization_Protocol_for.13.aspx	
NHS England (2013) Everyone Counts: Planning for Patients 2014/15-2018/19. [Online] Available at: https://www.england.nhs.uk/wp-content/uploads/2013/12/5yr-strat-plann-guid-wa.pdf	
NHS Improvement (2018) Update on the reporting and monitoring arrangements and post-infection review process for MRSA bloodstream infections [Online] Available at: https://improvement.nhs.uk/documents/2512/MRSA_post_infection_review_2018_changes.pdf	
Pelfort et al (2019) Reduction of periprosthetic <i>Staphylococcus aureus</i> infection by preoperative screening and decolonisation of nasal carriers by undergoing total knee arthroplasty. [Online] Available from: https://www.aott.org.tr/en/reduction-of-periprosthetic-staphylococcus-aureus-infection-by-preoperative-screening-and-decolonization-of-nasal-carriers-undergoing-total-knee-arthroplasty-166639	
Pratt et al (2014) Epic3: National Evidence Based Guidelines for preventing Healthcare-Associated Infection in NHS Hospitals in England. <i>Journal of Hospital Infection</i> , 65 (1): Supplement 1.	
Sundar et al. (2016) Antiseptic use in the neonatal intensive care unit – a dilemma in clinical practice: An evidence-based review. <i>World Journal of Clinical Pediatrics</i> , 5(2): 159-171.	

11. Background

11.1. Consultation

Contribution List

This key document has been circulated to the following individuals for consultation;

Name	Designation
Dr Emma Yates	Infection Control Doctor/Consultant Microbiologist
Astrid Gerrard	Antimicrobial Stewardship Pharmacist
Tracey Cooper	Director of Infection Prevention and Control
Emma Fulloway	Infection Prevention Nurse Manager
Kerrie Howles	Senior Infection Prevention Nurse
Maxine McDonald	Senior Infection Prevention Nurse
Angela Roxburgh-Powell	Senior Infection Prevention Nurse
Claire Farley	Senior Patient Safety and Risk Advisor

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee
Trust Infection Prevention and Control Committee (TIPCC)
Medicines Safety Committee (MSC)

11.2. Approval Process

The draft document will be submitted to TIPCC for awareness prior to the receipt of comment, and again for approval once comments received before document code and version number are confirmed and the policy is released for placement on the Trust intranet. The final draft will be checked to ensure it complies with the correct format and that all supporting documentation has been completed.

11.3. Version Control

Date	Amendment	By:
23.03.21	Amalgamation of WAHT-INF-003 and WAHT-INF-006 with amendments as required.	L Bailey (SIPCN)
20.04.21	Amendment to section 6.1.2 – addition of day 14 screening for patients with exfoliating and poor skin conditions	L Bailey (SIPCN)/E Yates (Co-Infection Control Doctor)
09.06.21	Amendments to section 6.1.3 - addition of comments from Dr Hutchinson regarding pre-operative screening	L Bailey (SIPCN)

Appendices

Appendix A High Risk Groups for MRSA colonisation and/or infection



WAHT-INF-049
Appendix A.pdf

Appendix B Record of MRSA Decolonisation Treatment



WAHT-INF-049
Appendix B.pdf

Action Cards

Action Card 1 – MRSA Screening and Management Protocol – HIGH RISK



WAHT-INF-049
Action Card 1.pdf

Action Card 2 - MRSA Screening and Management Protocol – MEDIUM RISK



WAHT-INF-049
Action Card 2.pdf

Action Card 3 - MRSA Screening and Management Protocol – LOW RISK



WAHT-INF-049
Action Card 3.pdf

Action Card 4 - MRSA Screening and Management Protocol – MINIMAL RISK



WAHT-INF-049
Action Card 4.pdf

Action Card 5 - MRSA Topical Decolonisation Treatment



WAHT-INF-049
Action Card 5.pdf

Pathways

Pathway 1 – MRSA Screening for Emergency Admissions to Ward Areas



WAHT-INF-049
PATHWAY 1.pdf

Pathway 2 – MRSA Screening for Elective Major Vascular Surgery



WAHT-INF-049
PATHWAY 2.docx

Pathway 3 – MRSA Screening for Elective Surgery including T&O Procedures



WAHT-INF-049
PATHWAY 3.pdf

Pathway 4 – MSSA Screening Protocol for Elective T&O Procedures



WAHT-INF-049
PATHWAY 4.pdf

Trust Policy

Herefordshire & Worcestershire STP - Equality Impact Assessment (EIA) Form Please read EIA guidelines when completing this form

