

TRUST WIDE POLICY

METICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA): CONTROL AND PREVENTION

DOCUMENT REF: PTWCMRSA

(Version No. 3.3)

Name and designation of policy author(s)	Lauren Gould, Infection Prevention and Control Matron
Approved by (committee, group, manager)	Sheila Lloyd, Director of Nursing & Quality
Date approved	25 th June 2020
Approving signature	Electronic approval received
Review date	June 2023
Review type (annual, three yearly)	3 yearly
Target audience	All Staff
Links to other strategies, policies, procedures	Standard Infection Prevention & Control Precautions Mandatory Training matrix Antibiotic Formulary
Protective Marking Classification	Public
This document replaces...	V3.2

Consultation:

	Authorised by	Date Authorised	Comments
Impact Assessment	N/A	N/A	N/A
Fraud Assessment	N/A	N/A	N/A

Circulation/Dissemination:

Date added into Q-Pulse	25 th June 2020
Date notice posted in the Team Brief	25 th June 2020
Date document posted on the intranet	25 th June 2020

Version History:

Date	Version	Author name and designation	Summary of main changes
05/03/2009	1.0	Sharon Grimshaw – Infection Control Nurse	First version.
Nov 2010	2.0	Deborah Kretzer – Infection Control Lead Nurse	The update clarifies responsibilities and includes all requirements of the Health & Social Care Act. There are also a number of new processes in place e.g. surveillance, updated Meditech care plans, medical alerts and new decolonisation regimen. References and guidance have been updated.
August 2012	2.1	Deborah Kretzer – Infection Control Lead Nurse	Updated to include changes to screening criteria and formal monitoring systems required by the Strategic Health Authority, changes to MRSA decolonisation and to clarify monitoring systems for NHSLA.
September 2015	3.0	Deborah Kretzer – Infection Control Lead Nurse	Scheduled review incorporating major changes to screening requirements and updated reference.
November 2018	3.1	Deborah Kretzer – Infection Control Lead Nurse	Rolled over until March 2019 at the request of the Interim Deputy Director of Nursing until final Infection Control changes are in place.
March 2019	3.2	Joe Allan – Interim Head of Infection Prevention & Control	Minor changes only.
June 2020	3.3	Lauren Gould - IPC Matron	Changes to reflect move to CCC-L service provision by LCL

Issue Date: 25 th June 2020	Page 2 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould		Authorised by: Sheila Lloyd, Director of Nursing & Quality	Copy No:

1.0	Introduction	5
2.0	Purpose.....	6
3.0	Scope.....	6
4.0	Responsibilities	6
4.1	The Director of Infection Prevention and Control and Infection Control Group	7
4.2	Medical Microbiologists	7
4.3	Consultant Physicians	7
4.4	Infection Prevention and Control Team	7
4.5	Occupational Health Team	8
4.6	Pre-operative Assessment Nurses	8
4.7	Clinical information Team	8
4.8	Directorate Leads	8
4.9	Matrons and ward / unit managers	8
4.10	Hotel Services	9
5.0	Laws and Regulations.....	9
6.0	Definitions	10
7.0	Main Body of Policy.....	12
7.1	Hand Hygiene.....	12
7.2	Screening and identification of positive cases	12
7.3	MRSA Decolonisation.....	13
7.4	Outbreaks of MRSA.....	13
7.5	Patient Transfers	13
7.6	Patient information	13
7.7	Audit Programme	13
7.8	Trust Targets	13
7.9	Antibiotic Stewardship	14
8.0	Training.....	14
9.0	Audit.....	14
10.0	Policy Monitoring.....	14

Issue Date: 25 th June 2020	Page 3 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: Sheila Lloyd, Director of Nursing & Quality		Copy No:

11.0 References 15

12.0 Appendices 18

 Appendix 1 19

 Appendix 2 20

 Appendix 3 22

 Appendix 4 24

 Appendix 5 25

 Appendix 6 25

 Appendix 7 26

 Appendix 8 27

 Appendix 9 28

 Appendix 10 31

Issue Date: 25 th June 2020	Page 4 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould		Authorised by: Sheila Lloyd, Director of Nursing & Quality	Copy No:

1.0 Introduction

Staphylococcus aureus* and meticillin resistant *Staphylococcus aureus

Approximately 30% of the population is colonised by *Staphylococcus aureus* (*meticillin sensitive S.aureus*), which is usually present on the nose and/or skin. *S.aureus* infections acquired outside a healthcare setting typically involve the skin and soft tissue (e.g., impetigo, folliculitis, boils, and infected minor breaks of skin) and more rarely the bone and joints.

Healthcare associated *S.aureus* may infect the skin and soft tissue, usually as surgical wound infection, but also colonise the foreign bodies frequently used in patient care causing infections (e.g. intravascular line infection, prosthetic-related infections, urinary catheter-associated infections, ventilator-associated pneumonia). Infections can sometimes be severe and spread to the bloodstream.

‘Meticillin Resistant *Staphylococcus aureus*’ (MRSA) is a less commonly encountered strain of *S.aureus*, MRSA is resistant to antibiotics such as flucloxacillin, an initial option for treating some infections. Some MRSA strains may also be resistant to a wider range of antibiotics leaving a limited choice of antibiotics to treat infections.

MSSA and MRSA are mainly transmitted by direct and indirect physical contact e.g through the contaminated hands of health care workers (HCW) and / or re-useable equipment if not decontaminated correctly after use on another MSSA / MRSA colonised patient.

Airborne transmission may occur in some cases (e.g. productive coughing with MRSA-contaminated sputum, shedding of skin scales carrying MRSA by individuals with dermatological skin conditions.)

Issue Date: 25 th June 2020	Page 5 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: Sheila Lloyd, Director of Nursing & Quality		Copy No:

The outcome of MRSA colonisation depends mainly on whether breaches in the mucocutaneous surfaces (e.g., due to wounds and /or invasive devices) are present. Most frequently this colonisation is asymptomatic.

Following MRSA colonisation, three outcomes are possible:

- Asymptomatic (short-term or long-term) colonisation status.
- Initial colonisation for some time, but developing a clinically significant infection later (e.g., after an invasive procedure)
- Immediate health-care-associated infection as a single case or in an outbreak setting.

2.0 Purpose

This policy outlines the Trust strategy for implementation of screening for elective and emergency admissions for MRSA to facilitate the prevention and management of MRSA colonisation and infection within The Clatterbridge Cancer Centre (CCC).

3.0 Scope

This policy applies to all CCC staff and contractors.

4.0 Responsibilities

It is the responsibility of every member of staff within CCC to make themselves familiar with this policy, to comply with its contents and to ensure that the procedures within it are followed.

Mandatory infection prevention and control training is provided for all staff groups at Trust Induction and thereafter according to agreed timescales explicit within the Mandatory Training Matrix.

Issue Date: 25 th June 2020	Page 6 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: Sheila Lloyd, Director of Nursing & Quality		Copy No:

All clinical staff must be familiar with the methods used within CCC to identify MRSA carriers through admission screening and the management of patients with MRSA, thus reducing the risk to that patient and to others. This policy has been structured so as to make clear staff responsibilities in relation to MRSA according to professional group.

4.1 The Director of Infection Prevention and Control and Infection Control Group

Will receive and review:

- Post infection reviews and action plans for MRSA bacteraemia cases.
- updates on compliance on with MRSA screening programme
- reports of outbreaks / incidents
- infection control audit reports
- policies and guidance related to prevention and management of MRSA.

4.2 Medical Microbiologists

Will:

- notify all MRSA positive blood cultures and those from normally sterile sites to the doctor responsible for the patient's care and provide advice on treatment
- provide early notification to the infection control nursing team of the above.

4.3 Consultant Physicians

Will ensure:

- appropriate antibiotics are prescribed where necessary with advice as required from a medical microbiologist.

4.4 Infection Prevention and Control Team

Will:

- notify positive MRSA results from screening swabs to the clinical team

Issue Date: 25 th June 2020	Page 7 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: Sheila Lloyd, Director of Nursing & Quality		Copy No:

- support the notification of patients' General Practitioners of positive results for patients discharged before the results become available.
- undertake clinical follow up visits to monitor in - patient management on a regular basis.
- compile reports for the infection control group

4.5 Occupational Health Team

Will provide:

- Relevant support for staff where there is a requirement for MRSA screening to be carried out along with communication of results to staff.

4.6 Pre-operative Assessment Nurses

Will ensure:

- the MRSA screening of elective patients is completed as per Trust screening policy

4.7 Clinical information Team

Will:

- Compile and circulate feedback data to managers on compliance with MRSA screening.

4.8 Directorate Leads

Will ensure:

- Resources are available to support effective screening and management of patients subsequently identified to be MRSA positive.
- clinical teams contribute to root cause analyses and incident / outbreak investigations.

4.9 Matrons and ward / unit managers

Will ensure:

- MRSA screening is carried out as per trust guidance and the infection control team consulted about any queries.

Issue Date: 25 th June 2020	Page 8 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: Sheila Lloyd, Director of Nursing & Quality		Copy No:

- Results are communicated to in-patients appropriately with supportive information.
- Relevant information is communicated where patient transfers occur between clinical areas within the Trust and, where appropriate, to healthcare teams external to the trust to guide effective patient management.
- Patients are isolated using contact precautions and receive appropriate supportive information.
- Equipment is decontaminated appropriately between reuse.
- Suppression treatments are available and applied appropriately
- Infection Prevention and Control audits are carried out and any areas for improvement actioned promptly.

4.10 Hotel Services

Will:

- Ensure the patient’s environment is regularly cleaned to the specification in the trust contract
- Terminal cleans of isolation rooms are undertaken as per Trust policy.

5.0 Laws and Regulations

- Health and Safety at Work etc Act 1974
- The Management of Health and Safety at Work Regulations 1992
- The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1985
- The Health and Safety (Dangerous Pathogens) Regulations 1981

Health and Safety regulations require employers to assess the risks to their employees and patients.

Issue Date: 25 th June 2020	Page 9 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould		Authorised by: Sheila Lloyd, Director of Nursing & Quality	Copy No:

Control of Substances Hazardous to Health Regulations 2002 (COSHH) (as amended) relate to biological agents (micro-organisms/infection risks) and chemicals (disinfectants), providing a framework of actions designed to control the risk to health from a wide range of substances.

The Health and Social Care Act 2008 (updated July 2015) Code of Practice on the prevention and control of infections and related guidance.

6.0 Definitions

Term	Definition
Clearance of MRSA to below a detectable level	At least 3 negative MRSA screening from positive sites at weekly intervals which will allow the patient can be cared for in an open bay under the same infection control principles as a non-MRSA colonised patient.
Colonisation	presence and multiplication of MRSA at a body site without tissue invasion, damage or clinical disease
Heterogeneous intermediate resistance (hGISA or heteroGISA)	Most strains appear to be susceptible to glycopeptides (vancomycin MIC \leq 4 mg/L) but contain subpopulations of cells at frequencies of $>10^6$ that exhibiting reduced susceptibility (vancomycin MIC 8-16 mg/L)
Homogenous intermediate resistance (GISA)	most strains exhibit MIC to vancomycin between 8-16 mg/L
Infection	the entry and multiplication of MRSA in the tissues of the host where tissue damage is caused. This results in clinical disease that may be local (e.g. surgical site wound) or systemic (e.g. bloodstream infection)

Issue Date: 25 th June 2020	Page 10 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould		Authorised by: Sheila Lloyd, Director of Nursing & Quality	Copy No:

Term	Definition
Meticillin resistant <i>Staphylococcus aureus</i> (MRSA)	A <i>S.aureus</i> strain with a minimum inhibitory concentration (MIC) to oxacillin of ≥ 4 $\mu\text{g/mL}$. MRSA confers resistance not only to Flucloxacillin, but to all beta-lactam agents. (Penicillins, Cephalosporins, Carbapenems, and Monobactams). MRSA usually carries other virulence factors and antibiotic resistance genes, explaining its multi-resistance to antibiotics.
MRSA suppression	refers mainly to the use of topical agents such as nasal ointment and bodywash /shampoo to eradicate / reduce nasal and skin carriage.
MRSA with reduced susceptibility to vancomycin	<i>S. aureus</i> with reduced vancomycin susceptibility refers to isolates with minimum inhibitory concentration (MIC) to Vancomycin/Teicoplanin of > 4 mg/L. However, this is not a homogeneous group and strains differ in their phenotypic expression and underlying genotypic mechanism of resistance as follow:
Vancomycin-intermediate <i>S.aureus</i> (GISA/ VISA)	refers to isolates with MIC to vancomycin of between 8 and 32 mg/L. They may be more frequently encountered and their resistance mechanism usually involves a thickening of the cell wall which traps the glycopeptide.
Vancomycin-resistant <i>S.aureus</i> (GRSA/VRSA)	refers to isolates with MIC to vancomycin of > 32 mg/L. These isolates are rare so far and carry similar vancomycin resistant genes to those found in vancomycin-resistant enterococci, which are usually present as a colonisers at the infectious site with MRSA.

7.0 Main Body of Policy

7.1 Hand Hygiene

Routine compliance with Standard precautions including hand hygiene (before and after patient contact) and asepsis is the single most important action required to prevent MRSA spreading between patients resulting in colonisation and / or infection.

7.2 Screening and identification of positive cases

Enhanced precautions through identification and segregation of patients colonised with MRSA through a comprehensive MRSA screening and management programme to include:

- All elective admissions to CCC prior to admission.
- All emergency admissions
- All patients transferred between hospital sites if requested
- Patients with hospital stay exceeding one month will be rescreened monthly if negative on initial screen
- Sites to be routinely are nose, and groin (Kiestra). In addition swabs should be taken from any wounds, ulcers, line sites or skin breaks and from skin lesions such as psoriasis and eczema. A catheter specimen of urine should be sent if the patient is catheterised. Any perceived need for variation to this screening guidance must be discussed with the Infection Prevention and Control Team.
- Prompt notification of MRSA positive samples to clinical teams by the IPCT members.
- Screening of in-patient contacts of a newly identified MRSA positive case where indicated **Appendix 1**
- An alert flag on Meditech to allow MRSA colonised individuals or those with a history of MRSA colonisation or infection to be promptly identified and

Issue Date: 25 th June 2020	Page 12 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: Sheila Lloyd, Director of Nursing & Quality		Copy No:

provided with the appropriate antiseptic / antibiotic prophylaxis prior to invasive procedures.

7.3 MRSA Decolonisation

An MRSA suppression regime including prophylactic perioperative antibiotics as applicable **Appendix 2**

7.4 Outbreaks of MRSA

Environmental Hygiene supported by ward cleaning checklists, disinfection policy, Hotel Services audit and monitoring

7.5 Patient Transfers

Optimum communication between healthcare providers to support patient transfers both within and between health care facilities and discharge home to ensure patients receive appropriate treatment and care. **Appendix 6**

7.6 Patient information

Patient information leaflets and additional supportive information available on Trust intranet.

7.7 Audit Programme

An infection prevention and control audit programme supported by the matrons, ward and department managers and Infection Prevention and Control Link practitioners.

7.8 Trust Targets

A Trust target of no avoidable MRSA bacteraemia infections.

Issue Date: 25 th June 2020	Page 13 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: Sheila Lloyd, Director of Nursing & Quality		Copy No:

7.9 Antibiotic Stewardship

A Trust Antibiotic Management group is responsible for instituting an antibiotic stewardship programme including reviewing audits of antibiotic usage and updating the antibiotic formulary.

Exposure to broad-spectrum antibiotics, particularly third generation Cephalosporin's and fluoroquinolones, have been shown to be independent risk factors for MRSA colonisation and infection in numerous studies. Colonisation or infection with glycopeptide-resistant and intermediately-resistant *S. aureus* (VISA and VRSA) is strongly associated with prolonged exposure to glycopeptides and prior colonisation / infection with MRSA.

8.0 Training

The contents of this document are supported by clarification of the Trusts expectations during main induction training for all staff and thereafter during mandatory training according to the frequency listed in the Education and Training Policies. The policy launch will be accompanied by additional training of all Infection Prevention & Control champions and staff working in clinical areas.

9.0 Audit

The contents of this policy will be audited routinely as part of the IPC audit programme and will include visits to the ward by the IPCN to ensure that appropriate precautions are in place. Exceptions will be noted by incident reporting and all reports and audits followed up as per Infection Prevention & Control Policy.

10.0 Policy Monitoring

In addition to individual patient centred monitoring, a point prevalence audit will be undertaken of all patients. A case notes review will be used to ensure that

Issue Date: 25 th June 2020	Page 14 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: Sheila Lloyd, Director of Nursing & Quality		Copy No:

patients were screened as appropriate and that subsequent actions were timely and appropriate. Including:

- IPCN informed of results by ICNet or laboratory.
- IPCN discussed the result with nursing, secretarial or medical staff dependant on the patient location, documented the results on Meditech and added the alert.
- The patient has been informed of the results and given an information leaflet (if appropriate).
- For inpatients:
 - An MRSA Care Plan has been initiated and completed.
 - The patient was isolated with contact precautions.
 - Suppression commenced.
 - Details of MRSA included in discharge/transfer documentation.

Where non- compliance is identified action plans will be developed by the lead assigned to each section and progress against the action plan will be presented to the identified monitoring committee at each meeting until the issue is resolved. The lead person responsible for monitoring compliance and developing and implementing action plans to rectify non-compliance with this policy is the IPC Matron.

11.0 References

Advisory Committee on Antimicrobial Resistance and Healthcare Associated Infection (ARHAI). National one week (NOW) prevalence audit of MRSA screening report (ARHAI 22-13(02)). Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/707165/ARHAI_annual_report_2014_to_2015.pdf Last

accessed 22 November 2013.

Issue Date: 25 th June 2020	Page 15 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould		Authorised by: Sheila Lloyd, Director of Nursing & Quality	Copy No:

Boyce, J.M. (2007). Environmental contamination makes an important contribution to hospital infection. *J. Hosp. Infect.* 65 (Suppl. 2): 50–54.

Brown DF, Edwards DI, Hawkey PM, Morrison D et al., for the Joint Working Party of the British Society for Antimicrobial Chemotherapy, the Hospital Infection Society and the Infection Control Nurses Association (2005). Guidelines for the laboratory diagnosis and susceptibility testing of meticillin-resistant *Staphylococcus aureus* (MRSA), *J Antimicrob Chemother* 56(6): 1000–18.

Available from: <https://academic.oup.com/jac>

Coia JE, Duckworth GJ, Edwards DI, Farrington M, Fry C, Humphreys H, Mallaghan C, Tucker DR; Joint Working Party of the British Society of Antimicrobial Chemotherapy; Hospital Infection Society; Infection Control Nurses Association. Guidelines for the control and prevention of meticillin-resistant *Staphylococcus aureus* (MRSA) in healthcare facilities. *J Hosp Infect* 2006; 63 Suppl 1: S1–44.

Department of Health (2007) Saving Lives: reducing infection, delivering clean and safe care a delivery programme to reduce Healthcare Associated Infection including MRSA

Department of Health (2015) Health & Social Care Act, 2008 and updates to code of practice for health and adult social care on the prevention and control of infection and related guidance, and prevention and control of infection in care homes

Department of Health (2014). Implementation of modified admission MRSA screening guidance for NHS (2014). Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/345144/Implementation_of_modified_admission_MRSA_screening_guidance_for_NHS.pdf

Issue Date: 25 th June 2020	Page 16 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: Sheila Lloyd, Director of Nursing & Quality		Copy No:

Fuller C, Robotham J, Savage J, Hopkins S, Deeny SR, et al. (2013) The National One Week Prevalence Audit of Universal Meticillin-Resistant *Staphylococcus aureus* (MRSA) Admission Screening 2012.

Gould FK, Brindle R, Chadwick PR, Fraise AP et al. Guidelines (2008) for the prophylaxis and treatment of methicillin-resistant *Staphylococcus aureus* (MRSA) infection in the United Kingdom. Journal of Antimicrobial Chemotherapy 2009; 63(5): 849-61. Available from: <http://jac.oxfordjournals.org/content/63/5/849.long>

Gemmell CG, Edwards DI, Fraise AP, Gould FK et al., for the Joint Working Party of the British Society for Antimicrobial Chemotherapy, the Hospital Infection Society and the Infection Control Nurses Association (2006). Guidelines for the prophylaxis and treatment of methicillin-resistant *Staphylococcus aureus* (MRSA) infections in the UK, J Antimicrob Chemother 57(4):589–608. Available from: <http://jac.oxfordjournals.org/content/57/4/589.long>

Huang SS, Septimus E, Kleinman K, et al. Targeted versus universal decolonization to prevent ICU infection. N Engl J Med 2013;368:2255-65.

Loveday H et al. The patient experience of the MRSA screening process and the impact of a MRSA-positive result: a qualitative study. Antimicrobial Resistance and Infection Control 2013;2 (Suppl 1):P56
<http://www.aricjournal.com/content/2/S1/P56>

ONS. Deaths Involving MRSA: England and Wales, 2008 to 2012.

Pratt RJ, Pellowe C, Loveday HP, Robinson N, Smith GW and the epic guideline development team (2001) The epic project, Developing National Evidence-based Guidelines for Preventing Healthcare associated infections. Journal of Hospital Infection. 47 (supplement) S21-S37).

Pratt RJ, Pellowe CM, Wilson JA, Loveday HP, et al (2007) epic 2: National Evidence-Based Guidelines for Preventing Healthcare-Associated Infections in

Issue Date: 25 th June 2020	Page 17 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: Sheila Lloyd, Director of Nursing & Quality		Copy No:

NHS Hospitals in England. Journal of Hospital Infection 65 (supplement 1)
February 2007.

Siegel, J., Rhinehart, E., Jackson, M., Chiarello, L. and The Healthcare Infection Control Practices Advisory Committee (HICPAC) (2007) Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings 2007, June 2007.

Specialist Advisory Committee on Antimicrobial Resistance (SACAR) – UK
Template for hospital antimicrobial guidelines. BSAC Available at:

<http://www.bsac.org.uk>

12.0 Appendices

Issue Date: 25 th June 2020	Page 18 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: Sheila Lloyd, Director of Nursing & Quality		Copy No:

Appendix 1

Screening of patients for MRSA (MRSA surveillance programme)

MRSA colonised and infected patients are the primary reservoir of MRSA for others.

All elective and emergency patients admitted to the Trust are screened for MRSA. There are some exceptions in line with national recommendations

The admission screening body sites are anterior nares and groin / perineum. Additional swabs must be obtained from skin lesions and wounds, sites of catheters (urinary, intravenous, tracheostomy) if present and sputum (if (productive cough).

Communication of positive results to patients.

MRSA positive results are transferred electronically from the medical microbiology database to the infection control database at regular intervals each day. The IPCT will add the alert to Meditech as required.

A medical microbiologist will contact the relevant medical team to offer advice whenever MRSA is recovered from an important sterile site, in addition to providing antibiotic treatment advice.

The infection prevention and control nurses ensure the relevant staff in the clinical area are aware of all MRSA positive microbiology results and will offer infection prevention and control advice and visits as appropriate.

The infection prevention and control nursing team will also ensure systems are in place to ensure that other healthcare facilities and General Practitioners are informed of MRSA positive results associated with patients under their care when patients are discharged before a result becomes available.

The nursing / medical staff responsible for the patient's care should communicate the result to the patient. Further support is available from the Infection Prevention and Control team and medical microbiologist on request. Patients should be

Issue Date: 25 th June 2020	Page 19 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: Sheila Lloyd, Director of Nursing & Quality		Copy No:

advised about the implications of MRSA colonisation, infection and treatment and the reason for isolation.

Verbal information must be supported by the relevant information leaflet in the language appropriate to the recipient.

Antibiotic treatment considerations while waiting for the first screening results

For patients already receiving antibiotic treatment for clinical infections prior to MRSA positive result an antibiotic change to one with activity against MRSA should be considered if the causative organism remains unknown and there is lack of response to the antibiotic prescribed. A medical microbiologist will provide advice as required. For patients requiring prescription of antibiotics for a new infection an antibiotic with activity against MRSA is recommended if the infection severe

Appendix 2

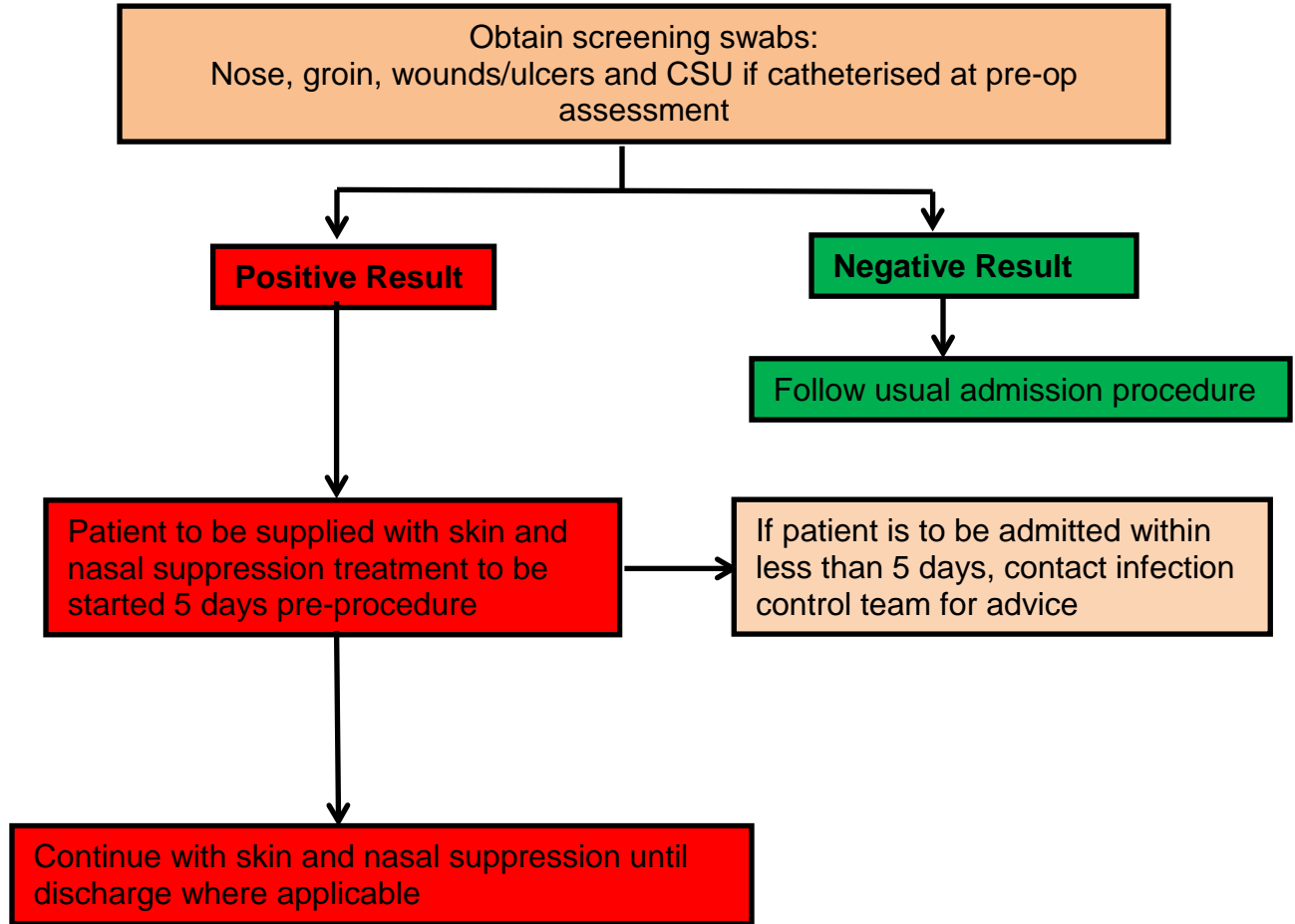
Suggested suppression regimes

Issue Date: 25 th June 2020	Page 20 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: Sheila Lloyd, Director of Nursing & Quality		Copy No:

Product	Guidance
Prontoderm® nasal gel	Apply to the inner surface of each nostril (anterior nares) three times daily for five days.
Prontoderm® foam	Ready-to-use foam for antimicrobial cleansing of the whole body. Individuals may shower and hair wash using their own toiletries and the Prontoderm foam may be applied to clean, dry skin and used as a 'leave on' product (not rinsed off).
2% mupirocin (Bactroban) in a paraffin base	Apply to the inner surface of each nostril (anterior nares) three times daily for five days.
2% aqueous chlorhexidine wash cloths	Ready to use washcloths. . Individuals may shower and hair wash using their own toiletries and the washcloths may be applied to clean, dry skin and used as a 'leave on' product (not rinsed off).
0.5% neomycin plus 0.1-1% chlorhexidine (Naseptin)	Apply to the inner surface of each nostril (anterior nares) three times daily for five days.
Octenisan	<p>A three minute contact time is recommended for maximum efficacy to kill MRSA bacteria and reduce the risk of infection, including bacteraemia.</p> <p>NOT for use as a wound antiseptic, however clinical tests have demonstrated that the active substance is not absorbed systemically therefore Octenisan may be safely used in proximity to wounds.</p> <p>Octenisan is not classed as a medicinal product; the manufacturers state it has activity against MRSA.</p>

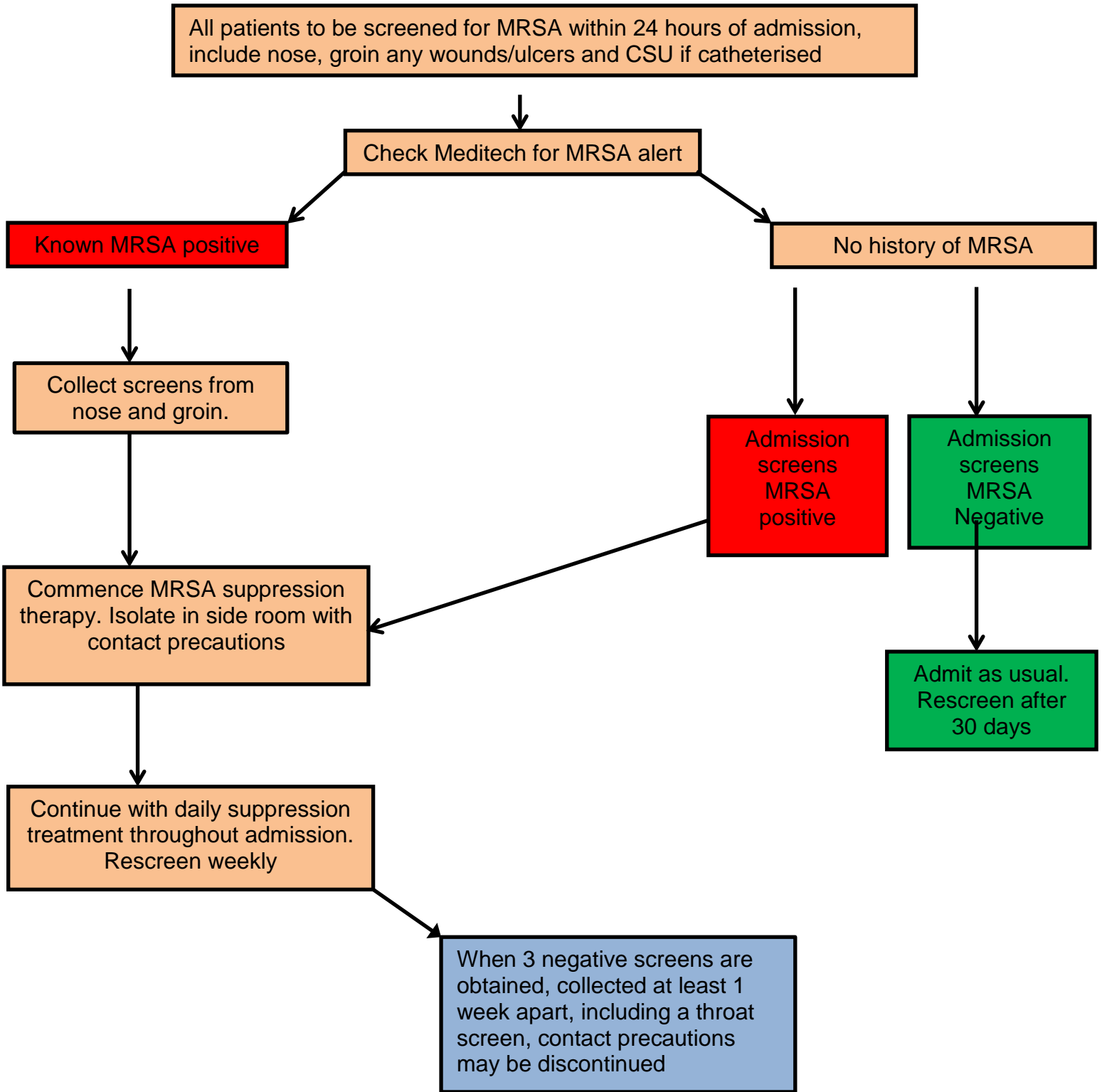
Appendix 3

Screening and management of elective admissions



Issue Date: 16 th July 2019	Page 22 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: IPC Committee		Copy No:

MRSA Ward Screening Procedure



Appendix 4

Management of MRSA positive patients

The main route of spread of MRSA is via direct and indirect contact, but cross-infection in wards may be difficult to prevent by routine contact precautions alone. Staphylococcal dispersers may heavily contaminate the environment with some staphylococci becoming airborne. All MRSA positive patients should be nursed in a single room with staff complying with Contact precautions.

