MRSA & Management Of Antibiotic Resistant Organisms
(Infection Prevention and Control Policy: Appendix 14)

This MRSA & Management of Antibiotic Resistant Organisms Appendix, must be read in conjunction with the Infection Prevention and Control Policy

Version: 3

Summary:
This policy defines the actions to be taken by Southern Health NHS foundation trust (SHFT) to reduce the acquisition and transmission of MRSA and other antibiotic resistant micro-organisms by reducing or managing their reservoirs and preventing onward transmission in community health care settings.

Keywords (minimum of 5): (To assist policy search engine)
MRSA, Staphylococcus aureus, resistant micro-organisms, ESBL, resistant E coli.

Target Audience:
All staff of all disciplines, Non-Executive Directors, Volunteers, Governors and Contractors

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March 2020

Approved & Ratified by:
IPC group
IP & C & Decontamination Group

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Version Control
Change Record

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<td>Technical amendment: All OPMH in-patients to be screened for MRSA on admission / within 48 hours.</td>
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Reviewers/contributors

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**Second contributors prior to ratification of the policy.**

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<td>Version 3: 22.1.16 to Susanna Preedy and to everyone else 11.2.16.</td>
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Quick Reference Guide
For quick reference, this page summarises the actions required by this policy. This does not negate the need to be aware of and to follow the further detail provided within this policy.

Other resistant organisms:
ESBLs
- For ESBL risk based assessment for patient placement go straight to appendix 12.1
- For ESBL information leaflet go straight to appendix 12.2
- For Information on other resistant organisms go straight to appendix 12.3

MRSA
For MRSA information leaflets go straight to appendix 12.16 & 12.17

Management of MRSA positive cases: In-patients
- For in-patient management of MRSA within physical or OPMH refer to section 5.6
- For pre-admission procedure for elective surgical day case patients’ at LNFH refer to section 5.6.8
- For in-patient management of MRSA within MH & LD refer to section 5.7

Community
- For management of MRSA in community settings refer to section 6.0
- 6.2 Management of MRSA in own home
- 6.4 Social care TQ twentyone
- 6.5 GP practices, health centres, dental practices
- 6.6 Childrens’ services
- 6.7 Podiatry services management of MRSA refer to section

Screening for MRSA:
Refer to appendix 12.7, organisational MRSA screening flowchart for in-patient settings. All patients admitted as emergencies who fit the above screening criteria, must be screened for MRSA at the time of admission and within a 48 hour timeframe as per MRSA SOP appendix 12.4.

Screening for Staphylococcus aureus should be performed using a dry charcoal swab (one swab per site)

Screening Sites:
- Anterior nares (all patients) the same swab should be used for both nostrils
- Groin (inpatients only) the same swab should be used for both groins
- Wounds/skin lesions
- Intravenous devices
- Urinary catheters a catheter specimen of urine should be obtained

For further advice on the correct method to take MRSA swabs refer to appendix 12.5

Admission MRSA risk reduction measure/ routine antimicrobial skin wash in Octenisan.
All emergency admissions in Physical & OPMH organic in-patient settings must be given Staph aureus protection using topical antimicrobial skin washes until their screening results are known with the exception of those patients’ identified with allergy to the product.
- Octenisan wash once daily until MRSA screening results known

Octenisan information leaflets for staff and patients can be found in appendix 12.13 & 12.14.

Please note: There is no requirement at present to conduct this risk reduction measure in MH and LD in-patient areas.
Treatment protocol for MRSA:

**Confirmed MRSA positive patients** should receive suppression therapy under the guidance of the Infection Prevention Team:

1st Line Suppression:
- Mupirocin 2% applied to the inner surface of each nostril 3 times a day for 5 days
- Octenisan wash once daily for 5 days

2nd Line Suppression (for Mupirocin Resistant Strains):
- Naseptin applied to the inner surface of each nostril 4 times a day for 10 days (prescribed for those with a known allergy to Mupiricin or during time periods of Mupiricin shortage)
- Octenisan wash once daily for 10 days or Dermol 500 (prescribed for those with a known allergy to Octenisan)

The purpose of suppression therapy is to achieve a short-term reduction in skin and nasal flora. Patients should not be given more than two courses of full suppression therapy in six months (e.g. antimicrobial topical nasal ointment and skin washes, 2 treatments can be consecutive).

**Isolation of patients confirmed MRSA positive:**
Where possible, all patients with MRSA positive isolates should be placed in side rooms. High Staphylococcal dispersers must, without exception, take priority for side rooms, these are noted below:
- MRSA positive sputum with productive cough
- MRSA positive tracheostomy
- MRSA positive with uncovered discharging wound
- MRSA positive with severe skin shedding (e.g. severe eczema, psoriasis).

**Please Note:**
Patients with nasal or skin carriage of Meticillin sensitive *Staphylococcus aureus* (MSSA), or MSSA Blood Stream Infection do not routinely need to be isolated with the exception of:
- A MSSA positive patient with severe skin shedding (high staphylococcal disperser), contact the IPCT for further advice.

**Contact the IPCT for advice on:**
- IPCT lead: 07500 975 960
- IPCT secretary: 02380 87 4658
- IPCN west: 07500 975 961
- IPCN north east: 07500 975 962
- IPCN east: 0771 771 4894
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1. **Introduction**

1.1 Meticillin Resistant *Staphylococcus aureus* (MRSA) is a strain of *Staphylococcus aureus* bacteria present in community and healthcare settings capable of causing significant healthcare associated infection (HCAI).

This appendix of the over-arching infection prevention and control (IPC) policy, defines the actions to be taken by Southern Health NHS foundation Trust (SHFT) to reduce the acquisition and transmission of MRSA and other antibiotic resistant micro-organisms by reducing or managing their reservoirs and preventing onward transmission.

This appendix will inform SHFT staff of their individual responsibilities to effectively manage these micro-organisms. This appendix should be read in conjunction with:-
- Standard precautions appendix 5 of the overarching IPC policy
- Hand hygiene appendix 6 of the overarching IPC policy
- Isolation appendix 9 of the overarching IPC policy
- HIOW Antibiotic Guidelines

1.2 "The prevention and control of health care associated infection (HCAI) is a priority for all parts of the NHS", (Department of Health (DH) 2010). MRSA is a significant HCAI resulting in additional morbidity and mortality as well as contributing to healthcare costs. If basic principles of infection prevention and control (IPC) management are followed, the risks of a service user acquiring MRSA or indeed any other HCAI will be effectively minimized in all types of community healthcare settings.

1.3 SHFT is committed to complying with MRSA screening for all elective and emergency admissions highlighted in (Department of Health (DH) Operating framework 2008/9 and 2010/11).

"NHS providers and commissioners should ensure that: (they) screen all relevant emergency admissions for MRSA (Florry & Beasley 2010).

1.4 The DH Jan 2011, Gateway reference, extension of mandatory surveillance to include Meticillin Sensitive Staphylococcus Aureus (MSSA), has been included within this appendix.

1.5 The DH Jan 2011, Gateway reference, extension of mandatory surveillance to include *Escherichia coli* surveillance (E coli), has been included within this appendix.

1.6 Appendix 12.3: Makes reference to other antibiotic resistant organisms.

2. **Who does this policy apply to?**

This policy applies to all staff employed or contracted by SHFT and also to all visiting staff including, agency / locum, students their tutors and volunteers. Every member of staff has a personal responsibility to ensure that they comply with this document.

In the event of an infection outbreak, flu pandemic or major incident, the Trust recognises that it may not be possible to adhere to all aspects of this document. In such circumstances, staff should take advice from their IPCT and manager and all possible action must be taken to maintain ongoing patient and staff safety.
3. Definitions

3.1 **MRSA – Meticillin Resistant *Staphylococcus aureus***: A gram positive bacteria, found on approximately 3% of the general population and up to 7% of hospital service users. Ref (DH 2007: A simple guide to MRSA).

MRSA is a variant of *Staphylococcus aureus*, which has developed resistance to commonly used antibiotics e.g. Meticillin or Oxacillin which makes it more difficult to treat.

MRSA is no more likely to cause an infection than any other strain of *Staphylococcus aureus*.

3.2 **Meticillin & Oxacillin** – Antibiotics, members of the Penicillin family called beta-lactams: which MRSA has developed resistance to (through a process of natural selection).

3.3 **Screening** for MRSA is the detection of MRSA by taking swabs from various sites and sending them to the microbiology laboratory for analysis.

3.4 **Suppression Therapy (Previously known as decolonisation)** - methods by which an attempt is made to eradicate or reduce the amount of *S. aureus* bacteria a person is carrying on their skin through topical treatment using the Trust’s chosen antimicrobial skin wash solution and topical nasal ointment.

**Octenisan**: Is a gentle, non-perfumed antimicrobial wash solution, suitable for use in all age groups and those with eczema and psoriasis.

**Nasal Creams: Mupirocin and Naseptin** are antimicrobial ointments for the use in nasal passages. Repeated or prolonged courses must be avoided due to possible development of resistance.

3.5 **Colonisation** is the asymptomatic carriage of *S. aureus* bacteria on an individual. Whilst most of the time this does not cause a problem to the colonised service user, it has the potential to act as a reservoir of the bacteria in a healthcare setting, hence the importance of all staff adhering to good infection control practice at all times. The majority of service users who are colonized will not have an active infection. Colonisation may be transient or life-long (depending on medical co-morbidities).

3.6 **Infection** is when the bacteria have invaded a wound for example, enabling it to multiply and cause the person to have signs and symptoms of clinical infection.

3.7 **Bacteraemia (blood stream infection)** describes the presence of either MRSA or MSSA bacteria in the blood. This type of infection can lead to septicaemia very quickly and has a high mortality rate.

3.8 **High Risk Groups**: National and local evidence shows that certain service users’ will be at higher risk of having or acquiring MRSA and are as follows;

- Those who have been MRSA positive in the past
- Those who have had admission to a health care facility in the last six months
- Those who are living in residential settings (i.e. nursing or residential homes, military barracks)
- Those who have an indwelling urinary catheter and/or intravenous/tunneled line
- Those who have a chronic wound
- Those who have a chronic skin condition such as psoriasis or eczema
- Those who have a history of intravenous drug use
- Healthcare workers
3.9 **Healthcare Associated MRSA (HA-MRSA)** MRSA strains that are transmitted to and circulate between individuals who have had contact with healthcare facilities. HA-MRSA is endemic in the hospital or healthcare environment.

3.10 **Community Associated MRSA (CA-MRSA)** New strains of MRSA have emerged that cause infections in community service users' who have had no previous history of direct or indirect healthcare contact. These strains have been designated CA-MRSA. These strains are genetically and phenotypically distinct from HA-MRSA (Nathwani et al 2008).

3.11 **Panton-Valentine Leukocidin toxin (PVL)** Is produced by some strains of Staphylococcus aureus which is associated with an increased ability to cause disease. Clusters and outbreaks of cases have occurred in healthcare community settings, gyms, military training camps and prisons. For further information on the treatment of PVL producing strains of Staphylococcus aureus refer to HPA guidance 2008, “The diagnosis and management of PVL associated staphylococcus aureus in England”. Additional advice should always be sought from a consultant microbiologist at your nearest acute Trust.

3.12 **Fomites** are inanimate objects that may become contaminated with infectious organisms such as MRSA and serve in their transmission e.g. blood pressure cuff.

3.13 **MRSA Care Pathway:** A tool used to manage the quality in healthcare concerning the standardisation of care processes for MRSA. It embeds guidelines and protocols both nationally and locally agreed. It ensures that evidenced-based, patient centred best practice, is delivered into everyday use for each individual service user.

3.14 **Standard precautions:** Standard Precautions are a key part of infection prevention and control. They are based on a set of principles designed to minimize exposure to and transmission of a wide variety of micro-organisms.

3.15 **Contact precautions:** Adheres to the principles of standard precautions and in addition focuses on service user placement within the health care environment and contact with service user equipment and the environment.

3.16 **ESBL:** A group of bacteria that are resistant to many commonly used antibiotics. ESBL stands for, Extended Spectrum Beta-Lactamase, it is an enzyme (chemical), produced by some bacteria that normally live in the bowel. These bacteria (Klebsiella species and Escherichia coli) normally live quite happily without causing a problem and are no more likely to cause infection than other bacteria found in the bowel.

3.2 **MRSA can be Transmitted via:-**

3.2.1 **Direct Contact:** This is the most common route of transmission through skin to skin contact. The hands of health care workers’ have the potential to transfer MRSA from one person to another or from one body site to another if correct hand hygiene and adherence to basic infection prevention and control practice is not carried out.

3.2.2 **Indirect Contact:** Transmission of MRSA through the environment. MRSA has the ability to colonise service users’ skin and it can be dispersed on their skin scales. This may lead to contamination of the environment and high standards of environmental cleanliness must be maintained to keep dust and micro-organisms to a minimum. Transmission of MRSA may also occur via contaminated equipment - all equipment must be routinely and effectively cleaned/decontaminated between service user use (refer to Decontamination of Medical Devices Appendix SH CP 100).
3.2.3 **Endogenous spread:**
When a person with staphylococci spreads the bacteria from one part of their own body to another. This spread can be reduced by good personal hygiene inclusive of hand hygiene of the service user.

The implementation of ‘Standard Precautions’ will reduce the risk of MRSA cross-infection in all service users (see Standard Precautions Appendix SH CP 19).

4. **Duties and responsibilities**

The **Chief Executive** holds ultimate responsibility and accountability for compliance with this policy within the Trust.

**Director of Nursing/Director of Infection Prevention & Control (DIPC)** holds delegated executive responsibility for the management and control of healthcare associated infection, including implementation of this policy and adherence to this policy across SHFT. Divisional and Care Group Management Teams are responsible for monitoring implementation of this policy and for ensuring action is taken when staff fail to comply with the policy.

**Infection Prevention Team:**
- Review and update MRSA & other resistant organisms’ policy 4 yearly unless new guidance is published before this time so that it remains consistent with the evidence base for safe practice.
- Will make additional technical amendments’ to the policy as and when required throughout this time period.
- Give additional advice regarding the management of patients with MRSA in accordance with this policy.
- Include MRSA in all induction and update training for clinical staff. Is this in Sponge E learning?
- Promote good practice and challenge poor practice

**Microbiologists as per agreed SLA’s in place with SHFT:**
- Alert SHFT Infection Prevention Team and clinical teams (where appropriate) of patients with an MRSA bacteraemia.
- Follow the antimicrobial prescribing policy for patients with or at risk of MRSA
- Support our SHFT medical staff with medical treatment advice regarding the management of the MRSA positive service user.

**Hospital Managers:**
- Facilitate placement of patients with MRSA into appropriate isolation rooms
- Escalate difficulties in management/placement of MRSA patients to the Infection Prevention Team
- Ensure effective communication of patients risk and carriage status

**Matrons / Ward Managers:**
- Must establish a culture of compliance with infection prevention practice across their units to reduce the spread of infection to patients, visitors and staff
- Ensure that the MRSA & other resistant organisms’ policy is implemented in their areas
- Ensure admission and any subsequent screening for MRSA occurs as per policy
- Promote good practice and challenge poor practice
- Ensure their staff keep themselves in date with their IPC training to enable them to adopt safe working practices
Medical Staff:
- Ensure compliance with infection prevention and antimicrobial prescribing policies/guidelines
- Ensure prudent antimicrobial prescribing and stringent use/removal of indwelling devices
- Follow IPC advice relating to the management of patients with MRSA/other resistant organisms
- Follow prescribing advice as and when received from the acute trust microbiologist and seek advice if required
- Promote and adhere to compliance with IPC practice and challenge poor practice
- Keep themselves in date with their IPC training to enable them to adopt safe working practices.

All Healthcare Staff:
- Must be familiar with and adhere to the relevant infection prevention policies to reduce the risk of cross infection of patients
- Must adhere to the full terms and conditions documented in this policy
- Refer to the infection prevention and control team if unable to follow the policy guidelines
- Must report any breaches to this policy to their line manager, IPCT and onto Ulysses the incident reporting system.
- Non-compliance with this trust policy may result in disciplinary action.
5. MAIN POLICY CONTENT

5.1 MRSA SCREENING:

Principles
Screening for MRSA will improve service user safety. Those found to be MRSA positive (colonised with MRSA bacteria) can be managed to minimise the likelihood of MRSA infection during their in-patient admission and to protect other service users from the risk of colonisation.

5.2. WHO to screen:
(Refer to Organisational MRSA screening flowchart, Appendix 12.7)

Service users admitted to community hospitals (physical health and OPMH wards):
All service users admitted to community hospital inpatient areas (physical health & OPMH) should be screened for MRSA within 48hrs of admission, with the exception of:
Those admitted who are already receiving decolonisation/suppression treatment for MRSA: complete course, rest for 2 days then screen for MRSA.

Service users admitted to mental health/learning disability inpatient areas:
All service users admitted to MH/LD inpatient areas, with the following risk factors as stated below, should be screened for MRSA within 48hrs of admission.
- Those that are admitted from a non-mental health hospital e.g. physical health inpatient setting, Acute Trust or Community hospital.
- Those with a previous history of MRSA colonisation or infection.
- A service user admitted with an indwelling device e.g. urinary catheter or PEG
- A service user with a history of IV drug abuse who has a wound and/or abscess present on admission.
DH 2010 Operational Guidance includes other risk factor categories for MRSA screening: A SHFT local decision has been made by the microbiologist and Director of Infection Prevention and Control (DIPC) following analysis of data available to reduce the screening programme for mental health service users’ to include only the risk factors documented above.
These changes to DH guidelines will be monitored locally by the SHFT IPCT. Also refer to: - returning admissions to all in-patient areas within this section 5.2.

- Children:
Please note that service users under the age of 18 years in mental health and learning disability care settings do not require admission screening unless - already in the high risk group e.g.
   I. Children with intravenous lines / invasive devices.
   II. Children with long-term conditions e.g. cystic fibrosis
   III. Children who are regularly admitted as emergencies (DH Operating guidance (3) 2010).
Service Users admitted to LNFH for Surgical pre-assessment screening

Service users awaiting elective admission must be routinely screened for MRSA as close to their procedure/admission as possible (within 12 weeks) for all types of surgery excluding implants. For implant surgery e.g. hernia mesh, patients’ must be screened again after 6 weeks if surgical procedure breeches this timeframe. The decision of timeframes was made locally at SHFT with consultant microbiologist and IPCT.

Please NB: the whole pre-assessment process is only valid for a 3 month period, therefore if this timescale is breeched the pre-assessment process inclusive of MRSA screening must be repeated.

MRSA screening is part of this process with the exception of:-
- Day case ophthalmology
- Day case dental
- Day case endoscopy
- Minor dermatology procedures, e.g. warts/lesions or other liquid nitrogen applications.

SHFT do not perform surgical procedures on Children at LNFH theatre dept, if any pre-assessment screening was requested by the acute trust then follow their pre-assessment guidelines and contact their IPCT for further advice.

SHFT do not perform obstetric surgery at LNFH theatre dept. If any pre-assessment screening was requested by the acute trust then follow their pre-assessment guidelines and contact their IPCT for further advice.

Laboratory request forms should be completed and clinical details should clearly state pre-admission screen.

The pre-assessment screen should comprise of:-
- Nose and Groin swabs
- Wound/skin lesions: one swab from each site; clearly identifying sites
- Invasive devices: insertion sites e.g. PEG, IV, tracheostomy
- CSU if catheterised at the time of screening, taken aseptically from the sample port
- Site of previous MRSA colonisation/infection

Pre-assessment clinics must ensure there are clear arrangements for checking, documenting and acting upon the results of screening.

If a patient is found to be MRSA positive by the pre-assessment process then follow the MRSA surgical pre-assessment flowchart (for use at LNFH)

Appendix 12.8

Pro-actively managing MRSA pre and peri-procedure will improve service user outcomes and reduce the risk of MRSA transmission during clinical stay / intervention.
Returning Admissions to All Inpatient Areas (including, mental health & learning disability)

Service users returning back to SHFT inpatient areas following investigations or procedures carried out at an acute or community physical health environment (step up for emergency care) must be screened for MRSA if their stay was greater than 48 hours.

Regular attenders to inpatient areas for medical/surgical treatment

Those service users who are not in-patients but attend hospital regularly to undergo a course of medical or surgical treatment over a period of time should be screened at the beginning of their treatment and then at (monthly intervals) and again at the end of their treatment e.g. blood or platelet transfusion, administration of IV antibiotics, joint injections, chemotherapy.

5.2.1 MRSA Contact screening:

- **Physical health, community Hospital inpatient areas:**
  A single contact screen for service users’ exposed to someone identified as MRSA positive for greater than 24 hours is required.

- **OPMH in-patient settings:**
  Contact screening is only required if the service user’s bed space is in a bay and service users’ have been exposed to someone identified as MRSA positive for greater than 24 hours.

  No contact screening is required if the service user has own bedroom (Decision made on the basis that all care will be provided within the service user’s room).

  **An exception to the above:** would be any service user who may have risk factors for MRSA colonisation. If so an MRSA contact screen will be required. Contact the IPCT for further advice if required.

- **Within mental health / learning disability inpatient settings:**
  Contact screening is not required.

  Sites screened and results must be recorded in the medical notes. The service user informed of the result if positive and managed according to the Trust’s MRSA Policy.

  Service users will need clear information about when they will be screened, their results and any suppression treatment required, (Clean Safe Care 2008).

5.2.2 Refusal of MRSA Screening: Action to be taken if a service user refuses MRSA screening or suppression therapy:

- Provide a clear explanation to the service user explaining the rationale for the above measures.

- Explain the potential risks to the service user of not undertaking the above measures.
• Clearly document the service user’s reasons for refusal of screening and suppression therapy in the medical/relevant notes and complete an incident form.
• Inform the service user’s medical consultant/GP.

A service user should not be refused treatment, investigations or therapy because of a positive MRSA status.

5.2.3 **Staff screening for MRSA:**

Staff carriage of MRSA is usually transient and easily removed with good hand hygiene, therefore routine screening of staff is not recommended practice as healthy staff with intact skin will encounter transient colonisation through contact with colonised service users and their immediate environment. (Coia et al 2006). Effective hand hygiene before and after each service user contact is essential.

Staff with any skin lesions must ensure personal wounds are covered with a waterproof dressing. If lesions persist, staff should contact their GP or Occupational Health Department. Following an individual risk assessment, screening may be appropriate. It is essential that any staff member who has direct contact with service users and has a visible skin lesion e.g. face or hands that cannot be covered, should report to Occupational Health for advice prior to working.

Screening of staff may be recommended during outbreak situations if transmission (new cases) continues despite active infection prevention and control measures. This will be undertaken with direction from the Infection Prevention and Control Team, Occupational Health Department and in some instances from the microbiologist. Care is needed to distinguish between transient carriage (which is lost within a day or so of removal from MRSA positive patients and carries little risk of onward transmission) and prolonged carriage (especially associated with skin lesions and throat colonisation). This will be achieved by screening staff as they come on duty at the beginning of their shift.

The screen will consist of:-

Nose, groin, and any skin lesions, throat or Sputum specimen: for staff with a productive cough, prior to commencement of their shift.

Staff MUST NOT undertake self-screening.

Staff found to be MRSA positive by Occupational Health Department/GP will be treated with empathy, respect and in confidence and will commence a topical treatment regime for 5 days in an attempt to eradicate MRSA (see treatment regime page 11 – 12). Staff can continue to work if MRSA positive once topical treatment has been commenced providing they do not have a known skin condition e.g. eczema/psoriasis or hand lesions or other open uncovered wounds (Coia 2006). This decision should also be based on local risk assessment and potential risks to service users. For further advice contact the IPCT. It is recommended that 3 screens at weekly intervals (whilst not receiving antimicrobial therapy), should be performed before the staff member can be considered clear of MRSA colonisation.

Staff members found to be persistently colonised/infected will be managed on an individual basis by Occupational Health with advice from a consultant microbiologist.

No MRSA pre-employment screening is currently required.

5.3 **HOW to Screen – refer to Appendix 9.5**

MRSA screening should be performed using a basic charcoal swab. The swab is to be used dry as per manufacturer’s guidance.

Staff must perform hand hygiene prior to obtaining the swab.
5.3.1 **Sites to Screen:**
Prior to screening a full explanation of why the test is required and how it will be performed should be given to the service user.

- **Nose:** Use the same swab inside both right and left nostrils (anterior nares, fleshy part of nose)
- **Groin:** Use the same swab for both groin sites (right and left)
- **Any breaks in the skin/lesions/wounds:** one swab from each site; clearly identify which sites have been swabbed on micro-form or via electronic requesting system. Wounds should be cleaned prior to taking the swab to remove any superficial bacteria / slough that may affect the result.
- **Invasive devices:** Insertion sites for devices in-situ at time of screening e.g. IV / PEG site.
- **CSU:** Urine sample if service user has a catheter in situation at the time of screening. Specimen must be taken using an aseptic technique from the designated port not the specimen collection bag.
- **Sputum specimen:** for patients’ admitted with a productive cough (Coia et al page S20, 2006).
- **Any other site that has been previously identified as MRSA positive.**

Specimens must be correctly labelled with the service users details. The laboratory will reject unlabelled specimens. Swabs should be received by the laboratory within 24 hours if the MRSA bacteria is to remain viable for testing. If there is a delay in transport - store swabs in a specimen refrigeratator. (MRSA admission screens can be transported over the weekend period via Trust agreed taxi provider).

Specimens requested without an indication for screening may be rejected by the laboratory. Clinical details must include current antibiotic therapy.

A record of the sites screened must be recorded in the patients’ notes.

It is the responsibility of the person sending the specimen / or nominated other to check the result and ensure this is clearly documented in the service users’ clinical records.

5.4 **Admission Octenisan anti-microbial skin washes.**

**From April 2016 All** admissions in Physical health wards & OPMH organic wards must be given Staphylococcus aureus protection using topical antimicrobial skin washes to commence after the MRSA admission screen has been taken. Refer to appendices 9.13 & 14.

- Octenisan wash once daily until screening results known

Exceptions for use:-
- Those patients’ identified with allergy to antimicrobial product or
- Documented refusal by patient.

**If MRSA admission screen tests negative**, Octenisan wash can stop when bottle of Octenisan is used up (usually about 3 days, depending on size of the service user).

**If MRSA admission screen tests positive**, to continue on Octenisan body washes and add Mupiricin (Bactroban nasal cream), as per MRSA suppression therapy regime for a further 5 days (Refer to section 5.2 & 5.2.3 of this policy).
Please note: There is no requirement to conduct Octenisan washes as part of admission suppression therapy in OPMH functional wards, MH and LD in-patient areas.

5.5 MRSA Suppression Treatment for MRSA positive In-patients

5.5.1 Topical suppression treatment for reduction of MRSA:
All adult in-patients found to be MRSA positive should receive topical treatment as an attempt to reduce the amount of MRSA bacteria on the skin, and to reduce the subsequent risk of infection, unless there are contra-indications or clinical / mental health reasons why this is not appropriate, (in these circumstances the reason for not decolonising the service user must be documented in medical/nursing notes) & an incident report completed.

Commence the MRSA Care pathway - Appendix 12.15

After giving the first topical treatment for 5 days wait 2 days before conducting clearance screening. If screening results still detect MRSA, prescribe a consecutive second course of treatment.

A maximum of 2 treatment regimes are recommended over a 6 month period and can be given consecutively if the patient returns positive MRSA screening results.

5.5.2 Products and Regime for MRSA suppression therapy.

When topical MRSA treatment is performed in an attempt to reduce MRSA bacteria colonisation, the nose, skin and hair must all be treated using the following regime:

5.5.3 MRSA Suppression Treatment Regime for adult service users’ in-patient areas

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Product</th>
<th>Directions for use</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily shower, bath or Blanket bath of skin</td>
<td>Octenisan wash. (Topical antimicrobial hair and body wash lotion)</td>
<td>Apply product directly to wetted skin using a disposable cloth OR apply directly to damp wash cloth. <strong>DO NOT DILUTE.</strong> <strong>Use approx 50 mls - depending on size of the service user.</strong> (Consider using a compatible skin cream if skin becomes dry eg. Diprobase - seek advice from pharmacist). Wash the body from head to toe, pay particular attention to axillae (arm pits), groin and perineum, buttocks &amp; other skin folds. Allow a minimum contact time of 1 minute. Rinse off thoroughly. Dry with clean towel, put on clean clothing / bedding.</td>
<td>Once daily for 5 days. (longer courses are not more effective).</td>
</tr>
<tr>
<td>Hair Wash</td>
<td>Octenisan wash. (Topical antimicrobial hair and body wash lotion), as above</td>
<td>Wash hair with this product in place of shampoo. Dry with clean towel.</td>
<td>Minimum of twice during the 5 day suppression therapy period.</td>
</tr>
<tr>
<td>Nasal clearance</td>
<td>Mupirocin ointment 2% (Bactroban)</td>
<td>Apply to nostrils 3 times a day. A small amount (size of match head) to be placed on cotton bud or tip of clean little finger and applied to each nostril. Pinch the sides of the nose together to spread the ointment. Service users should be able to taste the ointment at the back of their throat.</td>
<td>5 days</td>
</tr>
</tbody>
</table>

After satisfactory completion of the daily treatment, clean clothing, bedding and towels must be provided.
5.5.4 **Octenisan and/or Mupirocin allergy or Resistance:**
For service users with a documented Octenisan or Mupirocin allergy or resistance, discuss with microbiologist in the first instance, and consider using the alternative products as per table below.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Product</th>
<th>Directions for use</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily shower, bath or Blanket bath of skin</td>
<td>Dermol 500 Or Stellisept-Med</td>
<td>Apply product directly to wetted skin using a disposable cloth. <strong>DO NOT DILUTE.</strong> Use approx 30 - 50 mls - depending on size of the service user. (Consider using a compatible skin cream if skin becomes dry eg. Diprobase, consult pharmacist). Wash the body from head to toe pay particular attention to axillae (arm pits), groin and perineum, buttocks &amp; other skin folds. <strong>Contact times:</strong>- Dermol 500: contact time of 5 mins but manufacturers state bacterial kill 0 mins. Stellisept-med: contact time of 30 seconds Rinse off thoroughly. Dry with clean towel, put on clean clothing / bedding.</td>
<td>5 days. (longer courses are not more effective).</td>
</tr>
<tr>
<td>Hair Wash</td>
<td>Dermol 500 Or Stellisept-Med</td>
<td>Wash hair with this product in place of shampoo. Dry with clean towel.</td>
<td>Twice during the 5 day suppression therapy period.</td>
</tr>
<tr>
<td>Nasal clearance</td>
<td>Naseptin cream (Clorhexidine hydrochloride 0.1% &amp; Neomycin sulphate 0.5%)</td>
<td>Apply to nostrils 4 times a day. A small amount (size of a match head) to be placed on a cotton bud or tip of service users clean little finger, and applied to each nostril. Pinch the sides of the nose together to spread the ointment. Service user should be able to taste the ointment at the back of their throat.</td>
<td>10 days</td>
</tr>
</tbody>
</table>

**Please NB:**
*Not suitable for service users with a Chlorhexidine or peanut allergy.*
Neomycin allergy is rare but can occur.
For contraindications, special warnings and other interactions, please refer to the latest British National Formulary (BNF).

Suppression therapy must be prescribed by a doctor and should be discontinued immediately and the doctor contacted if the service user experiences excessive skin irritation or allergic reaction.

5.5.5 Suppression treatment of inpatients with active skin disease (e.g. eczema, psoriasis).
If service users’ have eczema, dermatitis or other skin conditions, attempts must be made to treat the underlying skin condition and further advice must be sought from a consultant dermatologist and microbiologist.
Treatment with topical agents alone is unlikely to be successful.

5.5.6 MRSA suppression treatment of inpatients with a wound infection, chronic wounds or long term invasive devices:
The hospital inpatient will require appropriate antibiotic treatment for MRSA wound infection, plus suppression therapy.
(Refer to suppression therapy regime within this policy section 5.2 - 5.2.3)
Wounds should be managed as per wound care plan / Tissue Viability care plan. Refer to TVNs for wound care advice.
Successful treatment of clearing MRSA from chronic wounds are unlikely.
Where risk factors for long term carriage of MRSA are present refer to medical microbiologist at nearest acute trust if you require further treatment advice.

5.5.7 Discharge prior to completion of suppression treatment:
If a service user confirmed as MRSA positive, is discharged prior to the completion of suppression therapy it will be necessary to arrange where possible for the treatment to be completed post discharge – particularly if further invasive procedures are likely in the future.

5.5.8 If the service user is confirmed MRSA positive following discharge the appropriate GP / Integrated community team (ICT) if care being provided or acute Trust if step up care was required should be informed ASAP.
For the management of MRSA in mental health and learning disability in-patient environments please refer to section 5.7.

For the management of service users with MRSA in community settings e.g: those who are not in-patients’, please refer to 6.0.

5.6 MANAGING MRSA WITHIN IN-PATIENT ENVIRONMENTS: PHYSICAL & OLDER PEOPLES MENTAL HEALTH.

STEP ONE: MRSA admission screening is required.

STEP TWO: Octenisan washes are required as part of admission suppression therapy.

STEP THREE: Start MRSA Suppression Therapy/ treatment, for In-patients who tested MRSA positive.

(Refer to MRSA SOP Appendix 9.4)

Management of the MRSA positive inpatient physical and OPMH

5.6.1 Pre 48 hours: Inpatients identified as MRSA positive on admission screening.

- If the wound swab returns an MRSA positive result, contact the IPCT for further management advice.
- All inpatients found to be MRSA positive should be informed of their result and given an information leaflet.
- Commence MRSA care pathway (refer to appendix 9.15).
- Commence topical suppression therapy within 24 hours.
  (2 Treatments in a 6 month period can be consecutive). Refer to suppression therapy treatment regime page 5.2 – 5.2.3.

Supression therapy should be discontinued immediately and the doctor contacted if the service user experiences excessive skin irritation or allergic reaction.

- After 5 days of suppression therapy rest for 2 days then rescreen for MRSA.
- Check for results 48 hours after screens have been received in the laboratory.
- If all screen sites are not available re-check in another 24hours.
- Check that all sites listed on the record of screening have been reported and that you have the results for the complete screen taken.
- It is the duty of the clinician taking the swabs to ensure that the results are collected, recorded and acted on (as appropriate). Results are usually available between 48-72hrs after swabs have been received in the laboratory. This responsibility can be delegated through handover eg nurse in charge/medical staff/ward clerk. (Refer to MRSA SOP appendix 9.4.)
- It is recommended that a minimum of 3 screens at weekly intervals are taken whilst the service user is not receiving antimicrobial therapy and if still an in-patient, (Coia 2006), before de-isolation can be considered by the IPCT.
- Service users’ who remain MRSA positive following 2 courses of suppression therapy, staff to :-
  1) Contact IPCT for further management advice
  2) IPCT to consider the use of Octenisan washes for the duration of their in-patient stay.
• The service user must have own bedroom / ensuite which should receive a daily clean using Actichlor Plus. Encourage service user to use own designated toilet rather than communal toilets.
• If the service user was previously in a bay and moved into a side room on receipt of MRSA positive result, then terminal clean of previous bed-space is required.
• If the service user has extended leave or discharged this room should receive a terminal clean (refer to trust isolation policy SH CP 32 appendix 9.5).
• Any care provided e.g. wound care, personal care if required or medication injections, should take place in the service users bedroom.
• Any waste generated will be infectious waste.
• Bedlinen / towels / rip sheets if appropriate should be treated as infectious linen and needs to be sent to the external laundry contractor (not washed on site in a domestic washing machine).
• Ensure designated medical equipment as far as is reasonably practical and refer to trust decontamination of medical devices procedure SHCP 100 / manufacturer’s cleaning guidelines in regards to cleaning of equipment.
• In-patients must be isolated a single room, unless there are contra-indications or clinical / mental health reasons why this is not appropriate. Document reasons on care pathway.
• Contact relevant specialist teams (e.g. falls prevention team) who must agree with the ward based risk assessment, before informing the IPCT that you are unable to isolate a patient with a known resistant infection.
   If unable to isolate, risk assess infection risk posed to other patients. Contact the IPCT for further advice.

5.6.2 For patients’ who test positive and are unable to comply with isolation precautions (e.g. those that wander within Physical & OPMH).
• Contact the IPCT for further advice.
• The IPCT will consider whether to continue with Octenisan washes for the duration of their in-patient stay.

5.6.3 Post 48 hours: MRSA positive patients.

If the swab returns an MRSA positive result 48 hours or more after admission:
  ➢ Contact the IPCT for further management advice.
  ➢ This result will be reported as a post 48 hour by IPCT via their internal surveillance system
  ➢ Ward staff to record this case onto Ulysses as an MRSA post 48 hour positive case identified through swabbing due to clinical need.
  ➢ This case will require a local eRCA investigation led by the IPCT.
  ➢ Before commencing suppression therapy conduct an MRSA screen of the service user:- nose and groin, any other wounds/ breaks to skin, invasive devices .
  ➢ Then follow management of the MRSA positive in-patient (physical & OPMH section 5.3.1 of this policy).
  ➢ Consider if any contact screening is required.
   Please Note: A bay does not need to close to admissions whilst awaiting results of contact screens.

All other In-patients: known to be MRSA positive on admission (Physical & OPMH)

5.6.4 Inpatient Transfers
In-patient areas should be informed in advance (where possible) of the transfer of a service user who is known to be MRSA positive and any treatment/screening commenced to date.
• If SHFT transfer a patient to a different community hospital in-patient area within our trust (bed management decision) then MRSA screening will be required on admission to the new facility.
• If internal transfer to a different ward in the same community hospital no admission screening is required.
• Isolate on admission. If isolation cannot be achieved (e.g. for medical/mental health reasons) a risk assessment must be conducted/ relevant specialist team contacted to assist you with that risk assessment (e.g. falls prevention team), document in the service users notes/RIO, and record an incident log. Inform the IPCT if isolation cannot be achieved for further IPC management advice and to risk assess infection risk posed to other patients as a result of not being able to isolate.
• Staff to review notes and documentation, if service user was transferred from another care facility; check for an alert via the electronic results system or service user information systems.
• Ascertain any recent screening results/treatment from previous ward / IPCT.
• Review any invasive devices/wounds, and rule out any obvious clinical signs of infection.
• All new inpatient admissions must be routinely reviewed by a doctor.

5.6.5 If Known MRSA positive on admission, but newly identified at previous trust before transfer then:-
• Contact the IPCT for further management advice.
• Isolate in a side room / bedroom
• MRSA admission screen
• Continue with any ongoing suppression therapy from acute trust or commence suppression therapy treatment regime for 5 days (if not had 2 courses already)
• Two days rest when suppression therapy is completed
• Rescreen for MRSA follow the de-isolation screening process x3 screens 1 week apart off antimicrobial treatment, ensure all sites are included.
• If still positive after two suppression therapy treatment regimes, contact IPCT for further advice.
• Patients’ who test positive and are unable to comply with isolation precautions e.g. those that wander within Physical & OPMH, will be considered by IPCT whether to leave them on Octenisan washes for the duration of their in-patient stay.
• Manage as per section 5.3.1 of this policy

5.6.6 If previously known MRSA positive case admitted from home then:-
• Isolate in a side room
• MRSA admission screen
• Commence admission suppression therapy (Octenisan antimicrobial washes for 3 days)
• Treat the admission screen:-
• If positive – manage as positive case as per this policy section 5.3.1.
• If negative – de-isolate, no further screening required providing that:-
  ✓ Staff, have checked medical notes/ previous micro results and know that this patient has not had a recent MRSA infection / colonisation prior to current admission.
  ✓ All required sites are included as part of the admission screen e.g. any chronic wounds, and all screened negative.
  ✓ Staff have contacted the IPCT for further advice

5.6.7 Discontinuing Routine/ regular screening of patients known to be MRSA positive & de-isolation.
MRSA Screening can be discontinued and the service user de-isolated only if during the current admission:-
A minimum of 3 screens at weekly intervals are taken whilst the service user is not receiving antimicrobial / antibiotic therapy

All MRSA screening returns negative results.

There are no invasive devices

You have discussed this case with the IPCT

Exceptions to prevent de-isolation:-
Prior to specific medical interventions e.g. inserting a PEG
Pre-assessment screening prior to surgery

If patient is not de-isolated then all other IPC management principles as outlined in this policy continue whilst an in-patient.

5.6.8 **LNFH: Pre-admission procedure for elective surgical service users:**
If a service user is found to be MRSA positive at pre-assessment clinics the following actions must be taken:-

- The service user and GP should be notified by pre-assessment staff following a review of the results.
- The service user’s notes and electronic records should be alerted.
- Elective admission documentation needs to clearly state if an MRSA screen has been carried out and result.
- Any variance needs to be clearly documented, i.e. if the service user refuses the screen.
- The service user should be provided with an MRSA information leaflet with the treatment plan outlined. (Refer to appendices 9.9 – 9.12).
- Treatment will commence 5 days prior to elective admission, in order to reduce the bio-burden of MRSA and the risk of infection.
- On day 6 the service user is admitted to hospital for the elective procedure.
- If the elective procedure requires antibiotic prophylaxis, please ensure that the antibiotic selected has activity against MRSA: discuss with surgeon / microbiologist at nearest acute trust if unclear.
- The service user does not require re-screening for MRSA prior to admission, unless clinically indicated or advised by the IPCT or if the surgical procedure exceeds the 3 month validity of the pre-assessment process with the exception of elective implant surgery e.g. hernia mesh MRSA screening results should be no more than 6 weeks old.

**Elective admissions who do not attend pre-assessment clinics** (e.g. those that take last minute cancellation slots (less than 5 days before surgery) or those that refuse MRSA screening, should be:-

- Admitted into a side room on admission
- MRSA screened on admission (If patient refuses document in med notes and inform theatre staff, the anaesthetist and the surgeon).
- Washed in Octenisan
- Inform theatre staff, the anaesthetist and the surgeon re this case
- Results should be checked by ward staff within 72 hours
- Negative results no further action
- Positive results contact the surgeon and IPCT for further advice
- Inform the service users GP.

5.6.9 **MRSA in the operating theatre**
Every effort should be made to eliminate or reduce the bio-burden of MRSA prior to surgery, through antimicrobial suppression therapy and prophylactic antimicrobial therapy if appropriate. If this is not possible:-

- MRSA positive service users’ can be placed anywhere on the operating theatre list provided all surfaces and equipment used are cleaned between cases.
- Routine cleaning measures should be adequate provided 15 minutes elapses between the MRSA service user leaving the theatre and the next arriving in conventionally ventilated theatres. This allows for adequate air changes between service users’ (Coia et al 2006).
- Cover any affected lesions that are not involved in the surgical procedure.
- MRSA positive service users in recovery must be nursed with contact and standard precautions next to a dedicated hand-washing sink/alcohol gel dispenser at the point of use.
- At the end of the operating session the operating table must be cleaned with a Chlorine based disinfectant (1,000 parts per million of available chlorine) surrounding hard surfaces not directly in contact with the patient can be wiped down using Clinell sanitising wipes or as per manufacturers cleaning instructions. Use a hypochlorite solution for contact with blood (10,000 parts per million of available chlorine)
- Discard single use equipment as clinical waste.
- Surgical instruments requiring decontamination to be sent to Central sterilisation unit used by Trust (Synergy).
- Any re-useable anaesthetic equipment must be decontaminated as per the Cleaning of Medical Devices Appendix and manufacturer’s guidance.

5.7 Management of the MRSA positive inpatient in mental health / LD

Please note: For the Mother and baby Unit at Melbury Lodge please contact IPCT for further advice.

Not all service users within mental health and LD in-patient environments’ are screened for MRSA on admission, only those identified with risk factors. (Refer to section 5.2 who to screen and appendix 12.7 organisational MRSA screening flowchart).

When a service user screens MRSA positive:-

- Contact the IPCT for further management advice.
- This result will be reported by exception in IPC surveillance data (does not fit post 48 hr acquisition if not screened on admission). Therefore we will not know if your service user was already colonised with MRSA on admission.
- Ward staff to record this case onto Ulysses as an MRSA positive case identified through swabbing due to clinical need.
- This case will require a local eRCA investigation led by the IPCT.
- Before commencing suppression therapy can you please try to conduct an MRSA screen of the service user:- nose and groin, any other wounds/ breaks to skin, invasive devices if tolerated by your service user, any refusal must be clearly documented in medical notes (refer to refusal of MRSA screen 5.5.1.6) and complete an incident form.
- Ask your medical staff to prescribe suppression therapy, (refer to section 5.2 – 5.2.3)
- If your service user will tolerate suppression therapy, continue as per treatment regime.

Suppression therapy should be discontinued immediately and the doctor contacted if the service user experiences excessive skin irritation or allergic reaction.
- After 5 days of suppression therapy rest for 2 days then rescreen for MRSA.
- Check for results after 48 hours.
- The service user must have own bedroom / ensuite which should receive a daily clean using Actichlor Plus. Encourage service user to use her own designated toilet rather than communal toilets.
- If the service user has extended leave or discharged this room should receive a terminal clean.
- Any care provided e.g. wound care, personal care if required or medication injections, should take place in the service users bedroom.
- Any waste generated will be infectious waste.
- Bedlinen / towels / rip sheets if appropriate should be treated as infectious linen and needs to be sent to the external laundry contractor (not washed on site in a domestic washing machine).
- Ensure designated medical equipment as far as is reasonably practical and refer to trust decontamination of medical devices procedure SHCP 100 / manufacturer’s cleaning guidelines in regards to cleaning of equipment.

- Isolation of the MRSA positive service user will be difficult to achieve within MH & LD in-patient areas, those who are not skin dispersers or sputum colonised with productive cough can frequent communal lounge and dining areas, please ensure that these areas have enhanced cleaning with Actichlor Plus daily, and that staff clean frequently touched surfaces with Clinell sanitising wipes during their shift.
- If you have a service user with a wound on your ward, can you please make sure this wound is covered at all times until healed.
- Discuss with IPCT if you are concerned about the vulnerability of other service users on your ward with wounds / invasive devices so that IPC management plan can be agreed.

- **Wound care:** If MH & LD staff do not hold a competency in wound care refer to either tissue viability for assessment and a care plan or to the integrated community team (ICT) ASAP to manage the wound care of your service users.

- Any wound care should be conducted within her bedroom.

- **Long term suppression therapy using Octenisan combined with wound care plan may be considered by IPCT and microbiologist as part of on-going care until a chronic / significant wound has healed.**

### 5.8 IPC Principles: For management of ALL in-patient areas

Safe effective and prompt detection and management of patients with MRSA requires adherence to the following principles.

#### 5.8.1 **Diagnosis:**

Service users must not be refused treatment, investigations or therapy because of their MRSA status, and must be treated like any other client – with dignity and respect. The service users ‘diagnosis’ must be ‘medical in confidence’.

#### 5.8.2 **Antimicrobial prescribing:**

- Medical staff to avoid unnecessary antibiotic prescribing to reduce selection pressure for resistant organisms including MRSA.
- Avoid prescribing antibiotics known to be associated with increased MRSA incidence in hospitals including: Fluoroquinolones, third generation Cephalosporins, Macrolides and Co-amoxiclav (Aldeyab MA et al 2008).
- Reduce the use of broad spectrum antibiotics to reduce emergence of multiply resistant organisms.
- Consider the risk of MRSA as a potential pathogen and prescribe appropriate antimicrobial therapy and surgical prophylaxis when indicated.
- Refer to SHFT medicines management anti-microbial strategy, and for antimicrobial prescribing guidelines / appropriate antibiotic choice refer to HIOW community antibiotic guidelines and University hospital Southampton antimicrobial guidance used at LNFH.
- Antimicrobial prescribing will be monitored by the medicines management team as per their anti-microbial strategy.

5.8.3 Surveillance:
- Local surveillance will be performed in order to monitor trends in MRSA and facilitate prevention and control measures.
- SHFT will participate in mandatory surveillance schemes relating to MRSA as required by the Department of Health.

5.8.4 Standard and contact precautions:
- The implementation of routine standard precautions (refer to Trust standard precautions procedure SHCP19) is fundamental to the management and prevention of MRSA.
- High standards of hand decontamination before and after contact are required to minimize the risk of cross infection, either thorough hand washing with soap and water or the application of alcohol hand sanitiser. NB This must also be undertaken after removing gloves.
- Staff with any cuts/abrasions / breaks to the skin must cover these with an impermeable dressing. Staff with eczema and/or psoriasis must be referred to occupational health or consult their GP to ensure their skin condition can be managed.
- Disposable gloves and aprons must be worn by all staff handling the service user or having contact with their immediate environment.
- This also applies to visitors who assist with the service user’s personal care. Relatives/visitors that only have social contact e.g. holding hands do not require PPE but must wash their hands after leaving the room.

Staff entering and leaving the isolation room of the MRSA positive in-patient.

<table>
<thead>
<tr>
<th>Before entering the source isolation room/areas</th>
<th>Inside the source isolation room/area</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Remove white coats, jackets or outside clothing</td>
<td>• Perform service user task (change disposable gloves, and wash hands if they become contaminated during a procedure).</td>
</tr>
<tr>
<td>• Collect all equipment needed to avoid entering and leaving the infected area unnecessarily.</td>
<td>• Do not sit on the bed.</td>
</tr>
<tr>
<td>• Ensure arms are bare below the elbows to facilitate hand hygiene.</td>
<td>• Do not touch the service user or anything else in the room unnecessarily.</td>
</tr>
<tr>
<td>• Clean hands with soap and water or alcohol hand sanitizer</td>
<td></td>
</tr>
</tbody>
</table>
5.8.5 **Isolation:**
Service users who are MRSA positive should be isolated. (Refer to the Isolation procedure SH CP 32).
If the admission/transfer of a service user is from another healthcare setting, a thorough handover is essential. Staff must be able to risk assess the situation and allocate an appropriate bed space / single room for the service user.

**It is recognised that isolation will not often be possible within mental health and learning disability inpatient settings following a risk assessment and occasionally in community hospitals where the service users’ acute medical condition e.g. falls risk, aspiration risk may compromise safety. In these circumstances:-**

- Consult other specialist team for further management advice and options available that may help to facilitate isolation e.g. Falls prevention team.
- Consult the IPCT for further advice.
- Actions/decisions made must be documented in the service user’s medical notes, care pathway and an incident report completed.
- The service user must be isolated at the earliest possible and safe opportunity.
- If isolation in a side room cannot be achieved in these situations, manage this patient with all other source isolation precautions, following discussions with the IPCT.
- And avoid placing a service user in the same bay as other potential high risk service users e.g. those with wounds or invasive devices.

A service user is regarded as “high risk” for the carriage or acquisition of MRSA, if they fulfil one or more of the following criteria:-

- Have been MRSA positive at any point in the past
- Had a previous admission to any healthcare facility in the last 6 months
- Have been admitted from a communal / shared living environment (nursing/rest home, prison, military barracks)
- Have been admitted with indwelling devices (urinary/supra-pubic catheters, PEG, PICC, tunnelled lines)
- Have chronic open wound(s) (skin breaks, pressure sores, ulcers or cellulitis)
- Have a chronic skin condition (psoriasis, eczema, dermatitis)
- Have been or are an IV drug user
- Have been or are a healthcare worker
- Are admitted for a high risk procedure (joint replacement or implant surgery)

5.8.6 **When conducting a risk assessment of isolation area required for the MRSA positive in-patient, consider the following points:**

- The site of MRSA colonisation or infection e.g. MRSA positive in the sputum with productive cough, in an uncovered discharging wound, invasive devices or MRSA positive with severe skin shedding (eczema, psoriasis, other) condition.
- The ability of the service user to comply with Infection Prevention advice e.g. dementia, confusion, learning disabilities.
- The consequence of MRSA in the environment and to other service users due to the risk of invasive infection and difficulties in treatment.
<table>
<thead>
<tr>
<th>MRSA strains</th>
<th>Route of transmission</th>
<th>Evidence for spread in hospital</th>
<th>Antibiotic resistance</th>
<th>Other factors patient susceptibility / dispersal risk</th>
<th>Risk</th>
<th>Isolation in side room</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRSA 15 &amp; 16</td>
<td>Contact</td>
<td>Strong</td>
<td>Moderate</td>
<td>i) Skin shedder (e.g. eczema, psoriasis) ii) sputum colonised and productive cough iii) Uncovered discharging wound</td>
<td>High</td>
<td>Yes, throughout admission</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>All others</td>
<td></td>
<td>Yes throughout admission unless de-isolated by IPCT</td>
</tr>
<tr>
<td>MRSA 17</td>
<td>Contact</td>
<td>Strong</td>
<td>Serious</td>
<td>i) Skin shedder (e.g. eczema, psoriasis) ii) sputum colonised and productive cough iii) Uncovered discharging wound</td>
<td>High</td>
<td>Yes throughout admission</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>All others</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

5.8.7 **Isolation Facilities:**

1st choice: Single room with ensuite facilities or single room without ensuite facilities but with designated toilet facilities.

2nd choice: Cohort Bay: Where there are several cases of MRSA (of the same strain) as single room isolation cannot be achieved. Before establishing a cohort bay, discuss with IPCT, bed manager and site-co-ordination teams. Isolation signs must be visible for all service users colonised or infected with MRSA. (Refer to Isolation policy SH CP 32).

The isolation room door must be kept closed to minimize any spread to adjacent areas. If this is likely to compromise service user care, for instance the elderly-confused, a risk assessment must be made regarding whether the door may be kept open. However the door must be closed during procedures that may generate aerosols, such as chest physiotherapy for the MRSA sputum positive service user or bed making.

5.8.8 **Action to take if there is no isolation room available.** Where single room isolation cannot be achieved, an escalation process must be followed informing the bed manager/manager in charge and a member of the IPCT. An incident report should be completed if there are delays in isolating a service user or if isolation facilities are unavailable.
5.8.9 **Service user’s environment and equipment used**
The ability of MRSA to survive in dust demonstrates the need for dust minimization from contact surfaces, it is also central to minimising the spread of MRSA. (Refer to Isolation policy SH CP 32 appendix 9.4 & 9.5), for environmental cleaning guidance for housekeeping/facility staff and terminal clean after the service user is discharged).

All linen from service users infected or colonised with MRSA should be considered to be infected, including bedding and adjacent curtains. Linen should be placed in an alginate bag then into an outer clear linen bag before leaving the isolation room.

Hoist slings must always be designated a single service user use item. When the service user is discharged items must be sent to the laundry or washed on site in a designated industrial washing machine at the correct temperature as per manufacturer’s instructions.

5.8.10 **Equipment cleaning**
Equipment e.g. sphygmomanometers and cuffs, stethoscopes, blood glucose monitoring machines and commodes should be designated as single service user use and thoroughly cleaned and dried after every episode of use in accordance with the trust cleaning and decontamination policy, manufacturers cleaning instructions and following service user discharge or transfer.
Use disposable equipment wherever possible.

5.8.11 **For daily Isolation Cleaning with Actichlor Plus (e.g. Bed-space or bay)**
Daily cleaning is essential to reduce dust and prevent the accumulation and growth of micro-organisms. Dust particles are mainly skin scales, respired droplets and fibres from clothing.
For procedure / requirements (Refer to Trust Isolation policy SH CP 32 appendix 9.4).
To organise this cleaning contact your facility contractor or Medirest helpdesk.

5.8.12 **Terminal Cleaning**
- Cleaning is essential when the service user no longer requires isolation nursing. The room, bed and other fixtures and fittings e.g. curtains / blinds, must be thoroughly cleaned after discharge of an MRSA positive service user or if the service user no longer needs isolation precautions. (Refer to Isolation policy SH CP 32 appendix 9.5).

It is the modern matron’s responsibility to ensure that all staff understand:-
- Who is responsible for cleaning and frequencies within in-patient environments.
- The appropriate disposal of contaminated waste and linen
- The correct equipment cleaning and decontamination required
All these measures must be rigorously applied.

5.8.13 **Movement of MRSA positive hospital inpatient – attending other clinical settings eg. X-Ray.**
The movement of service user’s with MRSA should be minimised to reduce the risk of cross-infection. Where service users need to attend departments for essential investigations, any risk posed to other service users’ should be managed by standard precautions and contact infection prevention procedures.

5.8.14 **Staff who are transferring hospital inpatients must ensure that:-**
- The receiving area is aware of the service user’s MRSA status.
- Unless an emergency situation, the service should be wearing clean clothes when transported in a wheelchair and clean bed linen when transported on a bed/trolley.
- Skin lesions must be covered, e.g. with a film/impermeable dressing.
- MRSA service users are not left waiting next to service users with open wounds/lesions.
- All transfer equipment is decontaminated after use including wheelchair, trolley. The x-ray table must be decontaminated with detergent and water / Clinell sanitizing wipe and dried after every service user episode. The person carrying out the decontamination must be wearing PPE (minimum of gloves and aprons).
- All linen should be treated as infected and disposed of accordingly (refer to Standard Precautions Appendix)
- Porters transferring a service user must be instructed by ward staff on standard precautions required when entering and leaving an isolation room e.g. hand hygiene and wearing PPE.
  Protective clothing should be removed once the service user has been transferred into a wheelchair/onto a trolley and hands decontaminated before leaving the room.
  Please note that PPE (gloves & aprons) are not required to be worn by staff when the service user is in transit.
  Don PPE if contact with the service user is required during the transfer e.g. (vomit).
- The wheelchair/trolley must be cleaned after each service user, wear PPE and clean using either detergent and water or a Clinell sanitising wipe, finally decontaminate hands.
- When service users are transferred on their bed, the bed linen should be clean. Hands should be decontaminated before and after the transfer. A clean plastic apron should be worn if contact with the bedframe is anticipated.

5.8.15 Visitors to all in-patient areas

Social contact DOES NOT pose a significant risk of colonisation of MRSA.

There must be no restriction upon visitors and they must be assured that they are at no special risk. If a relative is immunocompromised, experiencing active eczema or awaiting surgery, they must discuss this with their GP prior to visiting.

It is not necessary for visitors to wear protective clothing but washing their hands before and after leaving the care setting is strongly advised.

NB: The only exception would be if a relative was actively involved in the care of the service user.

Visitors must be encouraged to use the chairs to sit on and not sit on the bed.

A notice must be clearly displayed detailing isolation room precautions, (this will be risk assessed in mental health settings) and information leaflets regarding general principles of basic infection prevention and control available for the service user and visitors.

5.8.16 Discharging of MRSA positive service user

Ward staff discharging the service user must provide a thorough ‘handover’ to the relevant agencies involved in the ongoing care e.g. care home manager, community care team, virtual ward, general practitioner, physiotherapist/ occupational therapists and podiatrist.

Transfer/referral letters/discharge summaries must clearly state the MRSA status of the service user.

If good basic hygiene precautions are followed people colonised with MRSA are not a hazard to other members of their family and visitors. This includes healthy babies, children and pregnant women. MRSA must not be a reason for preventing admission to a nursing or residential home.
Service users’ must be encouraged to continue with their normal activities of daily living and visitors must be assured that they are at no special risk. If they have any special concerns they must discuss these with their GP.

Service users being discharged home to the care of their family with input possibly from home carers, therapists and district nurses are described as low risk.

5.8.17 **Deceased service user**

In the event of death observe the same infection control precautions taken when the service user was alive.

- Should be handled using standard precautions.
- Any wounds/lesions should be covered with an impermeable dressing.
- Inform the mortuary that the service user was MRSA positive.

(Refer to Care of the Deceased policy SHCP 23).

5.8.18 **Documentation:**

- Ensure the MRSA status of all service users is accurately recorded in health care notes (paper or electronic e.g. RIO), including information on suppression therapy and specimen results. (Refer to MRSA screening form appendix 12.6). This is the responsibility of the health care professionals caring for the service user, and is essential to ensure safe, effective care.
- Ensure the MRSA care pathway is commenced (see Appendix 12.15).
- The MRSA status of service users is alerted via the electronic microbiology results server (this may differ between our acute laboratories who process results for SHFT).

5.8.19 **Communication and service user information:**

- Provide service users and their visitors with accurate information regarding their MRSA management and a Trust leaflet, (MRSA appendix 12.16 & 12.17).
- Ensure the service users’ MRSA status, information on suppression therapy and specimen results are communicated to other health care professionals / health care facilities on transfer and discharge, in order to facilitate safe care.
- The MRSA Appendix can be located on the Infection Prevention and Control web-page available via the staff intranet and SHFT internet public website in order that the information contained within it is available to primary and community care providers, service users and the public.

5.8.20 **During the service user stay all service users should:-**

- Be actively encouraged to keep the bed space free from clutter to enable cleaning.
- Be actively discouraged from touching wounds / invasive devices.
- Be actively encouraged to observe good hand hygiene at every opportunity including using the hand gel if situated at the bed-side.
- Be encouraged to challenge poor / lack of hand hygiene by staff members.

5.9 **General IPC principles for out-patients who are MRSA positive.**

All service users with MRSA may visit other departments for consultations, investigations or treatment.

- Standard precautions are usually adequate in most departments, knowing the MRSA status of a service user in advance will allow staff to call the service user in a timely manner and to take appropriate and any additional Infection prevention precautions necessary.
- The service user can be seen at any time during the OPD session, providing staff implement contact and standard precautions.
• Staff in close contact with the service user should wear disposable aprons and gloves to be disposed of as infectious waste.
• Any linen used during the OPD appointment should be managed as infectious waste.
• Staff hands should be decontaminated after contact with the service user.
• Equipment used in contact with the service user should be adequately decontaminated after use, refer to manufacturers cleaning guidelines and decontamination of medical devices procedure SHCP 100.
• There is no requirement to take the OPD room out of action following a consultation of a known MRSA positive service user.
• A terminal clean of the OPD room is not required.
• Environmental surfaces in contact with the service user can be wiped clean using Clinell sanitising wipes. Any blood spillage to be cleared up as per trust standard precautions procedure using a hypochlorite solution. OPD clinic rooms should be on a scheduled cleaning regime as per their use.

5.10 Service user with MRSA bacteraemia (blood stream infection, BSI):
The Acute Trust where the microbiology laboratory processes MRSA specimens is required to report all results of MRSA bacteraemia onto the national data capture system regardless of where the specimen comes from. It will then be allocated to the relevant clinical commissioning group (CCG) or acute trust, who will then be responsible for the initial post infection review (PIR) investigation, through collaboration with the organisations involved in providing care.
In exceptional cases where the CCG / acute trust is unable to determine which organisation should be assigned the case of MRSA blood stream infection an arbitration is required, the final decision will be made by the director of public health.

Clinicians are required to report MRSA BSIs onto the Trust Ulysses incident reporting system.
If the patient is alive then Clinician with the specialist support of the IPCT are required to undertake an initial investigation to attempt to identify the reason for the bacteraemia and send to the PIR lead to put into their report. The clinician and IPCN attend a PIR panel within 14 days of receipt of result.

If the patient dies of MRSA bacteraemia then additional to the initial PIR investigation this case becomes a SIRI. The IPCT will notify clinicians of the need for an eSIRI and can provide support with this Investigation as required. Timelines as per SHFT SI policy.

A Serious Incident panel is held and any lessons learned identified. Action plans as a result of the SIRI should be reported back to the Director of Infection Prevention and Control. Action plans will be managed and monitored locally.

5.11 Outbreaks of MRSA:
• An outbreak of MRSA may be declared if there is an exponential rise in the number of cases in one area.
• Assessment and management of the outbreak will be led by the IPCT in consultation with a consultant microbiologist and DIPC.
• Screening of staff for MRSA carriage will only be carried out following decision of the microbiologist.

A ward closure:
• A ward closure to new admissions may need to be considered following a risk assessment. Factors influencing consideration of ward closure are:-
  i) Risk status of other patients to be admitted e.g. recent surgery with wounds, chronic wounds, presence of invasive devices, chronic underlying illness.
  ii) Number of MRSA cases in the ward
iii) MRSA strain e.g. virulence, resistance.
iv) Availability of alternate facilities for new admissions and bed pressures
v) Staffing levels

- Before re-opening to new admissions, effective environmental decontamination is required.

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### 6.0 MANAGING MRSA IN COMMUNITY SETTINGS

Which includes, adult physical & OPMH, service users’ in their own homes, TQTtwentyone (social care), nursing/residential facilities, podiatry and health centres, mental health, learning disabilities, children’s services.

As with our inpatients who are MRSA positive, service users in the community must not be refused treatment, investigations or therapy because of their MRSA status, and must be treated with dignity, respect and in confidence.

The same aspects of care are to be applied to our community service users who are MRSA positive.

In addition SHFT recognises that many service users being cared for in their own homes may have long standing complex physical health conditions that may make them more susceptible to MRSA acquisition. Some service users may have chronic MRSA colonisation, it is therefore important for SHFT staff to adhere to standard precautions to prevent onward transmission to other service users’.

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### 6.1 MRSA SCREENING in community settings:

**Routine MRSA screening of service users’ in the adult community setting, childrens’ services, mental health and learning disability social care settings is not necessary unless clinically indicated e.g. signs and symptoms of infection.** (e.g. a wound or invasive device), or if a request is made by medical / IPCT staff.

If a wound or medical device shows signs of infection, or is not responding to first line antibiotics, then take a wound swab and request general culture and sensitivity. If MRSA is identified discuss the result with the IPCT and GP, for further antibiotic prescription advice GP to contact the microbiologist at the nearest acute trust.

**Elective surgical admissions:** Service users (either in-patients in residential facilities or in their own homes) who are awaiting elective admission will be screened for MRSA prior to their admission/procedure as per the receiving hospitals’ pre-assessment protocol. This screening is usually undertaken at pre-assessment clinics in community or acute hospitals, however if community staff are assisting with the elective screening process (refer to the relevant Trust pre-admission screening & suppression therapy guidance if your service user is found to be MRSA positive).

Pro-actively managing MRSA pre and peri-procedure will improve service user outcomes and reduce the risk of MRSA transmission during clinical stay/intervention

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### 6.2 Management of MRSA positive service users’ in their home environment:

Staff attending to these service users must ensure they adhere to normal infection control practices and the trust MRSA policy which include:-

- Hand hygiene before and after providing service user care, using liquid soap and water, alcohol hand sanitiser or, hand sanitizing wipe (when access to soap and water is not available/ informed decision made not to use the home facilities by staff member. Staff will wash their hands with soap and water at next available opportunity).
• Disposable hand towels/kitchen towel must be used for staff hand drying where provided.

• Hands must be socially/visually clean prior to use of alcohol sanitiser and not contaminated with body fluids or any other organic matter dirt/dust. (refer to trust Hand Hygiene policy SH CP 12).

• Carers, service users and relatives must be made aware of the importance of their hand hygiene.

• Anyone with broken skin (cuts, wounds, abrasions etc.) is potentially at risk of contracting Staphylococcus aureus infection from a carrier or infected source. Cuts, abrasions or breaks in the skin must be covered with an impermeable dressing; staff with eczema or psoriasis must seek occupational health advice or visit their GP to ensure their skin condition can be managed carefully.

• Protective clothing i.e. disposable plastic aprons and gloves must be worn when giving direct service user care including washing, dressing and wound care. Aprons and gloves must be disposed of after use, single service user/single task only.

• Any loaned equipment for use within the home must be designated ‘service user’ use only until no longer required. Prior to re-use on another service user, all equipment must be thoroughly decontaminated as per manufacturers’ instructions and SHFT Decontamination of medical devices policy.

• Service users’ laundry can be washed in the normal way, in a domestic washing machine.

• The service user who is at home poses minimal risk to family members/other residents except if family member/other residents have an open wound or invasive lines. In these circumstances an individual risk assessment needs to be undertaken and appropriate measures taken. Further advice to be sought from the Infection control team as necessary.

• MRSA does not pose any extra risk to staff/relatives or visitors who are pregnant (DH 2007: MRSA a simple guide).

• Dispose of waste as per Trust Waste Management Policy and community care team (CCT) waste SOP.

• Cleaning – When undertaking clinical procedures in any community setting, staff should keep the immediate work surfaces dust free using a sanitising wipe e.g Clinell sanitising wipe.

• During wound care protect vulnerable sites eg. exposed wounds by using a sterile dressing towel.

• Staff equipment e.g. (BP machine & cuff, stethoscope) – Clean using a Clinell sanitizing wipe.

• Relatives do not require PPE but must wash their hands regularly.
• The risk to those relatives who are bed partners and those who assist with personal hygiene in the home environment is minimal. Keep the bed clean and change linen regularly. Any open wounds should be covered and kept dry.

• Previous history of MRSA should always be considered as relevant.

• Chronic wounds are a potential cause of skin and soft tissue infections as there is an increase in bacterial burden (refer to wound management section 5.6.1 in this procedure and Trust Aseptic and Clean technique appendix 7).

• Community staff to contact IPCT if any concerns regarding the IPC management.

• Community staff to contact tissue viability nurse specialist regarding any concerns re wound management.

6.3 Visitors in community settings: e.g. patients own home

• Social contact DOES NOT pose a significant risk of colonisation for MRSA.

• There must be no restriction upon visitors' to the home and they must be assured that they are at no special risk if they are generally healthy individuals.

• If a relative is immuno-compromised, experiencing active eczema or awaiting surgery, they must discuss this with their GP prior to visiting.

• Washing their hands before and after leaving the service users home/care setting is strongly advised.

6.4 Management of MRSA positive service users in residential care: (eg. Nursing/Rest Home, social care/TQTwentyone)

There can be a great deal of concern in residential care facilities about MRSA, invariably due to anxiety about the significance and spread of MRSA.

“MRSA is not a contraindication to admission to a home or a reason to exclude an affected person from the life of a home (DH, 2006)

Residents are at no greater risk of MRSA infection than the general population.

• Standard Precautions must be adhered to (refer to the Standard Precautions Appendix SH CP 19). Residents with MRSA are not a risk to other residents, staff, visitors or members of their family (including babies and pregnant women).

• Residents should be encouraged to live a normal life without any restriction, they can join other residents in communal areas for social activities and mealtimes provided that any wounds are covered with a dressing (preferably fluid impermeable), they can receive visitors and go out of residential care for home / day visits. They do not need to be isolated. However in cases with a high risk of transmission (see below) it would be advisable where possible that the service user receives assistance with personal care / wound care etc. in their own room.

i) MRSA positive with severe skin shedding (e.g. eczema, psoriasis, other).

ii) MRSA sputum positive with productive cough

iii) MRSA positive with an uncovered discharging wound.

iv) Invasive devices e.g. PEG, supra-pubic catheter.

The above group of service users should be designated their own single room following a risk assessment.
Special precautions to be taken if a resident is MRSA positive:
- Any ulcers or wounds should be covered with an appropriate dressing chosen from the wound formulary or with advice from tissue viability nurse.
- Clinical procedures and dressings should be carried out in the residents own room. The door should be closed during care activities.
- Any staff with broken skin (cuts, wounds, abrasions etc.) are potentially at risk of contracting Staphylococcus aureus infection from a carrier or infected source. Cuts, abrasions or breaks in the skin must be covered with an impermeable dressing.
- Staff with eczema or psoriasis must seek occupational health advice or visit their GP to ensure their skin condition can be managed carefully.
- Ensure personal items such as razors and towels are not shared.

6.5 Management of MRSA positive service users attending health centres/general practice.
Service users who are ambulant and who would normally attend a clinic or health centre should continue to do so, even with an MRSA diagnosis.
Service users who are colonised or infected with MRSA should not be stopped from visiting their GP surgery for treatment.

If the service user has had a procedure carried out which could involve the contamination of equipment through direct contact e.g. treatment couch, footstool, then this equipment should be cleaned with Clinell sanitising wipe or detergent/as per manufacturers instructions, after service user contact.

Staff to employ standard precautions (refer to the Standard Precautions Appendix SH CP 19).

Good practice would be to see the MRSA positive service user either at the end of a morning or afternoon session within the treatment room. However if this is not possible the risk of onward transmission is minimal if standard precautions are followed.

6.6 Management of the MRSA positive child within Childrens services e.g. health visitor & baby clinics in outpatient facilities.
Babies/children who are known MRSA positive should not be stopped from attending Childrens’ services outpatient facilities e.g. health visitor clinic, baby clinic.

If a baby has a nappy rash or baby eczema and/or a procedure carried out which involves the contamination of equipment through direct contact e.g. weighing scales, baby changing mats, then this equipment should be cleaned with detergent/ Clinell sanitizing wipes or as per manufacturers’ instructions after service user contact. (Refer to Trust standard for Baby Clinics) via the staff intranet IPC web page.

Staff should employ standard precautions. Onward transmission is minimal if the above precautions are followed.

Children / babies in whom MRSA has been detected can attend nursery and go to school as normal unless advised otherwise by IPCT or GP.

6.7 Management of MRSA positive service users attending Podiatry services:
Podiatry service users are high risk for MRSA colonisation and infection, especially those with chronic wounds and diabetes (raised blood glucose levels increase the risk of ulceration and infection). Diabetes can also cause suppression to normal inflammatory
responses that may mask signs of infection so practitioners’ need to take this into account when assessing a wound).

When high risk interventions are being considered e.g. nail bed surgery, removal of nail, debridement of wounds, it is recommended that the MRSA status of the service user is reviewed.

Any previous MRSA history needs to be considered as relevant. If the service user is MRSA positive or previously MRSA positive then decolonisation and antibiotic prophylaxis may be considered on an individual basis – please contact service users GP or microbiologist at nearest acute Trust for further advice.

Skin preparation prior to the procedure should use aqueous Chlorhexidine – please refer to the Trust podiatry standard which can be accessed from the IPC pages of the Trust staff intranet.

Wound care needs to be carried out using an aseptic technique, refer to Appendix 7 of the over-arching IPC policy SH CP 13. This will prevent the introduction of pathogens to the site and the transfer of pathogens from one service user to another.

Every attempt needs to be made to ensure that requests for swabs or antibiotic treatment is timely so that treatment when necessary can commence at the earliest opportunity.

Due to the invasive nature of some podiatry procedures there is a risk of contamination of inanimate objects such as couches etc with blood / body fluids. Therefore the correct cleaning/disinfection materials need to be at hand and used correctly following risk assessment.

Wound swabs should be taken if there are signs and symptoms of infection (eg redness, discharge, inflammation) or non-healing persists.

When taking a swab, the wound should be cleaned first to remove surface contaminants and any slough. A brief history of the service user and current or recent antibiotic treatment should be included on the laboratory request form and sent for culture and sensitivity testing – the swab may be rejected if there is insufficient information on the request form.

Results of wound swabs should be sought as soon as possible so that there is no delay in the correct treatment being prescribed if needed. (Results are generally available after 48 - 72 hours, it is the responsibility of the person sending the specimen to check the result and ensure it is clearly documented in the service users’ clinical records.

7.0 **Additional MRSA risk reduction measures for, in-patient and community settings: for service users known to have MRSA.**

Successful MRSA suppression therapy is unlikely in service users with chronic wounds, permanent tracheostomy, and long term indwelling devices because of long-term carriage with MRSA bacteria.

7.1 **Wound management:**

**Definition of wound colonisation:** The presence of multiplying bacteria in a wound, but with no service user immune response. There will be no active disease, ill health or signs and symptoms.
**Definition of wound infection:** The presence of multiplying bacteria that overwhelms the service user’s immune system and results in spreading cellulitis. Active signs and symptoms of disease are present.

**Chronic wounds e.g. leg ulcers** - All service users with a chronic wound, should have their wound reviewed and the most appropriate dressings should be selected using the wound formulary (consider the use of a wound dressings that has good barrier properties or anti-staphylococcal activity).

The wound and product should be reviewed weekly to ensure wound healing is taking place. Seek tissue viability and GP / medical advice if the wound does not improve within 2 weeks of commencing treatment or sooner if further concerns about wound care e.g. symptoms worsen, temperature, spreading cellulitis, sudden increase in pain.

Check wound for any localised signs of infection (using the SIGN checklist in the wound formulary), if infection suspected swab the wound for culture and sensitivity. If MRSA is identified, advice on the treatment of wounds can be sought from, the Tissue Viability Nurse Specialist covering your geographical location.

**Please note:** Only wash legs in Octenisan as part of suppression therapy if advised by tissue viability otherwise manage legs as per wound care plan.

If there is any reason why a wound cannot be dressed, advice should be sought from tissue viability nurse specialist (TV).

**Wounds healing by primary intention (sutures/clips/steri-strips), but infected with MRSA** - In general there should be no need to select a specific dressing to tackle wounds healing by primary intention. The wound should be monitored regularly, and if there is any evidence of cellulitis, further wound breakdown or delayed healing, advice should be sought from medical staff as antibiotic treatment may be required.

**The hospital inpatient will require:-**
- Appropriate antibiotic treatment and wound care as per wound care plan for an MRSA wound infection.
- Additionally antimicrobial suppression therapy should be prescribed (refer to MRSA treatment regime section 5.3.2) will be used on rest of skin.

**The service user in their own home will require:-**
- Only appropriate antibiotic treatment for an MRSA wound infection.

### 7.2 Invasive devices:

**PEG sites / suprapubic catheters:**
Insertion sites for indwelling devices such as PEG tubes and suprapubic catheters can provide a focus for infection, and a route for MRSA to track along.
- Sites should be screened on admission for MRSA.
- Where sites are well-healed they can be treated as normal skin during topical treatment for MRSA, and washed using antimicrobial decolonisation solutions.
- Check site for any localised signs of infection if suspected, the site should be swabbed and sent for culture and sensitivity. In addition a medical review should be sought as antibiotics may be required.
- Sites that are not healed should have an appropriate barrier dressing as per wound formulary (consider good barrier properties or anti-staphylococcal properties).

**Insertion of PEG /Supra pubic catheter:** Any previous MRSA history needs to be considered as relevant.
If our service user has a current MRSA positive result then commence suppression therapy prior to this procedure for five days.

If less than five days procedure, commence suppression therapy immediately and continue after the procedure to complete the five days of treatment.

If the current MRSA result is negative then no further risk reduction measures are required.

Prophylactic ABXs are not routinely prescribed.

**Urinary catheters:**
Insertion sites for indwelling devices such as urinary catheters can provide a focus for infection, and a route for MRSA to track along.

- Please note that when a service user is treated for a catheter associated urinary tract infection (CAUTI), clearance of infection can only be achieved if the catheter is changed or removed. The HIOW antibiotic guidelines state change catheter first then start antibiotics.
- Collect a CSU from designated port using an aseptic technique, test for culture and sensitivity (document if known MRSA positive on the microbiology request form).
- Assess the need to re-catheterise or trial without catheter (TWOC refer to SHFT TWOC form).
- Ensure any service user with an indwelling urinary or supra-pubic catheter is commenced on a catheter monitoring form and document actions.

Routine catheter changes for service users know to have MRSA carriage:-
- Antibiotic cover is not routinely required / prescribed.
- Contact IPCT if you require further advice

**Infected IV insertion sites in service users known to be MRSA positive:**
- Remove line and re-site if access still required
- Swab sites for culture and sensitivity (document if known MRSA positive)
- Dress the site using an appropriate dressing: a sterile transparent semi-permeable peripheral cannula dressing.
- Use the Trust IV Cannulation and Ongoing Monitoring Form, to document the VIP score and actions undertaken for in-patient areas.
- Systemic antibiotic therapy should be considered by medical staff.

If an IV device has been removed and the site appears infected (redness, pain, inflammation, pus, or spreading cellulitis.
- Swab the site for culture and sensitivity
- Take same actions for infected IV insertion site above.

**Central line / PIC line:**
- Contact medical staff regarding removal of the line.
- Re-siting this line will need to be arranged with medical staff
- Swab the site for culture and sensitivity
- Biopatch should be considered for all central venous catheter insertion sites of in patients who are MRSA positive.
- Dress the site using appropriate dressing as per wound formularly consider absorbency of antimicrobial dressing if exudate present or Inadine if no exudate (ref UHS policy 2013).

**Tracheostomy sites:**
Once the exposed edges of a permanent / long term tracheostomy site are healed it should be carefully cleaned daily as part of normal hygiene of the stoma.
If infected seek advice from medical staff / wound formulary. Consider Prontosan soaks 15 minutes twice daily around stoma (ref UHS policy 2013).

8. **Training**
Refer to the Trust Training Needs Analysis (TNA) in the overarching IP&C Policy SH CP 10 which can be found on the staff intranet.

9. **Monitoring compliance with this policy:**

<table>
<thead>
<tr>
<th>Element of policy to be monitored</th>
<th>Lead</th>
<th>Tool/method</th>
<th>Frequency</th>
<th>Responsible person</th>
<th>Where results will be reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>All elements</td>
<td>IPCT</td>
<td>Part of e RCA for MRSA post 48 hr acquisition &amp; e RCA / SIRI for MRSA BSI</td>
<td>As they occur</td>
<td>Ward manager supported by IPCT</td>
<td>IPC group meeting, QID forum, ISD Quality &amp; governance forum, Monthly by exception to DIPC / Board</td>
</tr>
<tr>
<td>MRSA screening compliance</td>
<td>IPCT</td>
<td>Audit</td>
<td>Twice a year</td>
<td>IPCT &amp; IPC link advisor</td>
<td>IPC group meeting, QID forum, ISD Quality &amp; governance forum, Monthly by exception to DIPC / Board</td>
</tr>
<tr>
<td>MRSA checking of results compliance</td>
<td>IPCT</td>
<td>Audit</td>
<td>Currently weekly, frequency to be monitored until clinical in-patient areas consistently scoring high %</td>
<td>IPCT &amp; IPC link advisor</td>
<td>IPC group meeting, QID forum, ISD Quality &amp; governance forum, Monthly by exception to DIPC / Board</td>
</tr>
</tbody>
</table>
10. Policy review
This document will be reviewed by the IPCT in the following circumstances:-
- When new national guidance is issued.
- When newly published evidence demonstrates the need for change to current practice.
- Every 4 years routinely.
- Technical amendments to be made at any time, when RCA / SIRI learning is identified and the MRSA policy would benefit from being strengthened in line with learning identified.

11. References.


12. Associated Trust documents: APPENDICIES.
Appendix 12.1: ESBL Risk based assessment for patient placement

ESBL Risk-based Assessment for Patient Placement

**Risk factors**
- Urinary incontinence
- Diarrhoea or faecal incontinence
- Actively coughing and/or productive

**Other risk factors**
- Indwelling urinary/supra pubic catheter or intermittent catheterisations
- Wounds requiring dressing
- Abdo drainage / stoma
- Tracheostomy
- Patient high dependency level
- Non compliance with basic hygiene

**No risk factors**
- No urinary incontinence
- No faecal incontinence
- No invasive devices
- No other risk factors
  - Bowel (gut) colonisation only

**Precautions**
- Isolation
- Side room
- Contact precautions for all direct patient care (minimum gloves and aprons)
- Ensuite or dedicated commode/toilet
- Dedicated medical equipment
- Inform patient of importance of good hand hygiene

**High risk of spread**

**Medium risk of spread**

**Low risk of spread**

**Disposal of bodily fluids in sluice is a high risk activity:**
- Ensure PPE (minimum of apron and gloves) if likely risk of splash to face wear facial protection goggles/visor, dispose after use into infectious waste stream.
- Take care to pour fluids slowly to reduce the risk of splashing.
- Place waste receptacle into macerator
- Clean macerator handle with Clinell /Actichlor Plus 1,000 PPM of av chlorine after disposal regardless of whether any spillage occurs
- Remove PPE
- Perform hand hygiene with soap & water, alcohol hand sanitiser

**Risk refers to the risk of spread of ESBL to other service users in the healthcare setting.**
(Adapted from: Canterbury District Health Board NZ IPC service 2012)
Appendix 12.2: ESBL Patient Information Leaflet

ESBL Patient Information Leaflet

You may have been told that you have ESBL. This leaflet has been produced to help you understand what is meant by this and to answer some of your questions.

What are ESBL’s?
A group of bacteria that are resistant to many commonly used antibiotics. ESBL stands for, Extended Spectrum Beta-Lactamase, it is an enzyme (chemical), produced by some bacteria that normally live in the bowel. These bacteria (Klebsiella species and Escherichia coli) normally live quite happily without causing a problem and are no more likely to cause infection than other bacteria found in the bowel.

How does resistance occur?
The bacteria produce a special enzyme, beta-lactamase which break down certain antibiotics preventing them from working. Resistance can make any infection caused by the bacteria difficult to treat.

What illnesses do ESBL-producing bacteria cause?
Infection from ESBL occurs mainly in the urine causing some urinary tract infections’, but may also infect wounds, lungs and the blood.

Sometimes the bacteria can be in your body (usually found in the bowel or urine) however you will not feel un-well or have signs or symptoms of infection. This is called colonisation.

How are ESBL’s spread?
Like other bacteria, ESBL can be spread from person to person, for example by unwashed hands, from equipment that has not been cleaned sufficiently or it can be picked up from the environment through touch.

How did I get ESBL?
It is difficult to say exactly. Some people come into hospital already carrying the bacteria; some pick it up whilst in hospital. It may also be a result of previous treatment.

Can I spread ESBL to other people?
ESBL can be spread to people in hospital, who are more at risk of infection because their body’s defence mechanisms are weakened by illness, surgery, drugs and medical procedures.

How can ESBL be treated?
If you have ESBL bacteria identified in your bowel or urine, you are likely to carry them for a long time. You will only be treated if you are showing signs of infection. Despite ESBL’s being resistant to many antibiotics, treatment options are still available should infection occur. If antibiotic treatment is necessary, your doctor will discuss this with you.

You may be transferred to a single room this minimises the risk of spread to other patients’ and ensures your treatment is managed correctly.

Prevention of infection rests mainly on encouraging good hand hygiene practices amongst staff, patients’ and visitors using soap and water or alcohol gel. Staff will wear protective clothing, gloves and aprons and high standards of environmental and equipment cleaning will be maintained.
Can I have visitors?
Your family and friends may continue to visit you. They do not need to wear gloves or aprons whilst visiting unless actively involved with your nursing care. It is important that your visitors are encouraged to wash their hands when they arrive and before they go home and before helping you to eat and drink.

Please do not allow visitors to sit on your bed in hospital.

Dirty laundry can be taken home for washing and laundered in the usual way.

What happens when I am ready to leave hospital?
If you are otherwise well, ESBL should not delay your discharge. If you need a district nurse or other healthcare services they will be informed.

What special precautions will I need to take at home?
You do not need to take any special precautions when you get home. Usual personal hygiene & household cleaning and laundry is sufficient. Restriction of activities or visitors is not necessary. Colonisation with these bacteria will not affect your family, friends or sex life, providing they have a healthy immune system.

What if I need to come into hospital again?
If you are admitted to any hospital in the future always tell your nurses/doctors that you have been ESBL positive in the past.

Where can I obtain more information?
Talk to the nursing/medical staff on your ward or ask to speak to an Infection Prevention and Control nurse contactable on: - Tel: 023 80874291.
Appendix 12.3: Other Resistant Organisms

The following microbes/groups of microbes are resistant organisms.

**Panton-Valentine Leukocidin toxin (PVL)**

Is produced by some strains of Staphylococcus aureus which is associated with an increased ability to cause disease. PVL is a toxin that destroys white blood cells. Like other *S. aureus* strains PVL predominantly cause skin and soft tissue infections but can also cause invasive infections e.g. necrotising pneumonia, osteomyelitis, septic arthritis. Clusters and outbreaks of cases have occurred in healthcare community settings, care homes & residential facilities, nurseries and schools, gyms & sports facilities.

Suspicion arises if a service user has recurrent skin and soft tissue infections (SSTIs) or there is a clustering of SSTIs within a household or social group.


**Multi drug resistant Pseudomonas aeruginosa**

*Pseudomonas aeruginosa* is an aerobic gram negative rod which is widely isolated from soil, water, plants and animals including humans. It has a preference for moist environments and is a frequent coloniser of the human ear, axilla, perineum and chronic wounds such as venous ulcers. Hospital reservoirs include respiratory equipment, disinfectants, cleaning solutions, sinks, mops and food. Human disease is also associated with water related reservoirs such as swimming pools, hot tubs and contact lens solution.

Widespread colonisation rapidly emerges on hospital admission, commonly in the respiratory tract of ventilated service users and those with chronic respiratory disease such as cystic fibrosis, service users with burns, and virtually any site in service users treated with antibiotics. Hospital outbreaks may be traced to specific reservoirs such as respiratory equipment and hand borne spread is important.

*Pseudomonas aeruginosa* is primarily a nosocomial pathogen, and can cause invasive disease such as bacteraemia, pneumonia, infective endocarditis, malignant otitis externa, bone and joint infections, urinary tract infections and skin and soft tissue infections. Resistance develops quickly and multi resistant *P aeruginosa*, defined on the basis of resistance to antibiotics which are ordinarily active, have increased in frequency.

The care and management of this service user must be discussed with the medical microbiologist and IPCT before the service user is admitted or as soon as infection is discovered.

**Vancomycin / Glycopeptide resistant enterococci (VRE / GRE)**

Enterococci are bacteria that are commonly found in the bowel of normal healthy individuals. They are also found naturally outside the hospital environment in/or on the surface of many animals. The antibiotics used in agricultural practice appear to encourage their proliferation. It was during the mid-1980s enterococci with resistance to glycopeptide antibiotics such as Vancomycin and Teicoplanin emerged.

They can cause a range of illnesses including urinary tract infections, bacteraemia (blood stream infections) and wound infections particularly following intestinal surgery. The mortality rate increases if they infect a heart valve.
The care and management of this service user must be discussed with the medical microbiologist and the IPCT before the service user is admitted or as soon as infection is discovered.

The care and management of this service user must be discussed with the medical microbiologist or IPCT before the service user is admitted or as soon as infection is discovered.

**Acinetobacter**

Acinetobacter are encapsulated, aerobic gram negative organisms, which are found in the environment, and may also be colonisers of the skin and GI tract. In general they are opportunistic pathogens in hospitalised service users. The respiratory site is the most common site for Acinetobacter infection, generally in service users with diminished host defences such as alcoholism or diabetes, and the greatest impact has been as a cause of ventilator associated pneumonia. Nososcomial spread in the ICU setting has been attributed to contaminated equipment and poor hand hygiene. They are capable of surviving for days in the environment on dry inanimate objects, and some strains, recovered from sinks, have been found to be tolerant to soap. Acinetobacter can also cause bacteramia, and soft tissue infection, usually as a result of an indwelling intravascular device. As with other opportunistic gram negative organisms, increasing antibiotic resistance has become problematic. Acinetobacter rarely causes problems in the community setting.

The care and management of this service user must be discussed with the medical microbiologist or IPCT before the service user is admitted or as soon as infection is discovered.

**GISA/VISA & VRSA**

Antibiotic resistance flourishes when antimicrobial drugs are abused, misused and dispensed at levels lower than treatment guidelines dictate.

Prevention:

- Careful antibiotic stewardship, right drug, right dose prescribed for appropriate length of time. These measures will help to reduce the likelihood of resistant strains arising.

**GISA (Glycopeptide intermediate S. aureus).**

Staphylococcus aureus with reduced susceptibility to glycopeptide antibiotics such as (Vancomycin and Teicoplanin).

The care and management of this service user must be discussed with the medical microbiologist and the IPCT before the service user is admitted or as soon as infection is discovered, the same precautions as those used to control MRSA, should be employed. Additional IPC measures may be introduced following consultation with microbiologist.

**VISA (Vancomycin intermediate S. aureus).**

Staphylococcus aureus with reduced susceptibility to Vancomycin.

The first case of clinical infection of S.aureus with reduced susceptibility to vancomycin was reported in Japan in May 1996. Since that time a small, but increasing number of clinical isolates have been reported. Service users affected have often had previous MRSA colonisation/infection and have received persistent/recurrent courses of glycopeptide therapy.

The care and management of this service user must be discussed with the medical microbiologist and the IPCT before the service user is admitted or as soon as infection is discovered, the same precautions as those used to control MRSA, should be employed. Additional IPC measures may be introduced following consultation with microbiologist.

**VRSA (Vancomycin resistant S. aureus).**

Staphylococcus aureus with resistance to Vancomycin.

The care and management of this service user must be discussed with the medical microbiologist and the IPCT before the service user is admitted or as soon as infection is discovered, the same
precautions as those used to control MRSA, should be employed. Additional IPC measures may be introduced following consultation with microbiologist.

**Carbapenemase - producing Enterobacteriaceae.**

Enterobacteriaceae are a large family of bacteria that colonise the gut of humans and animals. These organisms are also some of the most common causes of opportunistic urinary tract infections, intra-abdominal and bloodstream infections. They include species such as *Escherichia coli*, *Klebsiella* spp. and *Enterobacter* spp.

Carbapenems are broad spectrum β-lactam (penicillin-like) antibiotics, normally reserved for serious infections caused by drug-resistant Gram-negative bacteria (including Enterobacteriaceae). They include Meropenem, Ertapenem, Imipenem and Doripenem. They have been the antibiotics that doctors could always rely upon when other antibiotics failed to treat infections caused by Gram-negative bacteria.

Carbapenemases are enzymes that destroy carbapenem antibiotics, conferring resistance. They are made by a small but growing number of Enterobacteriaceae strains. There are different types of carbapenemases, of which KPC, OXA-48, NDM and VIM enzymes are currently the most common.

The care and management of this service user must be discussed with the medical microbiologist or IPCT before the service user is admitted or as soon as infection is suspected or confirmed.

Refer to our Trust procedure for the “management and control of CPE” SH CP 177.


**9.2 Multi-drug resistant Coliforms ESBL’s**

Extended spectrum beta lactamases (ESBLs) are enzymes produced by some species of coliforms, such as *E coli* and *Klebsiella*, which render the bacteria resistant to all penicillins and cephalosporins. They were first described in the mid 1980s, and were associated with hospitalised service users. However a new class of ESBL has emerged, which has been found in the community as well, usually in urinary tract infections. They are often resistant to other antibiotics, such as Ciprofloxacin, and Trimethoprim, making the infection harder to treat.

ESBL producing organism can also cause intra abdominal infections, bacteraemia and rarely respiratory infections.

**Infection Prevention**

Most infections are caused by the service user’s own flora, but service user to service user transmission can be avoided with robust infection control measures such as hand washing and service user isolation in a side room in, in-patient environments. Prudent antibiotic prescribing will also reduce the risk of spread. Antibiotics are only recommended if there are symptoms of infection. If antibiotics are required in the future for other illnesses the service user should be encouraged to finish the course and take them exactly as directed.

For service users in their own home there is no need to stay away from others. Service users to pay the usual good attention to their personal hand hygiene with soap and water particularly after using the toilet.
If service users go into hospital in the future or if they are visited by health care workers in their home the healthcare staff may wear gloves and aprons for direct care (as health care staff are likely to care for other patients who are more vulnerable to infection).

Additional advice should always be sought from your IPCT.
Appendix 12.4: MRSA Admission Screening – Standard of Operating Practice (SOP)

**MRSA Admission Screening: Standard of Operating Practice**

<table>
<thead>
<tr>
<th>1. Obtaining an MRSA admission screen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take MRSA screens as per <strong>MRSA &amp; Management Of Antibiotic Resistant Organisms Procedure</strong> (Infection Prevention and Control Policy: Appendix 14)</td>
</tr>
<tr>
<td>Where admission screening is applicable the screen must be taken in the first 48hrs after admission</td>
</tr>
<tr>
<td>If this timeframe cannot be met, please record the reasons why screening is delayed</td>
</tr>
<tr>
<td>Screen from the following sites:</td>
</tr>
<tr>
<td>✓ Groin</td>
</tr>
<tr>
<td>✓ Nose</td>
</tr>
<tr>
<td>✓ Any breaks in the skin/lesions/wounds: one swab from each site; clearly identify which sites have been swabbed on micro-form or via electronic requesting system. Wounds should be cleaned prior to taking the swab to remove any superficial bacteria / slough that may affect the result.</td>
</tr>
<tr>
<td>✓ Invasive devices: Insertion sites for devices in-situ at time of screening e.g. IV / PEG site.</td>
</tr>
<tr>
<td>✓ CSU: Urine sample if service user has a catheter in situation at the time of screening.</td>
</tr>
<tr>
<td>✓ Any other site that has been previously identified as MRSA positive</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Recording of MRSA screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record screening has taken place – admission documentation in patients notes or on RIO</td>
</tr>
<tr>
<td>Record a list of the sites that have been screened</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Looking up Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results must be checked 48hours after screens have been received in the laboratory</td>
</tr>
<tr>
<td>If all screen sites are not available re-check in another 24hours</td>
</tr>
<tr>
<td>Check ALL SITES listed on the record of screening have been reported and that you have results for the COMPLETE SCREEN taken</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Responsibility for Checking Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is the duty of the clinician taking the swabs to ensure that the results are collected, recorded and acted on (as appropriate). Results are usually available between 48-72hrs after swabs have been received in the laboratory. This responsibility can be delegated through handover eg nurse in charge/medical staff/ward clerk</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antibiotic advice for medical staff can be obtained from the Medical Microbiologist where the swab was processed</td>
</tr>
<tr>
<td>If the regular pathology transport system is not available please arrange for the MRSA screen to be couriered to the laboratory to avoid a delay in testing (including weekends)</td>
</tr>
<tr>
<td>When a MRSA screen tests positive, staff must print out, populate and follow the MRSA care pathway – found in the MRSA &amp; Management of Antibiotic Resistant Organisms Procedure</td>
</tr>
<tr>
<td>For further advice please contact a member of the IPCT on 02380 874658 or 02380 874291</td>
</tr>
</tbody>
</table>
Appendix 12.5: How to perform MRSA screening

**Taking nasal swabs**

**The Procedure**

Wash hands thoroughly, apply apron and don gloves.

1. Check expiry date, open packaging and remove swab.
2. Insert the swab into the anterior nare (nostril).
3. Sweep upwards towards the top of the nare (nostril).
4. Repeat the procedure with the same swab in the other nare.
5. Without contaminating swab, place in the culture medium provided.
6. Provide the patient with tissues as required.
7. Remove apron and gloves.
8. Dispose of waste as per organisation policy.
9. Wash hands.
10 Complete the appropriate documentation, specimen tube, accompanying form and nursing notes.

11 Dispatch sample according to organisation policy.

12 Inform the patient of when to expect results.

**Taking a Groin swab: follow the same procedure above:**

- Insert the swab to the left of the inner thigh and groin.
- Repeat the procedure with the same swab in right hand side.

**Taking a wound swab:**
Clean the wound prior to taking the swab to remove any superficial bacteria / slough that may affect the result (follow the procedure in your wound formulary).
## Appendix 12.6: MRSA screening form

| Patients Name: | DOB: | NHS No: |

### MRSA Screening

<table>
<thead>
<tr>
<th>Investigation / Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Groin</td>
</tr>
<tr>
<td>Nose</td>
</tr>
<tr>
<td>Wounds / Skin breaks (specify where)</td>
</tr>
<tr>
<td>Urinary Catheter</td>
</tr>
<tr>
<td>Invasive devices</td>
</tr>
<tr>
<td>Previously identified MRSA sites</td>
</tr>
</tbody>
</table>

Signed: ___________________________
Print Name: _______________________

Designation: _______________________
Date: ___________________________
Time: ___________________________

If results positive: complete MRSA care plan and inform Infection Prevention & Control Nurse

### Investigation / Tests

<table>
<thead>
<tr>
<th>Request</th>
<th>Date sent</th>
<th>Signature / Print name</th>
<th>Results received</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Date</td>
<td>Time</td>
</tr>
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<td></td>
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</tr>
</tbody>
</table>

SHFT MRSA Management & Other Antibiotic Resistant Organisms Procedure
Version: 3
April 2016
Appendix 12.7: Organisational MRSA screening flowcharts

MRSA Screening – Inpatient Settings (ISD, MH & LD)

Elective Admission

Inpatient

Day Case

Yes

Yes

*All day cases except those listed below must be screened

When do I need to screen?

Ideally within 12 weeks prior to procedure.

2. Regular Attendee

Any service user who attends on a regular basis for clinical treatment e.g. blood transfusions, joint injections, chemotherapy etc

Radiological service users not routinely screened

When do I need to screen?

At beginning and end of treatment plus at monthly intervals if treatment still in progress

What to screen:

Nose, groin, any skin break or wound / pressure sore.
CSU - Urine if catheterised, Invasive devices e.g. PEG, urinary catheter

When do I need to screen?

On admission

Exceptions to this are:-
1) Those already receiving suppression therapy for MRSA.
2) Service users in mental health (excluding OPMH) & learning disability settings who do not have risk factors for MRSA colonization.

If screen is MRSA positive, refer to the MRSA appendix of the IPC policy.

DAY CASE - The following service users do not need to be screened:

Ophthalmology • Dental • Endoscopy • Minor dermatology e.g. warts or other liquid nitrogen applications
• Children – unless high risk • Maternity – unless high risk

EXCEPTIONS TO THIS ARE:

➢ If service user has previous history of MRSA
➢ If service user lives in nursing home / residential home
➢ If service user requires an overnight admission

High risk Children/paediatrics: Those with lines, long term conditions e.g. cystic fibrosis and those regularly admitted as emergencies.

High risk maternity/obstetrics: Risk of complication to mother or baby.

Mental health (excluding OPMH)/learning disability services: Risk factors for MRSA colonization that require screening.

➢ Those that are admitted from a physical health environment e.g. acute trust / community hospital, or previous admission in the last 6 months.
➢ Those with a previous history of MRSA colonisation or infection.
➢ People with chronic wounds e.g. leg ulcers, or with indwelling devices such as catheters and PEG feeding tubes.
➢ Service user with a history of drug abuse with a wound or abscess.
Appendix 12.8:
MRSA Surgical Pre-assessment Screening Flowchart
(For use at LNFH)

Service User attends pre-assessment clinic in OPD.
DAY CASE - The following service users do not need to be screened:
Ophthalmology • Dental • Endoscopy • Minor dermatology e.g. warts or other liquid nitrogen applications • Children— unless high risk • Maternity – unless high risk

Exceptions To This Are:
1. If service user has previous history of MRSA
2. Service user lives in nursing home / residential home
3. Service user requires an overnight admission

MRSA screen to be performed on all day cases except those listed above.
✓ Gain verbal consent
✓ Issue information sheet re:- screening
✓ Discuss process & answer questions as appropriate.

Service user refuses MRSA screening (refer to section 5.3.7).

MRSA screen collected
MRSA screening results accessed approx 48 -72 hours later (by Knightwood ward staff), who inform the pre-assessment team of any positive results.

NEGATIVE
No further action required

POSITIVE

Pre-assessment nurse to contact the service user by telephone to inform of results.
✓ Ask service user to return to clinic for further advice and to collect treatment.

✓ Pre-assessment nurse to issue Treatment plan to service user
✓ Pre-assessment nurse to issue MRSA leaflet
✓ Pre-assessment nurse to issue treatment
✓ Pre-assessment nurse to ensure prescription written by Dr. (white hospital OPD prescription) for nasal cream to be collected from pharmacy at LNFH. If medication unavailable at LNFH, a green FP10 form to be completed by Dr the prescription can then be collected from any community pharmacy.

Service user completes decolonisation treatment for 5 days prior to admission on day 6, for a surgical procedure at LNFH.

Elective admissions who do not attend pre-assessment (e.g. those that take last minute cancellation slots less than 5 days before surgery or those that refuse MRSA screening).
✓ Admit into a side room on admission
✓ MRSA admission screen prior to surgery
✓ Wash in Octenisan
✓ Inform theatre staff, anaesthetist & surgeon

MRSA results should be checked by Knightwood staff within 72 hours.
✓ MRSA Negative result document in medical notes, no further action required
✓ MRSA positive result document in medical notes
✓ Contact surgeon and IPCT for further advice
✓ Inform the service users GP
Appendix 12.9: Pre-assessment service user information leaflet for MRSA screening

Keeping You Safe
Information about MRSA screening for service users being admitted for planned surgical procedures.

**What is MRSA?**
Meticillin Resistant Staphylococcus Aureus is a bacterium commonly referred to as MRSA. It is a type of bacteria from the more commonly found Staphylococcus aureus family. These bacteria survive harmlessly on the skin and in the lining of the nose. There are a small percentage of people who are healthy but have MRSA and do not know it. MRSA does not usually cause a problem, however, these bacteria can cause infections if there is an opportunity for them to enter the body, e.g. through cuts or abrasions. The type of infections that Staphylococcus aureus can cause range from, boils, abscesses, and more serious infections if they enter the bloodstream or surgical wounds.

MRSA is a type of bacteria that is resistant to many of the common antibiotics used to treat infections. A common misconception is that antibiotics are not available to treat infections. This is not true; there is a range of antibiotics that are effective for treating MRSA infections.

**Why am I being offered screening for MRSA?**
All service users being admitted to our Trust who are undergoing planned surgical procedures are being screened in line with recommendations from the Department of Health. If a person has MRSA on their skin surface this bacteria has the opportunity to enter the wound during or after surgery. By screening people we can offer treatment before their surgery to reduce the risks of MRSA wound infections.

This national initiative has been introduced to identify people who may have MRSA on their skin or nasal surfaces. This is called colonisation, this means that the bacteria are on these surfaces but are not causing any problems. When people are admitted to hospital for a planned procedure we want to ensure that we reduce risks of infections to a minimum.

**Does everyone need to be screened?**
Yes, all service users requiring an operation will need screening, however the Department of Health does not require screening of some day case procedures i.e. eye and dental surgery, endoscope procedures and minor skin treatments unless they have previously had MRSA, had a recent admission to hospital, live in residential care or require an overnight stay in hospital following a procedure.
What does screening involve?
Screening is a pain free procedure. A swab will be taken from the nostrils and groin area. Additional swabs will be required if you have an open wound and a urine specimen collected if you have a catheter. These swabs will then be sent to the Microbiology Laboratory for processing. You will NOT be routinely informed if the result of the test is negative, and you will proceed with your admission as planned.

What will happen if I have MRSA?
A member of staff will inform you by telephone if your MRSA screening is positive and request that you return back to clinic to be given further information about treatment for your MRSA. This treatment consists of an antibiotic skin washing treatment and some cream for the inner surfaces of the nose. Please inform the pre-assessment nurse if you have any known allergies to the prescribed treatment.

Can I pass MRSA onto other people?
If you have MRSA you do not normally present a risk to generally healthy people in the community (including pregnant women and babies). You will be issued with an MRSA leaflet which has been designed to give you and those close to you information about MRSA, so that you can understand the facts, and are able to care for yourself and get on with your life.

What measures are being taken in the hospital to reduce infections?
Bacteria can be transferred from the hands of healthcare workers during the care of service users. All hospital staff receive Infection Prevention & Control training. They are trained how to clean their hands properly between contact with service users. Within our Trust we have provided alcohol gel at every entrance to ward/departments' for visitors and staff to use, and at every bed space as appropriate. Each ward has an identified “hand hygiene champion/link advisor” and monthly audits are undertaken to check staff wash/gel their hands.

It is OK to ask staff if they have washed their hands.
Every ward has monthly hand hygiene audits and environmental cleanliness audits, actions are taken to rectify areas that do not meet the required standards. If you are concerned about any aspect of hygiene we would like you to raise this with the member of staff at the time. We also ask that you take the following sensible precautions during your hospital stay:

- Keep your hands and body clean. Have a supply of moist hand wipes with you for your personal use.
- Wash and dry your hands after using the toilet or commode.
- Always wash your hands or use a hand wipe immediately before eating a meal.
- Observe that your bed area is regularly cleaned and report any concerns or unclean toilet or bathroom facilities to staff.
- Do not let your visitors sit on your bed. Ask for a chair to be made available.

The organisation has an active Infection Prevention and Control Team. If you have any concerns please contact us via telephone no: 02380 87 4291

It is estimated that only 3% of service users who have been screened will have MRSA.

MRSA should not delay or cancel your planned procedure
Appendix 12.10: Pre-assessment service user treatment plan following a positive result for MRSA.

Keeping You Safe

Following your Pre-assessment screening you have had a positive result for MRSA. This means you are a carrier of MRSA. People carrying MRSA on their skin and/or nose are not ill. Most people will be unaware that they carry MRSA because it does not harm them and they have no symptoms.

MRSA can go onto cause an infection when it gets an opportunity to enter the body e.g. through a cut or wound. It can cause skin infections such as boils or more serious infections. In more serious cases it can cause bloodstream infection.

To reduce your risk of infection we need to try and remove as much of the MRSA as possible before you come in for your planned procedure.

Please be reassured this should not delay or cancel your planned operation.

MRSA treatment plan (please complete and bring with you on admission)

Start your treatment 5 days before your planned operation.

Date of planned operation:………………………………………………………………………..

Date treatment started (day one): ……………….. ………………………………………
(Continue with treatment for 5 days).

Date treatment finished:
………………………………………………………………………………………………………

Date admitted to hospital for planned operation (day six)
………………………………………………………………………………………………………

Any contraindications e.g allergy/skin irritation please describe below:-
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………
………………………………………………………………………………………………………

If you need to be admitted before your treatment is completed this usually will not delay or cancel your planned operation. You will still be admitted for your procedure and managed in a way to reduce the risk of infection.

If you have any further questions please contact the, Pre-assessment telephone help line: 01590 663182 or Bleep 8 via Lymington hospital switchboard or Trust Infection Prevention and Control Team telephone: 02380 874291
Appendix 12.11 Service user record/treatment table for positive MRSA result pre-surgery.

Keeping You Safe

Service user Record: Treatment Table.

Name:

Date of Birth:

Please put a tick (✓) in the box each time a treatment is completed.

Please bring the completed sheet with you at the time of admission.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Product</th>
<th>Frequency:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shower or bath</td>
<td>Octenisan (Topical anti-microbial hair and body wash lotion)</td>
<td>Daily</td>
</tr>
<tr>
<td>Hair Wash</td>
<td>Octenisan (Topical anti-microbial hair and body wash lotion)</td>
<td>Minimum of twice in the 5 day period</td>
</tr>
<tr>
<td>Apply nasal ointment to nostrils three times a day.</td>
<td>Mupirocin ointment 2% (Bactroban)</td>
<td>Morning (Every day)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Afternoon (Every day)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evening (Every day)</td>
</tr>
</tbody>
</table>

If you require further advice or information, please contact a member of the pre-assessment team, Tel no: 01590 663182 or Bleep 8 via Lymington hospital switchboard or Infection Prevention and Control Team on tel: 02380 87 4291
Appendix 12.12: Service user instructions how to use the treatment prescribed for MRSA

Keeping You Safe

Service user Instructions: How to use the treatment prescribed for MRSA.

The treatment should commence 5 days before your surgical admission date. Once the treatment has commenced (Day 1) it must be continued every day as detailed below, completing the treatment at the end of Day 5. You will be admitted for your procedure on day 6.

You may find it helpful to use the table to record your treatments

Ocetenisan topical anti-microbial hair and body wash lotion. Use Daily For 5 Days:

- Apply product directly to your wet skin if showering / bathing, or apply directly to damp wash cloth if you are having a strip bath.
- Use the solution as you would either soap or shower gel.
- Do not dilute the product e.g. pour into a bath, or into a wash bowl
- Wash the body from head to toe, pay particular attention to any folds of skin e.g. armpits, under the breasts and groin area. Leave the soap on your skin for approximately 60 seconds before rinsing off.
- To maximise the effectiveness of the solution further, ensure that a new disposable cloth (i.e. a ‘J Cloth’) is used each day, or that the cloth is laundered after each treatment. Use a clean towel to dry yourself each day, and then launder.
- Occasionally, some service users may experience some redness of the skin or develop a rash whilst using this product. If this should occur, then rinse yourself thoroughly with clear water and seek medical advice if it persists.
- It is also advised that both your bedding and clothing are changed each day for the duration of the treatment.
Octenisan topical anti-microbial hair and body wash lotion.
Use As Shampoo At Least Twice During The 5 Day Treatment Regime.

- Apply to wet hair and massage into scalp. Leave the soap (Octenisan lotion) on your skin for approximately 60 seconds before rinsing off.
- Rinse well with water.
- Conditioner may be used afterwards if desired.

Bactroban (Mupirocin 2%) Nasal Ointment Use 3 Times A Day For 5 Days:

- Please read the Information Leaflet included in the box with the Bactroban nasal ointment before you begin to use it.
- Apply 3 times a day, place a small pea sized amount of the Bactroban nasal ointment inside each nostril you could use the tip of your clean finger or a cotton bud to apply.
- Following application of the Bactroban nasal ointment to the inside of the nostrils it is important that the outside of the nose is massaged well (pinch the sides of the nose together to spread the ointment). This will ensure the treatment is effective. You may be able to taste the Bactroban nasal ointment.

Please bring any remaining 4% Chlorhexidine gluconate or Bactroban nasal ointment into hospital with you.

If you require further advice or information, please contact a member of the pre-assessment team, Tel no: 01590 663182 or Bleep 8 via Lymington hospital switchboard or Infection Prevention and Control Team on tel: 02380 87 4291
Appendix 12.13: Octenisan information for patients

Patient Body Wash Protocol

Information for Patient’s on Admission

- You have been given a bottle of soap to wash in every day
- This helps remove bacteria from your skin and may reduce the risk of infection
- Please use the soap every time you wash until the bottle is finished – do not dilute it, use it neat on a wet cloth or apply directly to wet skin
- Leave on the skin for one minute and then rinse off
- If you are unsure what to do or need help washing, please ask a member of staff
- Octenisan is very gentle on your skin

![Diagram of the body wash protocol]

1. Step 1: Ensure hair & body are wet
2. Step 2: Apply Octenisan undiluted to damp washcloth
3. Step 3: Apply Octenisan evenly over whole body
4. Step 4: Rinse off thoroughly
5. Step 5: Dry with clean towel
6. Step 6: Put on clean clothing & bedding
Appendix 12.14: Octenisan information for staff

Infection Care Pathway (for staff)
Octenisan for Staphylococcus aureus: for new admissions

- Screen all admissions for MRSA as normal
- Start daily Octenisan wash on every admission after the MRSA admission screen has been taken
- Explain to the patient how to use Octenisan
- Do not dilute in a bowl – use neat on a wet cloth
- Label Octenisan bottle with a patient ID sticker – do not share bottles
- Octenisan is not a prescribed drug but please ensure an Octenisan sticker is placed on the medication chart and signed on each day it is given by registered nurse
- Continue Octenisan washes for 3 days until results of admission screen are known

Steps:

1. Ensure hair & body are wet
2. Apply Octenisan undiluted to damp washcloth
3. Minimum contact time 1 minute
4. Rinse off thoroughly
5. Dry with clean towel
6. Put on clean clothing & bedding

Starts January 2016
### Appendix 12.15: In-patient MRSA Care Pathway

<table>
<thead>
<tr>
<th>Problem</th>
<th>Aim</th>
<th>Nursing Action</th>
<th>Date action commenced</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service user’s name:</td>
<td>To inform service user of the result and its implications</td>
<td>Inform service user of result.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>…………………………………………..</td>
<td></td>
<td>Give service user information leaflet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOB:………………………………..</td>
<td></td>
<td>- Commence Octenisan suppression therapy for 5 days.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospt no:…………………………….</td>
<td></td>
<td>- If less than 5 days before scheduled procedure commence Octenisan and continue after the procedure (5 days use in total).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRSA has been detected from:- (please circle)</td>
<td></td>
<td>- If MRSA antibiotic prophylaxis is considered discuss with microbiologist at nearest acute trust.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nose</td>
<td>Groin</td>
<td>- If current MRSA result is negative then no further risk reduction measures are required.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wound</td>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>…………………………………………..</td>
<td></td>
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</tr>
<tr>
<td>Date :………………………………...</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>MRSA can be spread by:</td>
<td>Prevent spread of organism</td>
<td>Isolate service user in a single room and commence source isolation precautions as per risk assessment :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Direct contact</td>
<td></td>
<td>If isolation not possible due to physical / mental health condition: Conduct risk assessment :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Indirectly through contact with contaminated equipment</td>
<td></td>
<td>In certain exceptional circumstances it is acceptable to nurse service users in an open bay if they are 1) at risk of falls 2) clinically unstable and require close supervision/monitoring 3) risk to psychological well being. This decision needs to be based on an assessment of the risks and documented in service users notes refer to section 5.5.5 – 5.5.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Set up room: Display isolation sign on isolation room door. Provide orange bag, (treat all waste as for hazardous waste). Provide disposable gloves and aprons outside the room. Ensure alcohol gel available outside the room. Store charts outside room. Provide own commode or toilet facilities. No special crockery precautions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before entering the room: Clean hands with alcohol rub then put on disposable gloves and aprons (if giving care or if contact with the environment is likely).</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Leaving the room: Remove protective clothing (gloves then apron) discard into orange bag in room. Wash hands with soap and water in the room. Leave room, close door and clean hands with alcohol rub.</td>
<td></td>
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<tr>
<td>Treat all linen as infectious- place alginate bag inside white outer bag.</td>
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<tr>
<td>Visitors do not need to wear protective clothing unless providing personal care, but need to clean their hands before entering the isolation room and before leaving.</td>
<td></td>
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</tr>
<tr>
<td>Daily room clean with Actichlor- Plus (1,000ppm av.chlorine)</td>
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<tr>
<td>Visits to other Departments:</td>
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<tr>
<td>• If the visit is essential (e.g. for rehab, ECT or for diagnostic investigations), inform the relevant department of MRSA status.</td>
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</tr>
<tr>
<td>• Department staff to wear PPE (disposable gloves and aprons) for direct service user contact. After removing PPE wash hands.</td>
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</tr>
<tr>
<td>• Cleaning- wipe couch/table with a detergent wipe. Equipment used on service user must be decontaminated as per Trust policy/manufacturers’ instructions.</td>
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</tr>
<tr>
<td>• Arrange for the service users to be seen and returned back to the ward promptly.</td>
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</tbody>
</table>

**MRSA can cause infection**

**Prompt treatment of any infection**

If infection is suspected ask doctors to review patient and to contact Consultant Microbiologist for advice on antibiotic treatment if required.

**MRSA Suppression Therapy:**

MRSA suppression therapy is **required for all hospital inpatients** who are MRSA positive.

After giving topical treatment for 5 days wait 2 days before clearance screening. If screening results still detect MRSA, prescribe a second course of suppression therapy. **MAXIMUM OF TWO TREATMENTS IN 6 MONTHS.**

Allow 7 days between screens. (Screen set = nose, groin, and if applicable wounds, catheter specimen of urine (CSU), swab around invasive device sites).

In hospital – de-isolate when, three consecutive **negative** sets of MRSA screens have been obtained, whilst the patient has not received anti-microbial therapy and following IPCT & microbiologist advice.

Routine screening post-discharge is not recommended, unless clinical need, or advised by IPCT or GP.
### SHFT MRSA Management & Other Antibiotic Resistant Organisms Procedure

**Version: 3**

**April 2016**

---

**Date first MRSA suppression therapy has been prescribed. Initial daily, each protocol component when complete.**

**Wash product in use for 5 days (please circle):**  
Octenisan,  
Dermol 500,  
Stellisept Med

**Nasal clearance product in use (please circle):**  
Mupiricin 2% (5 days)  
Naseptin (Clorhexidine hydrochloride 0.1% & Neomycin sulphate 0.5%) for 10 days

<table>
<thead>
<tr>
<th>Date:</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
<th>Day 7</th>
<th>Screen 1</th>
<th>Result of screen 1</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td><strong>Apply nasal Mupirocin 2% three times a day (TDS) for 5 days.</strong></td>
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</tr>
<tr>
<td><strong>Apply Naseptin if Mupiricin allergy or resistance four times a day for 10 days.</strong></td>
<td>Day 1</td>
<td>Day 2</td>
<td>Day 3</td>
<td>Day 4</td>
<td>Day 5</td>
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<td></td>
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<tr>
<td></td>
<td>Day 6</td>
<td>Day 7</td>
<td>Day 8</td>
<td>Day 9</td>
<td>Day 10</td>
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<tr>
<td><strong>Apply daily antimicrobial wash to whole of body, pay particular attention to skin folds.</strong></td>
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<tr>
<td><strong>Apply antimicrobial wash to hair at least twice in the 5 day period.</strong></td>
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</tr>
<tr>
<td><strong>Change bed linen and towels daily.</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Chronic wound sites, please specify:</strong></td>
<td>Date reviewed:</td>
<td>Dressing selected:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Long term invasive device in situ. please specify:</strong></td>
<td>Date reviewed:</td>
<td>Outcome:</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Record of additional advice sought &amp; reason:</strong></td>
<td>Date</td>
<td>Outcome</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td><strong>Advice from:</strong></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Record of non-compliance with suppression therapy:</strong></td>
<td>Date</td>
<td>Reason for non-compliance:</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

SHFT MRSA Management & Other Antibiotic Resistant Organisms Procedure

Version: 3

April 2016
Date second MRSA suppression therapy has been prescribed in a six month period can be given consecutively. Initial daily, each protocol component when complete.

Wash product in use (please circle): Hibiscrub , Dermol 500, Octenisan

Nasal clearance product in use (please circle): Mupiricin 2% for 5 days Naseptin (Clorhexidine hydrochloride 0.1% & Neomycin sulphate 0.5%) for 10 days

<table>
<thead>
<tr>
<th>Date:</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
<th>Day 7</th>
<th>Screen 2</th>
<th>Result of screen 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R</td>
<td>R</td>
<td>Date Due:</td>
<td>Date of result:</td>
</tr>
<tr>
<td>Apply nasal Mupirocin 2% three times a day (TDS).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Date taken:</td>
<td>Positive site:</td>
</tr>
<tr>
<td>Apply Naseptin if Mupiricin allergy or resistance, four times a day for 10 days.</td>
<td>Day 1</td>
<td>Day 2</td>
<td>Day 3</td>
<td>Day 4</td>
<td>Day 5</td>
<td>Day 6</td>
<td>Day 7</td>
<td>Day 8</td>
<td>Day 9</td>
</tr>
<tr>
<td>Apply daily antimicrobial wash to whole of body, pay particular attention to skin folds.</td>
<td></td>
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<tr>
<td>Apply antimicrobial wash to hair at least twice in the 5 day period.</td>
<td>Day 6</td>
<td>Day 7</td>
<td>Day 8</td>
<td>Day 9</td>
<td>Day 10</td>
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<tr>
<td>Change bed linen and towels daily.</td>
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<td>Chronic wound sites, please specify:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Date reviewed:</td>
<td>Dressing selected:</td>
<td>Signature</td>
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<tr>
<td>Long term invasive device in situ. please specify:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Date reviewed:</td>
<td>Outcome:</td>
<td>Signature:</td>
<td></td>
</tr>
<tr>
<td>Record of additional advice sought and reason. Advice from:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Date</td>
<td>Outcome</td>
<td>Signature</td>
<td></td>
</tr>
<tr>
<td>Record of non-compliance with suppression therapy:</td>
<td>Date</td>
<td>Reason for non-compliance.</td>
<td>Signature</td>
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Appendix 12.16: MRSA Information leaflet for Inpatients

What is MRSA?

*Staphylococcus aureus* is a common germ that is found on the skin and in the nostrils of about a third of healthy people. It can cause harm if it enters the body, for example through cuts and sores.

Meticillin (previously known as methicillin) is a type of penicillin, an antibiotic that is used to treat infections.

**MRSA** stands for meticillin (M) resistant (R) *Staphylococcus (S) aureus (A)*.

MRSA are types of *Staphylococcus aureus* that have developed resistance to meticillin and some other antibiotics used to treat common infections. Strains of MRSA were first found in the 1960s following the widespread use of antibiotics.

Some people carry MRSA on their skin or in their nostrils quite harmlessly. Some people carry MRSA for just a few hours or days, but other people carry MRSA for weeks or months. They don’t know that they carry MRSA because they have no symptoms and it does not harm them. This is called ‘colonisation’.

MRSA and other germs cause problems in hospitals. Complicated medical treatments, including operations and intravenous lines (drips), provide opportunities for germs to enter the body.

MRSA and other types of *Staphylococcus aureus* can cause local skin infections such as boils and, in more vulnerable service users; they can cause more serious infections in wounds, bones, lungs and blood (bloodstream infections).

How do you know if someone has MRSA?

People who carry MRSA do not look or feel different from anyone else. The MRSA does not harm them and they have no symptoms of infection. When service users come into hospital, a nurse may take swabs for laboratory tests to check for MRSA.

Service users who have an infection may develop signs and symptoms, such as a high temperature or a fever. An infected wound may become red and sore and discharge pus. Many different germs can cause these signs and symptoms. Laboratory tests can show whether MRSA or other germs are the cause.

How do hospital staff care for service users with MRSA?

A nurse may take swabs from different parts of the service user’s body to check if MRSA is present.

People who carry MRSA or have an MRSA infection can be treated with antibiotics. Hospitals have policies for treatment and these policies vary according to the local situation, the condition of the individual service user, and if the service user is likely to need further or repeated hospital care.
You can ask your nurses about local policies.

A service user who carries MRSA may be treated with antiseptic shampoo and body wash, which reduce or remove MRSA from hair, skin and nostrils.
A service user who is infected with MRSA is usually treated with appropriate antibiotics.

How does MRSA spread?
If people have MRSA on their hands, they can transfer it to people and objects that they touch.
Other people can then pick it up on their hands and pass it on to others.

How do hospital staff stop MRSA spreading?
Hospital staff take special precautions with service users who have MRSA in order to stop it spreading to other people.

**Simple hygiene measures reduce the risk of spreading MRSA**
- Everyone should clean their hands before and after touching service users.
- Hands can be cleaned with soap and water, or alcohol hand rubs.
- Staff will wear gloves and aprons when they care for a service user who has MRSA.
- Service users who have MRSA may be moved to a room on their own or into a separate area for people who have MRSA.

How can service users’ prevent the onward spread of MRSA?
- Clean your hands frequently with liquid soap and water or alcohol hand gel especially after touching your nose / skin, before eating and after using the toilet.
- Avoid touching your wounds, drips, urinary catheters other tubes as this may introduce MRSA into your body. If for any reason you do need to touch them, clean your hands before and after contact.
- Encourage your visitors’ to clean their hands at the start and end of their visit.
- Please feel confident to challenge staff, if you think hand hygiene should have occurred.

Do service users have to stay longer in hospital because they have MRSA?
Service users who carry MRSA do not usually have to stay longer in hospital.
Service users who have an MRSA infection or any other infection, may have to stay in hospital until the infection shows signs of improving.
They may stay until they have completed their course of antibiotics or they may need to continue treatment when they go home.

A service user who has MRSA can go home or be cared for safely in a nursing home or residential home, using simple hygiene measures discussed above.

Can MRSA harm friends and family visiting service users in hospital?
MRSA does not usually affect healthy people. It does not usually harm elderly people, pregnant women, children and babies. But it can affect people who have serious health problems, and people who have chronic skin conditions or open wounds.
Visitors can reduce the risk of spreading MRSA to other people if they do not sit on beds and if they clean their hands at the start and the end of their visit. Nurses can give you advice, which reflects the hospital’s policy. You should ask nurses for advice if:

- Someone who has a long-term health problem wants to visit a service user who has MRSA.
- A service user who has MRSA wants to visit another service user in the hospital.

**How is MRSA monitored?**

The Infection Prevention and Control Team monitors’ levels of MRSA in their own hospitals. NHS hospitals in England send information about MRSA bloodstream infections (the most serious MRSA infections) to the Health Protection Agency. The agency publishes figures for individual NHS trusts, for regions and for England (see further information). Hospital staff can compare their own progress in reducing MRSA with progress in other trusts, regionally and nationally.

**Further information about MRSA**

*For more information* ask to speak to a member of your clinical team e.g. charge nurse or doctor alternatively you can contact the **Infection Prevention and Control Team on 02389 874 291.**

*For more information / further reading*

*Staphylococcus aureus* (including MRSA) The HPA has an information sheet ‘Frequently Asked Questions’ at


The Department of Health has published ‘A simple guide to MRSA’ at


The Infection Prevention Society and Department of Health have published ‘Advice for those affected by MRSA outside of hospital’ at

[www.clean-safe-care.nhs.uk/ArticleFiles/Events/MRSA_Advice.pdf](http://www.clean-safe-care.nhs.uk/ArticleFiles/Events/MRSA_Advice.pdf)

**For Data**

The Health Protection Agency publishes data on MRSA bloodstream infections for trusts, regions and England at

[www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/StaphylococcusAureus/](http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/StaphylococcusAureus/)

**Guidelines**


If you have any further questions, please contact:

*Adapted from HPA service user information leaflet (March 2010).*
Advice for those affected by MRSA outside of hospital

If you have MRSA this leaflet provides information and advice for managing your day-to-day life.
About MRSA

There are lots of different types or families of germs found on the human body and in the environment around us. One of these families of germs is called *Staphylococcus aureus*. MRSA belongs to this family.

**Staphylococcus aureus**

*Staphylococcus aureus* (*S. aureus*) is found on about a third of the population. It usually lives in the moist areas such as armpits, groin and nose, although it can be found on other parts of the body such as your hands. Mostly, it causes no problems, though like any other germ, it can cause infections. In particular, *S. aureus* can cause skin-related problems such as pimples and boils. These germs can cause more serious infections if they get into sites where they would not normally be found, for example through cuts or surgical wounds. This family of germs is treatable with a wide range of antibiotics and is known sometimes as MSSA, or meticillin **sensitive** *Staphylococcus aureus* (meticillin being a type of antibiotic).

**MRSA**

MRSA (meticillin **resistant** *Staphylococcus aureus*) is when *S. aureus* becomes resistant to meticillin, meaning that there is a reduced choice of antibiotics available to treat it, although it is still treatable with other antibiotics.
How it is spread

MRSA exists throughout the community. It is more common in hospitals and care homes where people are having medical procedures and are being cared for. Mostly the germ does not cause harm to people unless it gains entry to the body via a break in the skin. Normal social contact such as holding hands or hugging does not usually present a risk.

People with breaks in their skin such as a sore or surgical wound, or those who have medical tubes in place, should keep them covered with a dressing to limit the risk of the germ getting into the body. They should also be sure to wash their hands before and after changing their dressings or touching their wounds. This is because germs are most commonly passed on from the hands.
Understanding the difference between MRSA colonisation and MRSA infection

**MRSA colonisation**
About 30% of the general population are colonised with *S. aureus*. In about one tenth of these cases (3% of the population overall), the *S. aureus* is MRSA and these people are said to be colonised with MRSA. People colonised with or carrying MRSA on their skin and/or nose ARE NOT ILL. Some of us carry it for a few hours, or days, while others carry it for weeks or for their whole lives. Most people will be unaware that they carry MRSA, because it does not harm them and they have no symptoms.

**MRSA infection**
MRSA can cause harm when it gets an opportunity to enter the body, for example through a cut or wound. It can cause pimples and boils, or more serious problems such as wound infections and chest infections. In more serious cases it can cause bloodstream infections.
Dealing with MRSA

On the whole, colonisation with MRSA does not require treatment. If, however, you need a healthcare procedure or surgery, there may be an increased risk of infection, (because this makes it possible for MRSA to enter the body). Your healthcare professional will consider whether you need to be ‘decolonised’. This means removing as much of the MRSA as possible. Decolonisation can be carried out either in hospital or at home. It will usually include treatment with bodywash, antiseptic shampoo and nasal cream, in order to remove MRSA from the body, hair and nostrils respectively. If you are being treated for an MRSA infection, you may be given antibiotics to take orally, to rub on your skin or by a drip.

There are some specific precautions that you should take while you are being decolonised or treated for an infection to ensure that this is effective (please see the last section of this leaflet, ‘Around the house’).
Safety and effectiveness of home treatment

Your healthcare professional will decide whether it is safe for you to be decolonised or treated at home. If you need treatment or decolonisation and there is no other reason for you to be in hospital, then it is safe for you to be treated at home. This can offer benefits such as enabling you to be cared for in the comfort of your own home, as well as assisting hospital staff in controlling the spread of infection. The decolonisation regime can be done simply and effectively at home. If you have had a bloodstream infection, your healthcare professional may decide that it is safe for you to continue your treatment at home and may arrange for a nurse to visit you at home and give you your antibiotics. The important thing to remember is to follow your treatment instructions carefully and make sure you complete it.
Tackling MRSA: how you can help

It is the responsibility of everyone who comes into contact with the NHS (from patients to healthcare staff, from managers to visitors) to help tackle infection and promote safe, clean care.

Tackling infection is everyone’s business. However, you can play an important role in reducing risks, by taking some specific actions, and this section focuses on such issues.

Pay particular attention to hygiene

Because they are an important route through which the germs are passed on, hands should be washed regularly, especially before and after wound care and handling any drips or tubes that enter your body. This is especially important if you are involved in changing or handling a dressing from a wound. Even when gloves are worn as an extra barrier, they should be thrown away with the soiled dressing. Hands should then be thoroughly washed again.
Take precautions when looking after wounds

If you have MRSA there is a small risk to those people with whom you come into contact, if they have open wounds, intravenous lines, catheters or if they have chronic skin conditions. In addition to general maintenance of good hand hygiene, the most effective way to reduce the risk is for them to take sensible precautions such as covering open wounds, cuts and abrasions with a waterproof dressing or plaster.

Frequently asked questions

How will I know that I am colonised?
If you are colonised you will not have any symptoms at all, this is because the germ has not caused an infection.

How will I know that I have an infection?
If you develop a general infection you may feel unwell, hot, lethargic and have a poor appetite.
There are 5 signs that can help you recognise any wound infection (including an MRSA infection):

- heat
- redness
- pus
- swelling
- pain

If you have any doubts, you should contact your GP or NHS Direct for advice.
How much of a risk am I to other people?
If you have MRSA, you do not normally present a risk to generally healthy people in the community (including elderly people, pregnant women, children and babies).

What about personal and sexual relations?
You should continue your normal life and this can include maintaining a normal relationship with your partner without restriction. If you do have MRSA, it is unlikely to harm your partner. While close contact could lead to your partner becoming colonised, this will not present a significant risk. If you are undergoing a decolonisation regime, say prior to surgery, you should ensure that you complete the treatment as advised by your healthcare professional, in order to reduce risk.

What if I am pregnant or a nursing mother?
If you are pregnant, and fit and healthy, there are no additional risks from MRSA. Breastfeeding is safe for you and your baby. However, in common with the usual advice given to breastfeeding mothers, if you notice certain symptoms, you should contact your GP, midwife or health visitor for advice. These include:

- painful breasts
- red patches or a sense of ‘lumpiness’ around the breasts
- flu-like symptoms, including a temperature

These symptoms indicate that you may have mastitis but this may or may not be MRSA. It is important that you tell your healthcare professional that you have or have had MRSA so that they can treat you appropriately.
Can my child go to school/nursery?
Children in whom MRSA has been detected can attend nursery and go to school as normal (see also the advice about leisure below). You do not have to inform the school or nursery.

Can I do my normal leisure activities and go to work?
MRSA colonisation does not prevent you going about your usual activities, including socialising, swimming, going to the gym etc. Regardless of whether you have MRSA or not, you should avoid swimming if you have a sore or open wound, and cover sores and wounds completely with a waterproof dressing if you are taking part in sports.

In general, you will be able to go to work as normal. However, if you work in a healthcare setting, and have an MRSA infection, you should contact your GP or occupational health service for advice.

Do I have to tell people that I have MRSA?
You do not have to tell anyone that you have MRSA. However, if you seek medical advice or visit the hospital for treatment, you should share this information with your healthcare practitioner. This is important because they might decide that you need an invasive procedure that may require decolonisation in advance.
Can I expect to be screened for MRSA?
Screening means that swabs will be taken from various parts of your body and tested for MRSA. You will be informed of the results. These results will help healthcare staff decide the safest way to proceed with your treatment.

By 2009, all hospitals will screen patients who are admitted for a planned stay. By 2011 patients who come into hospital in an emergency will also be screened.

What about my pet?
Pets pose minimal risk in the spread of MRSA. In general, the germs that live on humans are different from the germs that live on animals. Occasionally, human germs may pass to animals, and that includes MRSA. MRSA is not common in animals, although it is possible for a pet to become colonised with MRSA and develop an infection. Likewise, it may be possible (although it is extremely rare) for an animal with MRSA to pass these germs to you. You should always, as a matter of course, wash your hands after handling your pets, and keep wounds covered.

Can I still go to a care home?
Yes. As long as there is no other reason for you to be in hospital, it is safe for both you and the other residents, providing sensible precautions – such as regular hand washing by staff and visitors – are taken. Your care home should already follow good basic hygiene principles.
It is safe for you to share a room, as long as neither you nor the other occupant has open sores, wounds, drips or catheters. You can also join other residents in communal areas. Any sores or wounds should be covered with a dressing.

What is PVL?
You may have heard of the PVL type of \textit{S. aureus}. PVL stands for Panton-Valentine Leukocidin. A small proportion of \textit{S. aureus} germs (2\%) are the PVL type. These infections are rare in the UK and are not common in hospitals. This rare type can cause more severe infections, but they can still be treated with antibiotics. More information on PVL is available from the Health Protection Agency at: http://www.hpa.org.uk/webw/HPAweb&Page&HPAwebAutoListName/Page/1207208304710?p=1207208304710

Around the house

While special cleaning measures are not required, good hygiene and cleaning procedures in your household, will lower the risk of potential spread of MRSA.

Keep surfaces dust-free and regularly vacuum carpets. Clean your bath, shower, basins and toilets regularly with your usual cleaning products.

You should wash your clothes, bedding and linen as normal using your usual washing powder or liquid detergent at the hottest temperature suitable for the fabric. Your clothes can be incorporated into the family wash as usual, taking care not to overload your machine. You can tumble dry or line dry and iron clothes as normal.

Additional precautions

If you are being decolonised or treated for MRSA infection, there are some extra precautions to be taken. These will help get rid of as much MRSA as possible from your body, and will help reduce the chance of you becoming recolonised.

*You do not have to do these if you are colonised but not being treated.*
**Additional precautions for those undergoing decolonisation or treatment**

**Towels**
You should not share personal towels and should change yours daily for the duration of your treatment.

**Washing and bathing**
You can use your bath or shower and will probably have a special body wash and shampoo prescribed by your doctor.

**Clothing**
After washing, it is important that fresh clothing is worn, also that fresh night clothes are worn each night, for the duration of your treatment.

**Bedding**
This should be changed daily for the duration of your treatment.

**Razors and shaving equipment**
Even if you do not have MRSA, you should not share razors or other shaving equipment such as brushes and soaps because of the possibility of breaking the skin, allowing germs to enter your body and cause infection. If you are being decolonised or treated for infection you should take the additional precaution of using a pump action shaving cream or gel rather than a bar of soap to reduce the risk of re-colonisation.
## At a glance...

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<th>I am being treated</th>
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<td>Yes (but not if you have open wounds)</td>
<td>Yes (but not if you have open wounds)</td>
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<tr>
<td>Work</td>
<td>Yes – as normal</td>
<td>Yes – as normal</td>
</tr>
<tr>
<td>School and nursery</td>
<td>Yes – as normal</td>
<td>Yes – as normal</td>
</tr>
<tr>
<td>Friends and partners</td>
<td>Yes – keep any open wounds covered</td>
<td>Yes – keep any open wounds covered</td>
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<tr>
<td>Partners and sexual relationships</td>
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<td>As normal</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>Yes – be aware of signs of mastitis as usual</td>
<td>Yes – be aware of signs of mastitis as usual</td>
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<td>Usual cleaning regime</td>
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<td>Wash clothes at hottest temperature for the fabric using usual detergent. Avoid overloading the machine</td>
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<td>Pets</td>
<td>Wash your hands after handling pets</td>
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<td>You can go back to your care home as normal. Wounds should be covered</td>
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<td>Towels</td>
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<td>You shouldn't share personal towels and should change them daily</td>
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<td>Washing and bathing</td>
<td>As normal</td>
<td>Follow treatment instructions given by your healthcare professional</td>
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<td>Shaving</td>
<td>Don't share shaving equipment</td>
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<td>Clothes</td>
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