Section 1 - Name of Organisation (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust	X	Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust		Wye Valley NHS Trust		Other (please state)	

Name of Lead for Activity	Tracey Cooper, DIPC
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Details of individuals completing this assessment	Name	Job title	e-mail contact
	Lara Bailey	Senior Infection Prevention Nurse Advisor	larabailey@nhs.net
	T Cooper	DIPC	tracey.cooper27@nhs.net
	E Fulloway	Infection Control Nurse Manager	e.fulloway@nhs.net
Date assessment completed	29.06.2021		

Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	Title: Meticillin Resistant <i>Staphylococcus aureus</i> (MRSA) Screening and Management Policy and Meticillin Sensitive <i>Staphylococcus aureus</i> (MSSA) Screening for Pre-Operative Elective Orthopaedic Patients.			
What is the aim, purpose and/or intended outcomes of this Activity?	<p>This policy provides details on the standards required for the detection and management of MRSA in WAHT in order to protect patients from infection or colonisation with MRSA, prevent the transmission of MRSA and to safely manage and treat patients who are colonised with MRSA.</p> <p>This policy also provides details on the standards required for the detection and management of MSSA in WAHT in relation to orthopaedic surgery in order to protect patients from infection or colonisation with MSSA.</p>			
Who will be affected by the development & implementation of this activity?	<input checked="" type="checkbox"/> Service User <input checked="" type="checkbox"/> Patient <input type="checkbox"/> Carers <input type="checkbox"/> Visitors	<input checked="" type="checkbox"/> Staff <input type="checkbox"/> Communities <input type="checkbox"/> Other _____		

Meticillin Resistant *Staphylococcus aureus* (MRSA) Screening and Management Policy and Meticillin Sensitive *Staphylococcus aureus* (MSSA) Screening for Pre-operative Elective Orthopaedic Patients.

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Is this:	<input checked="" type="checkbox"/> Review of an existing activity <input type="checkbox"/> New activity <input type="checkbox"/> Planning to withdraw or reduce a service, activity or presence?
What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.)	<ul style="list-style-type: none"> National MRSA guidelines 2014 and consultation draft of new national guidelines awaiting publication Consultation with Trauma and Orthopaedics and Pre-Operative Assessment in relation to their experience of MRSA in the patient group
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	Policy was circulated to TIPCC members and subsequently approved following comments.
Summary of relevant findings	Policy approved and meets national requirements.

Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale.** Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential <u>positive</u> impact	Potential <u>neutral</u> impact	Potential <u>negative</u> impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age	✓			Evidence shows the very old and the very young are at increased risk of MRSA. By screening those at increased risk, we can detect colonisation and take steps to reduce the risk of infection.
Disability	✓			Evidence shows that those receiving care or resident in long-term care facilities are at increased risk of MRSA. By screening those at increased risk, we can detect colonisation and take steps to reduce the risk of infection.
Gender Reassignment		✓		
Marriage & Civil Partnerships		✓		
Pregnancy & Maternity		✓		
Race including Traveling Communities		✓		
Religion & Belief		✓		
Sex		✓		
Sexual Orientation		✓		
Other Vulnerable and Disadvantaged Groups (e.g. carers; care leavers; homeless;		✓		

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Equality Group	Potential <u>positive</u> impact	Potential <u>neutral</u> impact	Potential <u>negative</u> impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Social/Economic deprivation, travelling communities etc.)				
Health Inequalities (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)		✓		

Section 4

What actions will you take to mitigate any potential negative impacts?	Risk identified	Actions required to reduce / eliminate negative impact	Who will lead on the action?	Timeframe
How will you monitor these actions?				
When will you review this EIA? (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)	When the policy is reviewed and updated.			

Section 5 - Please read and agree to the following Equality Statement

1. Equality Statement


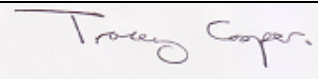
1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation

1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.

1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

Meticillin Resistant *Staphylococcus aureus* (MRSA) Screening and Management Policy and Meticillin Sensitive *Staphylococcus aureus* (MSSA) Screening for Pre-operative Elective Orthopaedic Patients.

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Signature of person completing EIA	Lara Bailey 
Date signed	29.06.2021
Comments:	
Signature of person the Leader Person for this activity	 T Cooper
Date signed	29.06.2021
Comments:	

Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue	No
3.	Does the implementation of this document require additional manpower	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	No
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval.