

TITLE: Meticillin Resistant *Staphylococcus aureus* (MRSA) SCREENING Policy

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<i>Name the documents here or record not applicable</i>			
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1 Introduction / Background

Modern healthcare has brought unprecedented benefits to generations of patients and their families. Today's healthcare though, brings risks as well as benefits. No risk is more fundamental than the risk of infection.

The Health and Social Care Act 2008 (DH 2015), states that:

'effective prevention and control of healthcare associated infections has to be embedded into everyday practice and applied by everyone. It is particularly important to have a high awareness of the possibility of healthcare associated infections in both patients and healthcare workers'.

Sherwood Forest Hospital NHS Foundation Trust (Trust) is committed to reducing and managing risk, ensuring effective and safe practice. The occurrence of invasive infection, particularly in vulnerable patients and limited options for therapy justify continued efforts to limit the spread of Meticillin resistant *staphylococcus aureus* (MRSA).

Prevention of MRSA is of the utmost importance, the Trust follows a targeted approach based to the screening requirements for MRSA, however the requirement for urgent

specialist care must not be compromised by control measures, and the patient's overall needs take precedence.

The new Department of Health Guidance (2014) on screening patients for MRSA has been reviewed by the Trust and at this time the Trust have chosen to exceed the guidance and continue with screening all emergency admission.

The transmission of MRSA and the risk of MRSA infection can only be effectively addressed if MRSA carriers are identified and treated to reduce the risk of transmission (DH 2007). This policy **must** be read in conjunction with ICP 24 Meticillin resistant *Staphylococcus aureus* policy.

2 Aims / Objectives / Purpose

The purpose of this policy is to provide all staff within the Trust with robust information on MRSA screening of patients at our Trust. It includes all clinical and non-clinical staff (including visiting staff to the Trust) and all clinical areas and patient groups. There are no exclusions to this policy.

3 Roles and Responsibilities

Each individual has a clinical and ethical responsibility to carry out effective infection prevention procedures and to act in a way, which minimises the risk to the patient.

3.1 Consultants and Clinical Chairs

Consultants and Clinical Chairs are responsible for ensuring that infection prevention and control policies, procedures and guidance are applied consistently across the clinical team and that they act as a good role model for infection prevention and control. They will actively support all infection prevention and control measures and will have an active role in measuring outcomes and developing action plans for improvement. They will ensure medical teams are allocated appropriately.

3.2 Heads of Nursing/Matrons

Heads of Nursing/Matrons are responsible for ensuring that infection prevention and control policies, procedures and guidance are applied consistently across the clinical team and that they act as a good role model for infection prevention and control. They are also responsible for ensuring that resources are available for all healthcare professionals to undertake effective standard and isolation precautions. They will actively support all infection prevention and control measures and will have an active role in measuring outcomes and developing action plans for improvement. They will ensure nursing teams are allocated appropriately.

3.3 Sister/Charge Nurses

Sister/Charge Nurses are responsible for ensuring that infection prevention and control policies, procedures and guidance are applied consistently across the clinical team and that they act as a good role model for infection prevention and control. They are also responsible for ensuring that all members of staff under their management control are appropriately trained, have access to appropriate personal protective equipment and adherence to safe practices. To keep clear and contemporaneous records re staff training.

3.4 Clinical Staff

Clinical staff are responsible for complying with the requirements of the Trust infection prevention and control policies, attend appropriate training and use appropriate personal protective equipment. To maintain clear and contemporaneous records about their own training that has been undertaken.

3.5 Non-clinical staff

Non-clinical staff are responsible for complying with the requirements of the Trust infection prevention and control policies, attend appropriate training and use appropriate personal protective equipment.

3.6 Occupational Health

Occupational Health is required to be aware of this policy. Occupational Health is responsible for ensuring that appropriate individual advice is available for staff who are advised they are MRSA positive. Staff need to contact Occupational Health for individual advice if they are advised they are MRSA positive.

3.7 Nominated Infection Prevention and Control Link Representatives and associates

Nominated infection prevention and control link representatives and associates are responsible for disseminating all relevant infection prevention and control information to staff within their own work environment, supporting the IPCT within their own ward/ department.

4 Policy Details (including Flowcharts)

There is good evidence and strong consensus that screening should be applied to certain groups based on the Trust's patient population and current MRSA data (DH 2007). However there is now a requirement following the Health and Social Care Act 2008 and Department of Health regulations to screen a wider group. Screening for MRSA on admission will aid the early identification of positive patients, which will in turn contribute to reducing the number of hospital acquired cases of MRSA and ensure the delivery of clean safe care to all our patients.

4.1 Confidentiality

MRSA is part of the patient's diagnosis. Personnel who do not have access to the patient's medical health records and nursing health records must not be told the nature of the illness, but should be given specific infection prevention and control guidance. Divulging a diagnosis inappropriately is a breach of confidentiality.

4.2 High-risk groups for MRSA colonisation/infection

It is important to identify patients who are at high risk of acquiring MRSA. Remember if signs and symptoms of infection are present, not every infection is due to MRSA even when the patient is a known carrier. It must be recognised that it is not always possible to eradicate MRSA.

Obtaining swabs is a key component of an effective MRSA prevention programme and certain patient groups are deemed to be a higher risk of contracting serious MRSA infections, therefore the following categories of patients are considered as being at high-risk of MRSA colonisation and/or infection (**note that this is NOT an exhaustive list**):

- Patients who are social or healthcare staff (due to their exposure to MRSA positive patients)
- Other health related staff may also warrant assessment for screening for example veterinary personnel, who have been found to have a relatively high (18%) carriage rate (Loeffler et al 2005)

- Patients with a previous history of MRSA
- Transfers from hospitals outside the Trust including diagnostic procedures and abroad
- Previous hospital stay (longer than 48 hours) within previous 12 months (UK or abroad)
- Patients admitted from Nursing or Residential Homes
- Patients admitted to the Intensive Critical Care Unit
- Babies admitted to the Neonatal Intensive Care Unit
- All haematology patients
- Patients undergoing an orthopaedic procedure
- Patients having vascular surgery
- Patients with central lines (note: 3M Tegaderm CHG dressing to be used)
- Patients with chest drains
- Chronic wounds including all diabetic foot ulcers
- Patients with indwelling devices e.g. Urinary/suprapubic catheters and nephrostomy/urostomy site etc

4.3 Responsibility of MRSA risk assessment

It is the responsibility of the medical, surgical and nursing teams to assess each patient on admission to ascertain if they meet any of the criteria in the high-risk category.

4.4 Admission screening of patients (elective and emergency)

All medical and surgical admissions (elective or emergency), including some day surgery patients, should be screened for MRSA in line with the DH MRSA screening operational guidance (2008). The only exceptions are the following groups:

- Paediatrics (<16 years of age)
- Obstetrics unless elective admission for Caesarean section
- Day case ophthalmology
- Day case dental
- Day case dermatology
- Day case endoscopy

If a patient falls within the above exceptions, **but** has any of the high risk-factors stated in section 5.2 they **must** be screened for MRSA. Any patient assessed as meeting the high-risk criteria must have an MRSA screen prior to commencing the decolonisation therapy (Refer to ICP 24) and then at weekly intervals thereafter, throughout their stay.

4.5 Timing of admission screen (including elective and emergency patients)

All relevant elective admission patients must be screened as per table

	Swabbed in clinic 12 weeks before	Swabbed 4 weeks out	Swabbed on the day	Decolonisation
High risk inpatients,		√	√	√
High risk Day Cases	√		√	√
Low risk Day cases			√	√
Local Anaesthetics			√	√

Swabs are to be obtained from the nose and perineum / groin. Any previous positive patients should have the swabs taken from their perineum. (Patients attending for joint injections **do not** require an MRSA screen unless they have any existing metal work/prosthesis). Refer to Appendix C and Appendix D). Where this is not possible due to distance of the patient's home from hospital, disability or other reasons, the patient's GP should be contacted and requested to screen. If this is not possible the patient should be screened immediately on admission. All relevant emergency admissions or transfers should be screened as soon as possible, and no longer than 24 hours after admission (Refer to Appendix A).

4.6 Personal protective equipment

It is vital that you must wash your hands, and wear appropriate personal protective equipment (PPE) i.e. gloves and aprons prior to collecting any form of specimens and using an aseptic non-touch technique and sterile swabs.

4.7 Screening in-patients

Change in risk status: in-patients, who do not fall into the high-risk categories on admission, but change to a high-risk category whilst an in-patient, must be screened when the change has occurred and be commenced on the decolonisation therapy. They must then be screened weekly thereafter (whilst in the high risk category unless they have reached day 21) in accordance with the decolonisation therapy (Refer to ICP 24). The patient only requires one course of decolonisation therapy on each admission.

Weekly screening: in-patients who fall into the high-risk categories on admission should be screened every 7 days during their admission.

Day 21: all adult patients who have been an in-patient for 20 days must be screened on day 21 of their admission to the Trust (not admission to a particular ward) from all required sites and then weekly thereafter. The day of admission to the Trust is counted as day 1.

Regular attendees to the Trust: all patients attending the Trust on a regular basis for treatment (e.g. chemotherapy) should be screened every 4 weeks.

4.8 Re-screening high risk patients

If the patient is an in-patient, MRSA screens are taken weekly until 3 consecutive negative screens have been obtained (Refer Appendix B)

Re-screening result (positive): A positive result indicates that colonisation is on-going and the suppression therapy should be repeated for in-patients. If colonisation is still on-going after 2 cycles of the suppression therapy or recurs at a later date the IPCT must be consulted before any further suppression therapy is administered.

If the positive result is known after the patients discharge their GP will be informed and advised of national guidance on treatment.

Re-screening result (negative): a negative result indicates that colonisation is not on-going and suppression therapy will not need to be repeated (Refer Appendix B) although contact infection prevention and control measures must continue until 3 consecutive negative screens 7 days apart have been received.

4.9 Using screening results to determine continuation of isolation precautions

Patients at high-risk (Refer 4.1) as well as patients found to be positive for MRSA during the current admission require 3 valid consecutive negative screens, at weekly intervals, before isolation precautions can be discontinued. The screens are not valid if a patient is on

antibiotics, or has been within the 48 hours prior to the screen being obtained. Any exception to this should be discussed and agreed with the Sister/Charge Nurse, Matron and IPCT.

4.10 Microbiological samples required for MRSA screening

An MRSA screen must consist of the following specimens (unless advised by the IPCT):

- Nasal swab
 - **For day case admissions:** Obtain nose swab only (unless high risk patients, in which case full MRSA screen *i.e.* nose/perineum/groin plus other sites if appropriate *e.g.* wound swab, catheter urine, sputum)
- Perineal/Groin swab
- Swabs from skin lesions such as eczema, psoriasis and wounds (must not have had an antibacterial dressing on in previous 48 hours) if present
- Samples from the sites of indwelling devices such as:
 - Urinary catheter - Catheter specimen of urine (CSU) (**do not** send MSU for MRSA screen as these will not be tested)
 - Central venous catheter (CVC) or Peripheral venous catheter (PVC) line insertion site (one swab per site)
 - Tracheostomy/PEG stoma (one swab per site)
 - Urostomy/Colostomy sites
 - Chest drain etc
- Sputum if the patient has a productive cough present

When a repeat screen is required for any patient, all sites must be rescreened as detailed above if indicated.

4.11 Procedure

- Charcoal wound swab
- **Nose:** pre-moisten swab with tap water (Weston 2008), and then rotate the swab in each anterior nares (nostril) in turn, using the same swab for both nares
- **Perineum/Groin:** pre-moisten swab with tap water, and then rotate the swab on the perineum/groin. If it is not possible to sample the perineum then the screen can be taken from the groin, remember to state the site of the screen on the microbiology request form. It is not necessary to use one swab for each side.
- **Wounds:** this includes surgical wounds, leg ulcers, pressure ulcers, eczema or other skin lesions. Pre-moisten the swab with sterile normal saline/sterile water, and rotate across the wound (cleanse wound first).
- **Invasive devices:** if the patient has an invasive medical device such as PVC.PEG in situ then the point of entry will require MRSA screening. Pre-moisten swab with sterile normal saline/sterile water and then rotate the swab around the entrance site
- **Urine:** if on admission the patient has an indwelling urinary catheter, a catheter specimen of urine (CSU) is required. Specify on the form for MRSA screening
- **Other specimens:** other specimens are not required routinely but can be undertaken if clinically indicated. This could include sputum, vaginal swab, blood cultures etc

4.12 Microbiological samples requests

Remember that whatever the specimen may be it must be clearly and accurately labelled; this is the responsibility of the person collecting the specimen. All requests for MRSA screens should be made via ICE where available. If ICE is not available then requests should be made using the standard microbiology blue requests form. Information that **must** be written (in the other tests section or relevant information box) on the form includes:

- MRSA screen
- Either:

- Elective
- Emergency
- Weekly
- Day 21 screen
- All sites where swabs were obtained from

This information allows the laboratory staff to process the specimen in the optimum manner. If Microbiological Culture and Sensitive (MC&S) is also required, the same swab may be used but please make it clear on the form that you also require this test

4.13 Communication of positive results and alerting mechanisms

For all patients with a previous history of MRSA, and newly diagnosed MRSA the following is used to identify them:

- When a patient has a positive result a member of the IPCT will phone the ward/department and inform the Registered Nurse looking after the patient
- The medical notes **must** be clearly labelled '**MRSA positive**' using the printed '**Alert**' labels; a member of the IPCT will alert the Medway Patient Administration System (PAS) accordingly. The alert label **must not** be removed. If a set of notes does not display an alert label, please contact the IPCT
- Medway PAS will automatically feed a message into the Vocera system when a patient with an alert is admitted to the Trust and notifies key staff e.g. Matron, Sister/Charge Nurse, IPCT and Site Co-ordinators

4.14 Staff screening

Staff screening will not be undertaken routinely and will only be carried out at the request of the IPCT in consultation with the Occupational Health Department (OH).

5 Education and Training

All healthcare workers will be aware of the Infection Prevention and Control policies and guidelines for the Trust by attending the mandatory, induction day, annual clinical update programmes, and formal infection prevention and control sessions and by their Sister/Charge Nurse of clinical and non-clinical areas. All training sessions are outlined in the Trusts Training, Education and Development Opportunities intranet site. Infection prevention and control training is part of the Trust wide mandatory training for all staff and is monitored via attendance records.

All clinical staff are to be aware of and have read this policy. Information about any updates will be communicated via the Divisional Management Team/weekly bulletins.

6 Definitions/ Abbreviations

Trust	Sherwood Forest Hospitals NHS Foundation Trust
Staff	All employers of the Trust including those managed by a third party on behalf of the Trust
Colonisation	Occurs when a microorganism establishes itself in a particular environment such as a body surface or wound without producing disease

Infection	Occurs when entry of a pathogen into the body and its multiplication in the tissue lead to symptoms such as pyrexia and septicaemia, skin and soft tissue infections
Vocera	Mobile communication system that uses the Trust wireless net work
RAPPA	Patient Administration System (PAS) electronic based system used to alert key staff of critical patient information on a named basis
Anterior nares	Nose
Positive screen	defines the patient as an MRSA positive case
PEG	medical procedure in which a tube is passed into the stomach through the abdominal wall, to provide nutrient when oral intake is not adequate
Decolonisation	treatment for patients who are high risk of acquiring MRSA, to reduce the burden of bacteria colonising the human skin and thereby attempting to minimise the risk of infection
Suppression	treatment used to reduce the colonisation of the skin and nose in patients who are found to be MRSA positive
CSU	Catheter specimen of urine
PHE	Public Health England
IPCC	Infection Prevention and Control Committee
IPCT	Infection Prevention and Control Team
HCAI	Healthcare Associated Infection(s)
MRSA	Meticillin resistant <i>Staphylococcus aureus</i>
MSU	Mid-stream specimen of urine
PAS	Medway Patient Administration System
PPE	Personal Protective Equipment
OPD	Out Patient Department
OH	Occupational Health
PVC	Peripheral venous catheter
CVC	Central venous catheter
MC&S	Microbiology culture and sensitive
PEG	Percutaneous endoscopic gastrostomy
ED	Emergency Department
EAU	Emergency Admissions Unit
OD	Once a day
TDS	Three times a day

7 Monitoring

WHO is going to monitor this element	WHAT element of the document/practice will be monitored	HOW will this element be monitored	WHEN will this element be monitored	REPORTING Which committee/group will the resultant report (including any areas of good practice) and action plan be reported to
MRSA Screening Co-ordinator	Emergency/Elective admission screening	Audit	Monthly	IPCC
MRSA Screening Co-ordinator	21 day screening	Audit	Monthly	IPCC

8 Evidence

- DH. 2014. *Implementation of modified admission MRSA screening guidance for NHS(2014)*
- DH. 2015. *The Health & Social Care Act 2008: Code of Practice for the NHS on the prevention and control of healthcare associated infections and related guidance*
- DH. 2014. *Epic3 guidelines*
- DH. 2010. *MRSA screening. Operational Guidance 3*
- DH. 2007. *Screening for Meticillin-resistant Staphylococcus aureus (MRSA) colonization*
- Loeffler et al. 2005. Prevalence of methicillin-resistant *staphylococcus aureus* among staff and pets in a small animal referral hospital in the UK. *Journal of Antimicrobial Chemotherapy*. 56 p692-697
- Weston. D. 2008. *Infection prevention and control: theory and clinical practice for healthcare professionals*. John Wiley. Chichester.

9 Equality, Diversity and Inclusivity and Impact Assessments

Equality Impact Assessment (EqIA) Form

- [Guidance on how to complete an EIA](#)
- [Sample completed form](#)

Name of service/policy/procedure being reviewed: Meticillin Resistant Staphylococcus aureus (MRSA) SCREENING Policy

New or existing service/policy/procedure:

Date of Assessment: 01/03/18

For the service/policy/procedure and its implementation answer the questions a – c below against each characteristic (if relevant consider breaking the policy or implementation down into areas)

Protected Characteristic	a) Using data and supporting information, what issues, needs or barriers could the protected characteristic groups' experience? For example, are there any known health inequality or access issues to consider?	b) What is already in place in the policy or its implementation to address any inequalities or barriers to access including under representation at clinics, screening?	c) Please state any barriers that still need to be addressed and any proposed actions to eliminate inequality

The area of policy or its implementation being assessed:

Race and Ethnicity:	None	None	None
Gender:	None	None	None

Age:	None	None	None
Religion:	None	None	None
Disability:	None	None	None
Sexuality:	None	None	None
Pregnancy and Maternity:	None	None	None
Gender Reassignment:	None	None	None
Marriage and Civil Partnership:	None	None	None
Socio-Economic Factors (i.e. living in a poorer neighbourhood / social deprivation):	None	None	None

What consultation with protected characteristic groups including patient groups have you carried out?

What data or information did you use in support of this EqIA?

As far as you are aware are there any Human Rights issues be taken into account such as arising from surveys, questionnaires, comments, concerns, complaints or compliments?
No

Level of impact

From the information provided above and following EqIA guidance document ([insert link](#)), please indicate the perceived level of impact:

Low Level of Impact

For high or medium levels of impact, please forward a copy of this form to the HR Secretaries for inclusion at the next Diversity and Inclusivity meeting.

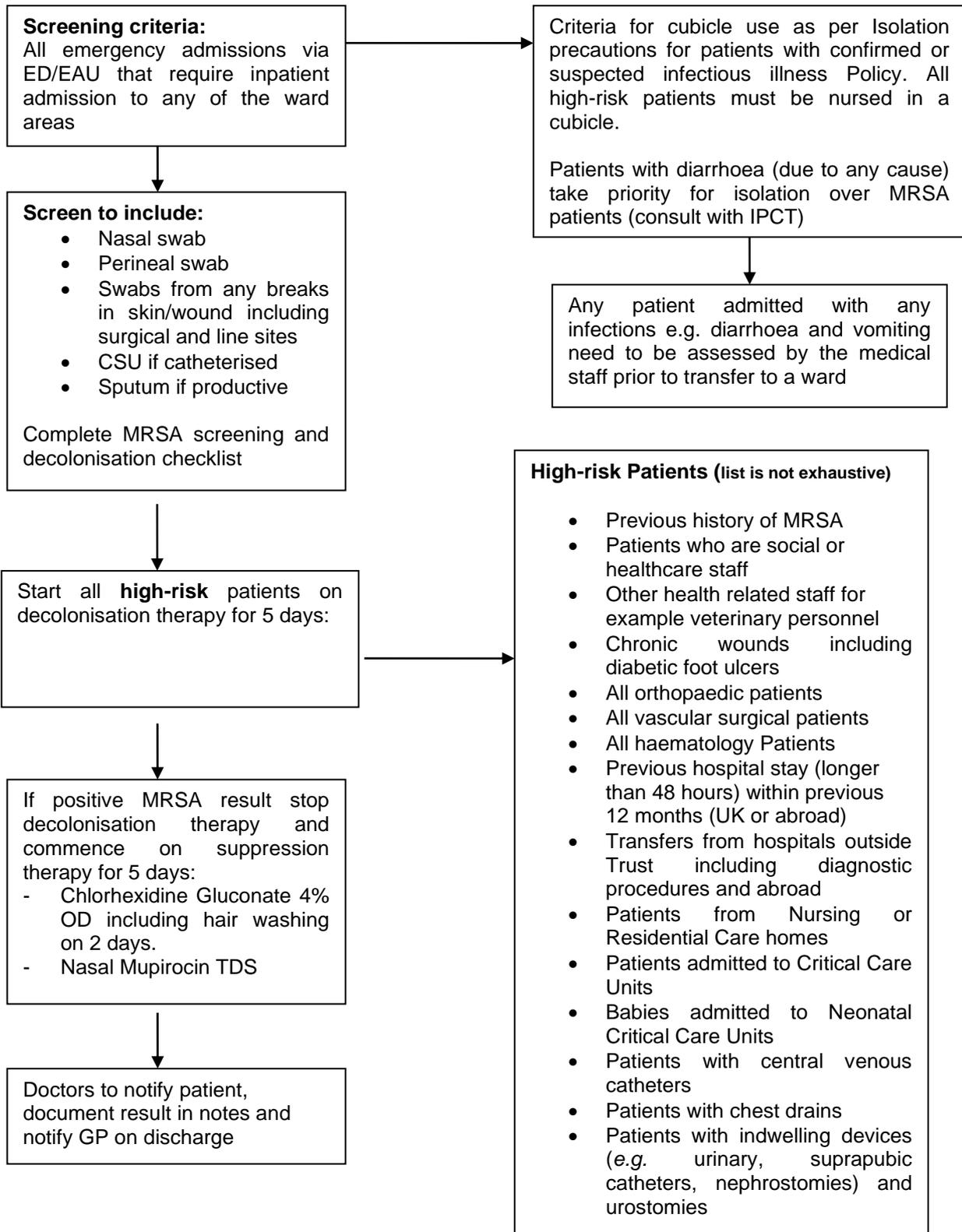
Name of Responsible Person undertaking this assessment: Sally Palmer

Signature:

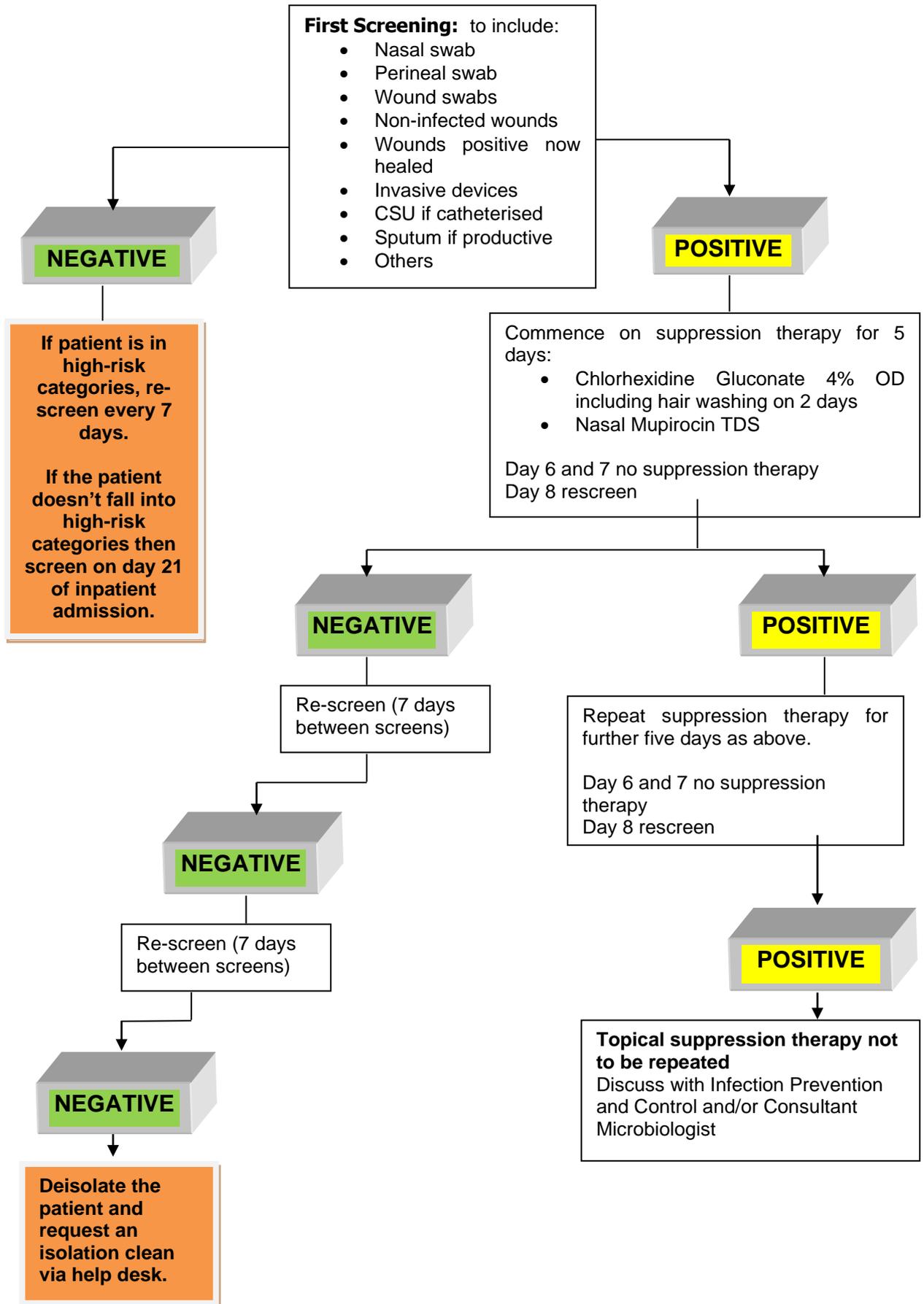
Date: 01/03/18

Appendix A

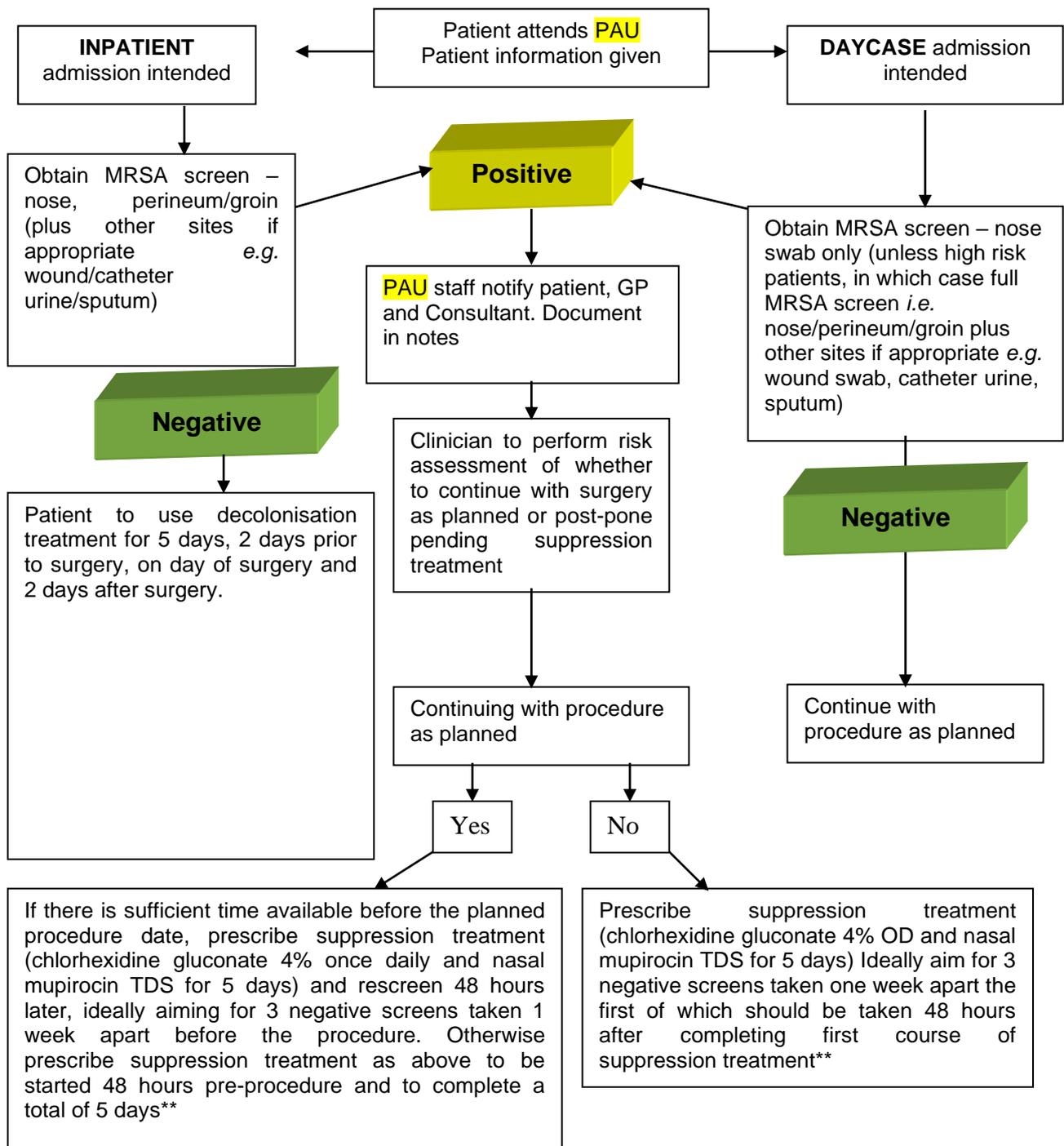
Screening Process for Emergency Admissions



MRSA Screening Process



MRSA Screening and Recall Process for Elective Admissions



*Refer Appendix A

** For all patients who are found to be colonised with MRSA by pre-operative screening (regardless of whether suppression treatment has been successful), if the procedure usually involves antibiotic prophylaxis, this will need to include an antibiotic with MRSA activity. Discuss with Consultant Microbiologist if further advice is required. Infection control precautions should be continued unless the patient has had 3 negative screens, this includes placing the patient last on the procedure list. **NB: Topical decolonisation therapy to be used for high risk patients only**

Guidance for managing MRSA positive patients awaiting elective procedures

Since March 2009, NHS Trusts are required to screen all elective and day-case admissions for MRSA (except day-case ophthalmology, day-case dental, minor dermatology, day-case endoscopy, paediatrics unless already in a high risk group and low-risk obstetrics). This will inevitably mean that a greater number of MRSA positive asymptomatic carriers are identified who are awaiting elective procedures.

The IPCT and Consultant Microbiologists advice in this situation is as follows:

- Being MRSA positive does **not** mean automatic cancellation of the planned procedure
- Most patients can proceed to have the procedure on the original date (but they will need to be listed at the end of the theatre session or procedure list)
- Where possible MRSA suppression therapy (Chlorhexidine and Mupirocin) should be given prior to surgery.
 - If there is sufficient time, a full 5-day treatment course should be followed by repeat MRSA swabs after a further 48 hours, otherwise eradication therapy should be started within 48 hours pre-operatively and continued post-operatively to complete a 5-day treatment course
- If the surgery usually involves antibiotic prophylaxis, this will need to include an antibiotic with MRSA activity
 - This must be done with all recently MRSA positive patients, even if they have completed a 5-day suppression therapy course or are currently on topical eradication therapy at the time of the procedure
 - Consultant Microbiologists can advise on appropriate antibiotic choice.
- If there is particular concern regarding the risk of MRSA infection for high-risk procedures, a risk assessment must be done to weigh up the pro et contra of postponing surgery i.e. an assessment of the urgency of the clinical indication for the procedure versus the risk of MRSA infection. Advice can be sought from the Consultant Microbiologists

For patients who are found to be MRSA colonised, 3 complete negative MRSA screens taken a week apart are required before infection control precautions can be discontinued. This means that for most MRSA patients identified by pre-admission screening there will not be time to obtain 3 sets of negative results, thus appropriate precautions will need to be taken during the procedure and post-surgery (Refer ICP24 for further details).