New MRSA positive patient identified from clinical or screening samples

- Full initial MRSA screening (nose and groin) following recovery of MRSA from a clinical sample is required..
- Provide patient with appropriate information and implement Contact Precautions
- Commence MRSA suppression treatment.

Isolation precautions

MRSA is mainly spread by direct or indirect physical contact with MRSA-containing surfaces of the patients or their environment.

Contact precautions - Information poster showing need for contact precautions on entering the isolation the room/bay should be clearly displayed at the door entrance, or at the end of the bed, if the patient has not yet been isolated.

Groups required to comply with contact precautions - all health care workers and visitors who assist with the patient's bodily care. Visitors who only have social contact with the patient do not need to wear protective clothing but do need to decontaminate their hands on entering and leaving the room.

Issue Date: 16 th July 2019	Page 24 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould		Authorised by: IPC Committee	Copy No:

Appendix 5

Environmental Hygiene: Cleaning and decontamination of the isolation facility

The ability of MRSA to survive in dust demonstrates the need for dust minimisation and the removal of fomites from contact surfaces. Medical devices used on these patients can get contaminated with MRSA, which can be transferred to another patient on their surface.

Occupied isolation room

Instruments or equipment should preferably be single-patient use. Otherwise, they should be capable of being decontaminated before use with other patients.

Fans to control the rooms temperature should be avoided

Isolation room doors should be closed, if this is not possible, evidence of a risk assessment must be documented in patients notes.

Adherence to local policies for environmental cleaning and equipment decontamination, waste disposal and linen management

All waste should be categorised as clinical waste, and disposed of in the yellow / orange bag inside the isolation room as per waste management policy.

Linen should be treated as infected and discarded into alginate bags.

After the patient's discharge terminal cleaning of the facility must take place after the room has been emptied.

The door should be kept closed while cleaning

Surface areas should be cleaned with hot water, detergent and a disposable cloth

Pillows, mattresses and covers should be checked for soiling and / or damage and replaced.

Therapy beds may need specialist cleaning in accordance with the manufacturer's/hirer's instructions.

Appendix 6

Patient Transfers

Issue Date: 16 th July 2019	Page 25 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould		Authorised by: IPC Committee	Copy No:

The transfer of MRSA-colonised patient to other wards or healthcare facilities increases the chances of MRSA spread and, therefore, it should be avoided if possible. However, MRSA infection or colonisation should not be a barrier to good clinical care.

The transfer should take place if the patient requires the specialist care in the receiving area and this should be discussed with the patient's Consultants and guidance obtained from the Infection Prevention and Control team.

Before transferring the patient

The staff responsible for arranging the patient's transfer should alert the staff in the receiving area to the requirement for contact precautions . Where appropriate information about current suppression treatment, antibiotic therapy and recent screening results should be provided. Patient's colonised / infected lesions, if present should be occluded with an impermeable dressing.

When transferring the patient attendants in contact with / helping the patient on to a trolley or into a wheelchair should observe the following precautions

In the ward from which the patient is being transferred out Contact precautions should be followed. i.e use of protective clothing (gloves and disposable apron), which is then removed and disposed of as clinical waste before leaving the isolation room, followed by hand cleansing.

Whilst transporting the patient there is no need for staff to wear protective clothing if not in direct contact with patient.

On the receiving ward / unit protective clothing (gloves and disposable apron) should be worn before helping the patient. Once the task has been completed protective clothing should be removed, discarded as clinical waste, and hands decontaminated.

Protective clothing should be worn to terminally clean a wheelchair or trolley before reuse.

Appendix 7

Discharge of MRSA colonised patient to home or a nursing home

Issue Date: 16 th July 2019	Page 26 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould		Authorised by: IPC Committee	Copy No:

There are not usually any contraindications to the transfer of a MRSA-colonised patients to a nursing or convalescent home. Carriage of MRSA is not a valid reason for exclusion from residential care homes. Contact members of the infection control team for further discussion, if necessary

There is not usually a need for MRSA screening before discharge to the community, including discharge to residential or care homes.

MRSA suppression may be commenced as an outpatient if the patient is due to be readmitted due to severe underlying disease or elective invasive procedure/surgery. The need for decolonisation to commence or continue after discharge from hospital should be subject to individual assessment with support from the IPCT

Information

The patient and the relatives should be provided with sufficient verbal and written information before discharge in relation to MRSA colonisation and infection to allay anxieties / concerns.

The patient's GP, Nurse Practitioner or staff of the residential healthcare facility, as applicable, should be notified and informed of the patient's MRSA status, preferably in writing.

Ambulance transportation

It is not usually advisable that MRSA-negative patients belonging to high risk groups e.g transplant patients, immuno-compromised patients should travel an ambulance at the same time that known MRSA colonised patients are being transported. There may also be some additional specific exceptions.

Infection control precautions before transport

Communication of relevant infection control precautions to the Ambulance staff must be discussed when transport arrangements are being made.

Appendix 8

Using microbiology swabs to detect MRSA

Issue Date: 16 th July 2019	Page 27 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould		Authorised by: IPC Committee	Copy No:

Sites to be swabbed:

Nose and groin for all patients

Additionally it may be necessary to ensure other sites are swabbed e.g.

- Wounds
- Sites of invasive devices eg lines.
- CSU if urinary catheter in situ
- Skin (eczema / psoriasis)
- Throat (if requested)

Resources

- Minimum 2 bacteriology swabs
- Steripod (sterile water or saline)
- Alcohol gel for hand hygiene
- Investigation request form printed from Meditech
- Specimen bag

Prepare patient

Provide information about MRSA screening and an information leaflet.

If for any reason patient refuses document in nursing records.

Preparation of swabs

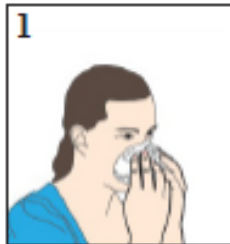
- Wash /gel hands
- Twist off cap of steripod
- Open swab packet being careful not to touch the swab
- Hold swab by blue handle only.
- Moisten swab by squeezing a few drops of water or saline on to it from Steripod.
- Do not allow stem of swab or end of swab to touch anything before site to be swabbed.

Appendix 9

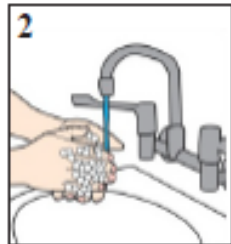
Obtaining MRSA nose and groin swabs

Issue Date: 16 th July 2019	Page 28 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould		Authorised by: IPC Committee	Copy No:

PROCEDURE FOR USING THE NEW SIGMA-TRANSWAB® DUO PACK FOR MRSA SPECIMENS



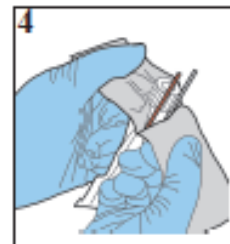
1
Ask patient to clear any nasal discharge.



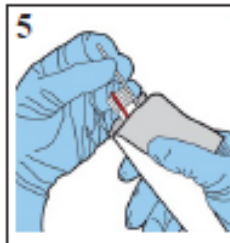
2
Wash YOUR hands and dry. Or if hands are visibly clean use alcohol gel.



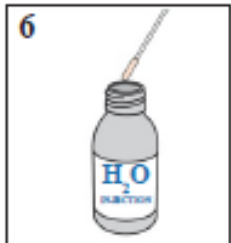
3
Put on disposable gloves



4
Open peel pouch containing 2 swabs & tube



5
Remove white shaft swab from pack



6
Moisten swab bud in sterile injection water



7
Bring swab to tip of nose, avoiding contact with external skin



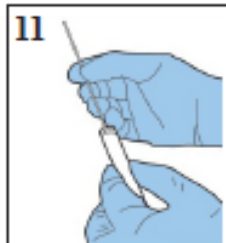
8
Insert swab approx 2cm into one nostril



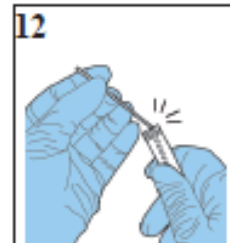
9
Gently rotate inside nostril for 3-5 seconds



10
Repeat process for other nostril using same swab



11
Remove cap from tube and place swab fully into tube



12
Carefully bend **WHITE** swab shaft against tube until it breaks. Discard non-swab end

Issue Date: 16 th July 2019	Page 29 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: IPC Committee		Copy No:

**PROCEDURE FOR MRSA SPECIMEN COLLECTION
USING SIGMA TRANSWAB DUO PACK**



Remove red shaft swab from pack



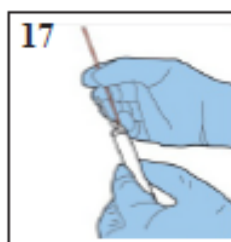
Moisten swab bud in sterile injection water



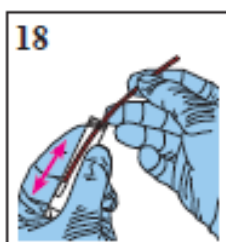
Swab along right groin rubbing from front to back 2-3 times



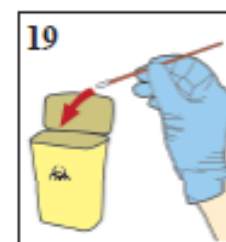
Swab along left groin rubbing from front to back 2-3 times



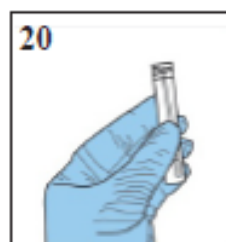
Place swab fully into tube



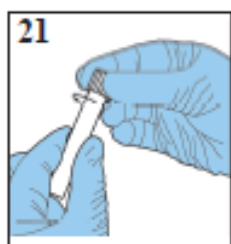
Rub/squeeze bud of **RED** shaft swab against the inside of tube



REMOVE THE **RED** shaft swab from the tube AND DISCARD



Tube now contains **ONLY** the white swab



Firmly screw cap back onto tube.
Fill in patients details and send to laboratory



Issue Date: 16 th July 2019	Page 30 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: IPC Committee		Copy No:

Appendix 10

Obtaining wound swabs

PROCEDURE FOR WOUND /SKIN SWAB USING SIGMA TRANSWAB

1 Example of wound area.

2 Example of wound area.

3 Wash YOUR hands and dry. Or if hands are visibly clean use alcohol gel.

4 Put on disposable gloves

5 Clean area to be swabbed with clean tissue or cotton wipe

6 Open peel pouch containing swab & tube

7 Remove white shaft swab from pack

8 Moisten swab bud in sterile water

9 Bring swab to wound,, avoiding contact with any other skin or surface

10 Swab wound area in criss-cross pattern in 2 directions

11 Swabbing technique

12 Place swab fully into tube

13 Bend swab shaft against tube until it breaks. Discard non-swab end

14 Firmly screw cap back onto tube. fill in patients details and send to laboratory

mwe
medical wire
www.mwe.co.uk

Issue Date: 16 th July 2019	Page 31 of 31	Filename: PTWCMRSA	Issue No: 3.3
Author: Lauren Gould	Authorised by: IPC Committee		Copy No: