Blackpool Teaching Hospitals NHS Foundation Trust

Management of Staphylococcus Aureus (SA) - Meticillin-Resistant (MRSA) and Meticillin-Sensitive (MSSA)

Unique Identifier:	CORP/PROC/408				
Version Number:	12				
Type of Update / Status:	Ratified with Minor / No Technical Changes				
Divisional and Department:	Infection Prevention and Control				
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Replaces:	CORP/PROC/408, Version 10.1, Management of Staphylococcus Aureus (SA) - Meticillin-Resistant (MRSA) and Meticillin-Sensitive (MSSA)				
Description of amendments:	Windsor unit guidance removed as the unit no longer exists.				
Approved by:	Whole Health Economy Infection Prevention Committee by Chairman's Action				
Approved Date:	01/02/2020				
Issue Date:	01/02/2020				
Review Date from Date of Approval:	1 Year ☐	2 Years ☐	3 Years ☒ 01/02/2023	4 Years ☐	5 Years ☐

Version Control Sheet

This must be completed and form part of the document appendices each time the document is updated and approved

Date dd/mm/yy	Version	Author	Reason for changes
17/05/19	11	S Mawdsley, Lead Nurse, Infection Prevention	Extension of review date.
01/02/20	12		Windsor unit guidance removed as the unit no longer exists

Consultation / Acknowledgements with Stakeholders		
Name	**Designation**	**Date Response Received**
Professor Mark O'Donnell	Medical Director	17/05/2019

CONTENTS

1 Introduction / Purpose

The purpose of this procedure is to provide instructions on the management of patients with Meticillin (Flucloxacillin) resistant Staphylococcus aureus (MRSA) or Meticillin (Flucloxacillin) sensitive Staphylococcus aureus (MSSA) including:-

- The screening of patients.
- The management of patients with carriage and/or infection caused by MRSA or MSSA.
- The prevention and control of infections caused by Staphylococcus aureus (SA) within the healthcare setting.

Compliance to guidelines and measures set out in the procedure should:

- Reduce all SA infections including bacteraemias, potential for cross transmission and optimize treatment of infected patients, thereby enhancing patient safety, assurance and quality of care. (DH 2006, DH 2008a)
- This procedure ensures that the trust is compliant with the Department of Health MRSA screening guidance that came into effect on December 31, 2010. (DH 2010).

2 General Principles / Target Audience

This procedure applies to all staff working within Blackpool Teaching Hospitals NHS Foundation Trust with responsibility of patient care and covers:

- Screening of patients for MRSA and MSSA.
- Dealing with patients carrying MRSA or MSSA (either previously known or newly detected on screening).
- Topical regimes for bio-burden reduction or decolonization.
- Treatment guidelines for infections with MRSA or MSSA.
- Communication of MRSA or MSSA carriage status on transfer or discharge to receiving ward or hospital.
- Audit and surveillance of MRSA infections.

3 Definitions and Abbreviations

AMU	Acute Medical Unit
CCG	Clinical Commissioning Group
CCU	Critical Care Unit
CDAD	Clostridium difficile Associated Disease
CITU	Cardiac Intensive Therapy Unit
CHS	Community Health Services
DIPC	Director of Infection Prevention and Control
DH	Department of Health

ENT	Ear Nose and Throat
HCAI	Healthcare associated infection
HDU	High Dependency Unit (
ICP	Integrated care pathway
ICU	Intensive Care Unit
MDRO	multi-drug resistant organisms
MRSA	Meticillin resistant Staphylococcus aureus
MSSA	Meticillin sensitive Staphylococcus aureus
NICU	Neonatal Intensive Care
OHD	Occupational Health Department
PIR	Post Infection Review
PPE	Personal protective equipment
SA	Staphylococcus aureus
SAU	Surgical Admissions Unit
SHCU	Surgical High Care Unit
TB	Tuberculosis
VRE	Vancomycin - resistant enterococci

4 Procedure

4.1 Introduction

4.1.1 Staphylococcus aureus (SA)

- *Staphylococcus aureus* infections are largely caused by two variants of the bacteria – MRSA and MSSA.
- SA infections range from impetigo, folliculitis, carbuncles, abscesses, to serious infections - scalded skin syndrome, endocarditis, pneumonia, meningitis, osteomyelitis, toxic shock syndrome, bacteraemia and sepsis.
- SA (both MSSA and MRSA) are the most common cause of hospital acquired infections and especially surgical site infections.
- Serious infections are associated with increased morbidity, mortality, extended length of stay and associated health care costs.
- Up to 30% of individuals carry Staphylococcus aureus on their skin or in the nose. A breach in the skin or mucosal barrier as part of medical / surgical treatment or immuno-compromised status renders a patient susceptible to acquiring an infection. Early detection of SA carriage in patients admitted to the hospital for planned high risk surgery can allow for intervention with topical bio-burden reducing regimes thereby reducing potential for deep seated SA infection.

4.2 Why screen for MRSA and MSSA?

- To prevent cross infection.
- To prevent carriers of SA from developing infections.
- To commence early and optimum treatment of MRSA or MSSA infection.

- To avoid the use of empiric glycopeptides (e.g. Vancomycin) in MRSA negative patients.
- To complement clinical decision making during management of patients.

4.3 Who should be screened for MRSA?

Guidance issued by the Department of Health in 2014 recommends that Trusts move to more focussed screening programmes to promote a more efficient and effective method for identifying and managing high risk MRSA positive patients. Therefore, only the following patients require screening:-

All patients who have been previously MRSA positive.

All patient having high risk surgery as outlined below:-

- Cardiothoracic surgery.
- Cardiology patients.
- Orthopaedic surgery
- Any surgery involving insertion of non-biodegradable MESH.

All patients admitted to critical care units as outlined below:-

- Intensive Care Unit (ICU).
- High Dependency Unit (HDU).
- Cardiac Intensive Therapy Unit (CITU).
- Surgical High Care Unit (SHCU).
- Coronary Care Unit (CCU).
- Paediatric High Dependency Unit (HDU).
- Neonatal Intensive Care (NICU).

All Haematology Oncology patients.

All patients transferred in from other hospitals.

All diabetic patients with foot infections – These patients should be screened on admission to hospital (regardless of MRSA status) and those who attend the diabetic foot clinic as outpatients and are status unknown should be screened every 3 months.

4.3.1 Emergency Admissions – High risk surgery

All patients admitted as an emergency for hospital stay beyond 24 hours must be screened for MRSA and MSSA on admission.

Children do not require screening unless they are high risk (i.e. admission to NICU, those requiring high dependency care or children transferred from other healthcare settings).

4.3.2 Elective Admissions – High risk

All adult patients admitted for elective high risk procedures must be screened for MRSA and MSSA preferably before their admission or if that is not possible, on admission.

A negative screen result in patients who have never tested positive for MRSA is valid indefinitely providing there have been no hospital admissions within that time frame.

4.3.2.1 MRSA screening is not required for patients in the following categories:

- Medical (All specialties except Haematology / Oncology)
- General surgery (non-high risk)
- Paediatrics
- Gynaecology
- Obstetrics
- Urology
- Ear Nose and Throat (ENT) / Maxillofacial
- Ophthalmology
- Ward transfers of previous known positive patients. See point 3.5 for further information on transfer screening.

Please refer to Appendix 1 for comprehensive SA screening and patient management guides.

4.4 Management of inter-ward transfers of negative Patients

Patients generally do not require routine inter-ward transfer screens unless they are being transferred from a low risk to a high risk area. For example a medical patient that later requires high risk surgery or critical care.

4.5 Which patients should be screened for MSSA as well as MRSA?

MSSA testing and bio-burden reduction only applies to the following high risk patient groups:

- Cardiothoracic surgery.
- Cardiology implants (such as pacemakers and intra-cardiac device insertion).
- Orthopaedic implant surgery (including joints and metal work)
- Vascular graft surgery.
- Any surgery involving insertion of non-biodegradable MESH.
- Admissions to ITU / HDU / CITU / SHCU / CCU / Paediatric HDU / NICU.

Previous MSSA positive patients who have a negative pre op screen prior to admission do not require decolonisation.

4.6 What screening samples are required?

See appendix 2.

4.7 Isolation precautions for MRSA positive patients or status unknown on admission

It is the responsibility of the nurse in charge of the admitting ward to check the MRSA status of all patients on the PAS, Maxims or Vision portal system on admission so that **immediate isolation precautions can commence for all known positive patients**.

Clinical MRSA infection, particularly those of the respiratory system, patients with exfoliative skin conditions and exudative / suppurative wound conditions must take priority for side rooms over MRSA colonisation without infection. MSSA screen positive patients do not require isolation precautions unless clinical infection is present.(e.g. Cellulitis)

In order to reduce the risk of MRSA spreading from those known to have infection/colonisation the following actions are recommended:

- All MRSA patients should be placed in single rooms, whenever possible.
- It must be clear to any healthcare worker that the patient is being barrier nursed.
- **Signs must be displayed to identify to visitors that they must seek advice on appropriate precautions**.
- If there is more than one infected/colonised patient, then cohort nursing within the ward should be practiced. Any deviation from this procedure must be clearly documented in the patient's case notes.
- If the clinical need (e.g. patients with tracheostomy or those at risk of wandering / falls etc.) or lack of single room facilities (as a result of occupation by higher priority cases for example pulmonary Tuberculosis (TB), chickenpox, diarrhoea), prevents an MRSA patient from being nursed in a side room then they should be barrier nursed in

a ward bed beside a sink. It must be ensured that patients in the neighbouring beds are ones that do not have catheters, lines or wounds. On some occasions isolation may not be possible but the risk of transmission of infection may be significant and the IP team may advise decommissioning the neighbouring bed space. This must be clearly documented in case notes.

- All patients transferred from other hospitals must be barrier nursed until results of MRSA and Carbapenemase Producing Enterobacteriaceae screening is known.

The principle underpinning MRSA control in this procedural document is that current prevalence of MRSA is low. Adhering to appropriate isolation precautions in relation to clinical risks, combined with standard precautions in low risk patients should minimise onward transmission of MRSA.

Patients who have the following clinical conditions should be isolated (in a side room where possible).

- Infected leg ulcers.
- Cellulitis.
- Exfoliative skin conditions.
- Exudative / suppurative wound conditions.

It is the responsibility of the nurse in charge to check the MRSA / MSSA screening results for patients on their ward / department throughout the day and to ensure that those results are acted upon as required.

Information for Community Health Services (CHS) staff caring for patients in treatment / clinic rooms or a domestic setting can be found in Appendix 5.

4.8 Personal Protective Equipment (PPE)

- Single use gloves and aprons must be used.
- Wear single-use gloves and aprons for close contact with the patient / patient environment e.g. bed making, moving and handling the patient, cleaning room / area.
- PPE is not required when handling prescription sheets / care plans etc. as these should not have been handled without hand decontamination. Care plans etc. should be kept outside the single rooms.
- Face protection is only required when there is a risk of mucus membrane contamination from secretions e.g. suctioning / tracheostomy care / disruption of ventilator circuits.

4.9 Movement and discharge of MRSA positive patients

- Minimise patient transfer and movement within the Trust.
- All lesions should be covered where possible, if transport is essential.
- Decontaminate the trolley or chair after use
- Place patient at end of operating / investigation lists.
- Avoid time in waiting areas.
- Keep numbers of staff in contact with the patient to the minimum.
- It is vital that the receiving area is notified in advance of the departure of the patient.
- If the patient is discharged and the 5 day bio-burden reduction course has not been completed, the remaining days of treatment should be included with the discharge medication (This applies to MRSA and MSSA). Day case patients need only complete the 5 day Prontoderm regime if not completed prior to admission.
- Documentation of discharge management must be on the electronic discharge transfer letter.

4.10 Cleaning

Terminal barrier cleaning and a curtain change is required for bed spaces that have been occupied by MRSA positive patients as per Infection Prevention and Control Policy (CORP/POL/116).

However, in areas where Universal screening is in place (Acute Medical Unit (AMU) and Surgical Admissions Unit (SAU)), domestic and nursing staff should use dual-purpose disinfectant / cleaning based products, (e.g. Chlor-clean or Clinell universal wipes), for every bed space.

In areas where universal screening is performed, curtain changes will take place on a monthly rolling programme so it is not necessary to change them in the event of a positive screen result unless blood or body fluid contamination has occurred.

4.11 Communications and Documentation

- The SA Care Pathway (See Appendix 7) must be commenced for all MRSA positive in-patients, i.e. both current or previously positive and for MSSA positive in-patients that are in the high risk group as outlined in section 3.6).
- Explanation to patient and relatives is essential. It is also important to maintain the patient's dignity and confidentiality at all times. Patient leaflets must be displayed at ward level and are available from stationary stores. In such circumstances that leaflets are not available, the nurse in charge of the patient's care must still provide the necessary information to the patient and relevant carers / family.
- All staff, both regular and visiting, must be made aware of the importance of taking the necessary infection prevention precautions at handover.

- It is the ward or departments' responsibility to ensure an accurate record of the decolonisation process is communicated to the receiving ward.
- Symptomatic MRSA positive patients can undergo inpatient investigations or procedures, provided appropriate precautions are taken. Advice can be sought from the infection prevention team in such circumstances. It is the ward or departments' responsibility to advise the receiving department in advance, of the MRSA status of the patient. The patient should be put last on the list, or should be fast tracked so that they have minimal contact with other patients in waiting areas.
- When transferring MRSA positive patients to other hospitals, the MRSA status must be properly communicated in advance of the transfer.
- MRSA status, as with all infective organism colonisation (Vancomycin - resistant enterococci (VRE), Clostridium difficile Associated Disease (CDAD), multi-drug resistant organisms (MDRO), TB etc.) should be recorded by the doctor completing e-discharge documentation. Not applicable should not be recorded in this section where patients are colonised or infected by transmissible organisms.

4.12 Post Infection Review

- The Department of Health (DH) requires all hospitals to complete a compulsory Post Infection Review (PIR) for patients with MRSA (not MSSA) bacteraemia and to discuss the MRSA bacteraemia PIR results with Clinical Commissioning Group (CCG) representatives, who are required to monitor the actions of the Trust with regard to MRSA control. The MRSA PIR must be completed by the clinical team and infection prevention and control team within 15 days.

4.13 Outbreaks

This would be declared by the Infection Prevention Team or Microbiologist when an increase in the number of infected cases or an unusual cluster of cases. The Investigation, Management and Control of Outbreaks of Infectious Diseases Procedure covers management of outbreaks. (See Policy CORP/PROC/488). It is the responsibility of clinical teams to discuss an unusual cluster of cases with the IP team or microbiologists.

4.14 Deceased Patients

Lesions and wounds must be covered where possible. There is negligible risk to undertakers or mortuary staff however Personal Protective Equipment should be worn.

4.15 Occupational Health Issues

- Staff screening is currently recommended only when epidemiological evidence suggests that a staff member/members may be MRSA carriers and likely to be transmitting infection.
- Staff with skin lesions should report to Occupational Health Department (OHD) as they are at increased risk of acquisition and would require treatment. MRSA positive staff must be under the care of an OHD physician. The Microbiologist, Director of

Infection Prevention and Control (DIPC) and OHD physician should carry out a joint risk assessment with regard to appropriate measures to minimise the risk of transmission of MRSA to patients. Current policy does not extend this to MSSA infection / carriage in staff members. However, this may be discussed with the microbiologist and OHD on a case by case basis.

4.16 Key Performance Indicators

- The Infection Prevention Team undertakes quarterly audits of wards to ensure that healthcare workers are compliant with the content of this procedure.
- Whenever areas of non-compliance are identified during these audits, an action plan is generated and target dates are set for review.
- The content of this procedure is incorporated into the Trust Mandatory Infection Prevention education and in annual mandatory update training.

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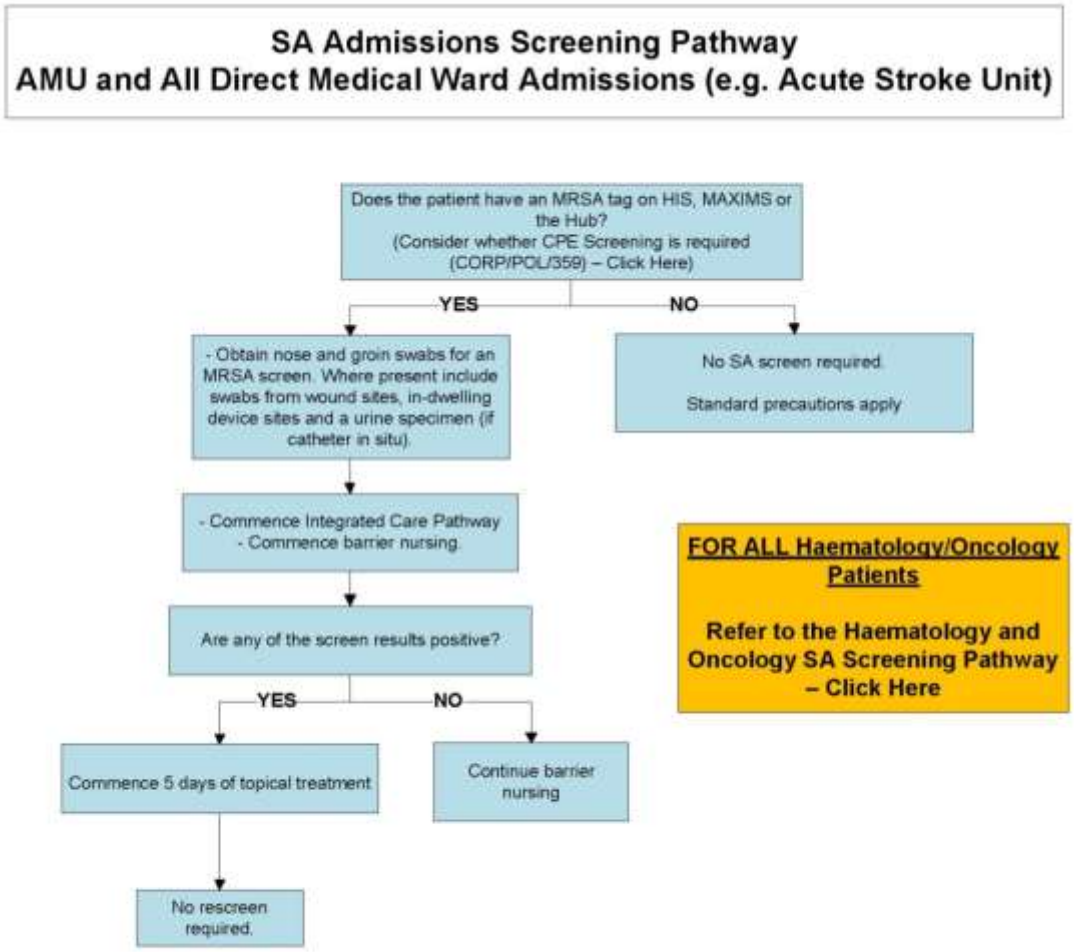
Appendix 1: *Staphylococcus aureus* SA screening and patient management guide

The SA pathways for each clinical area can be viewed below



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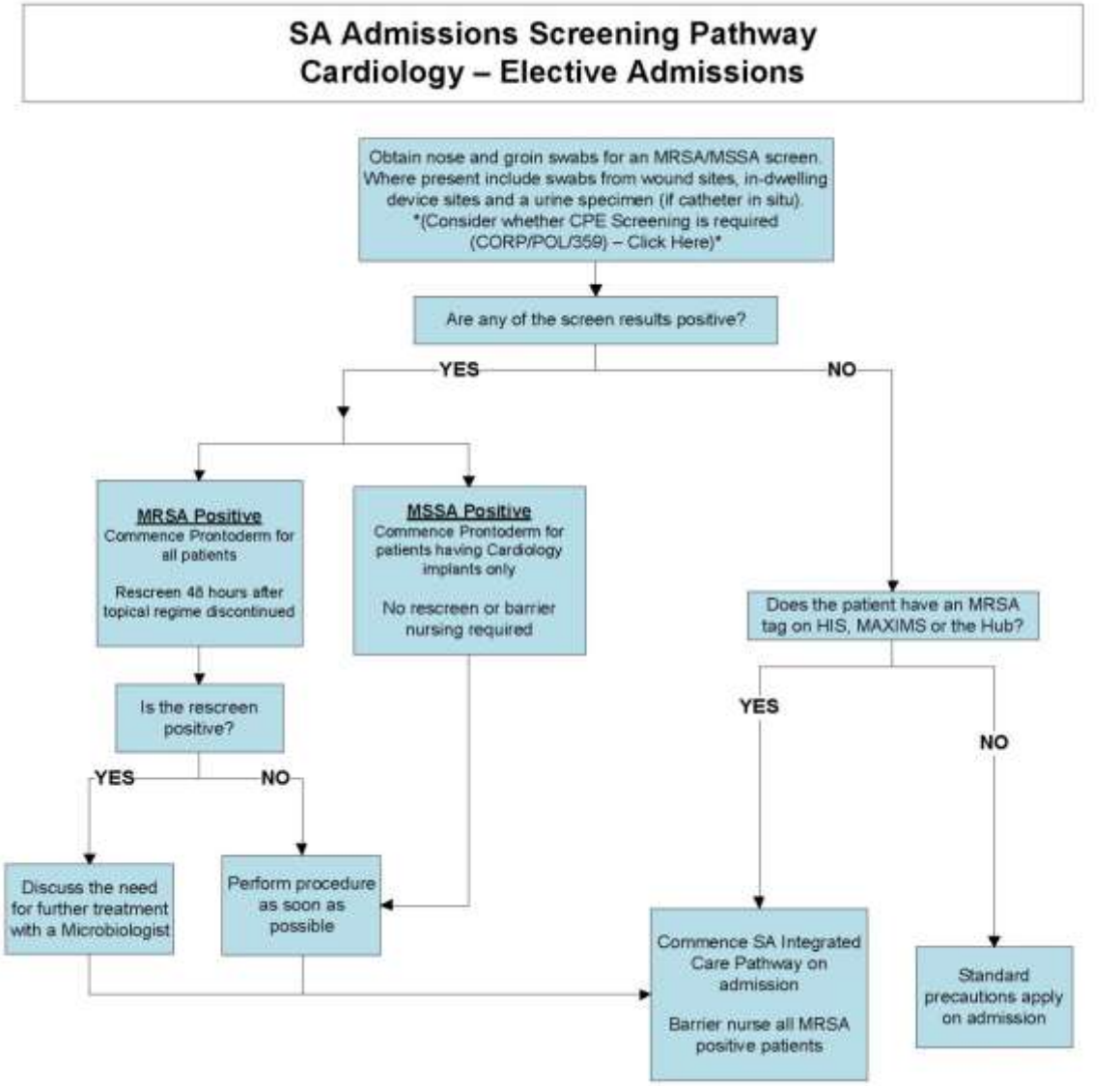

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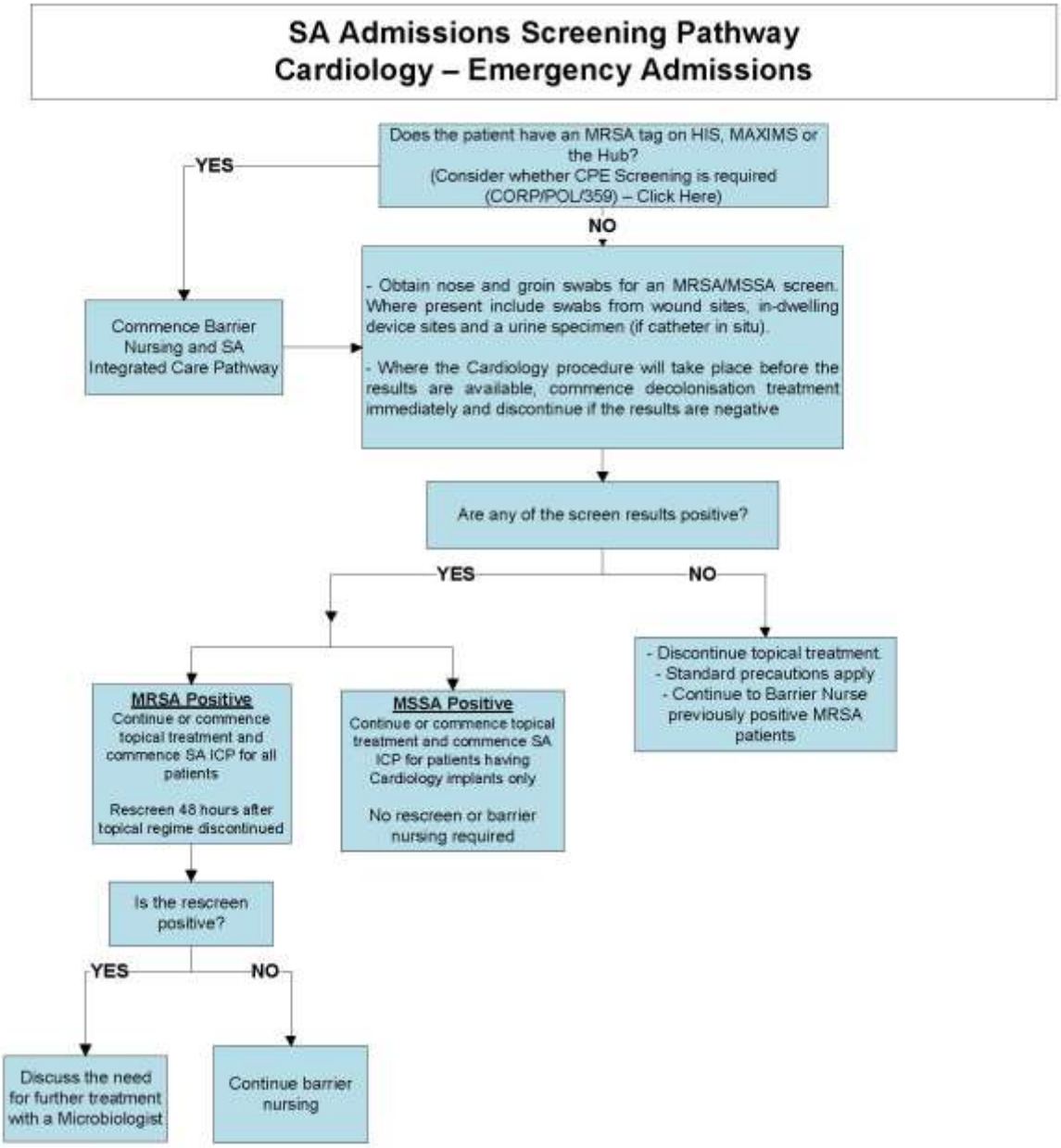

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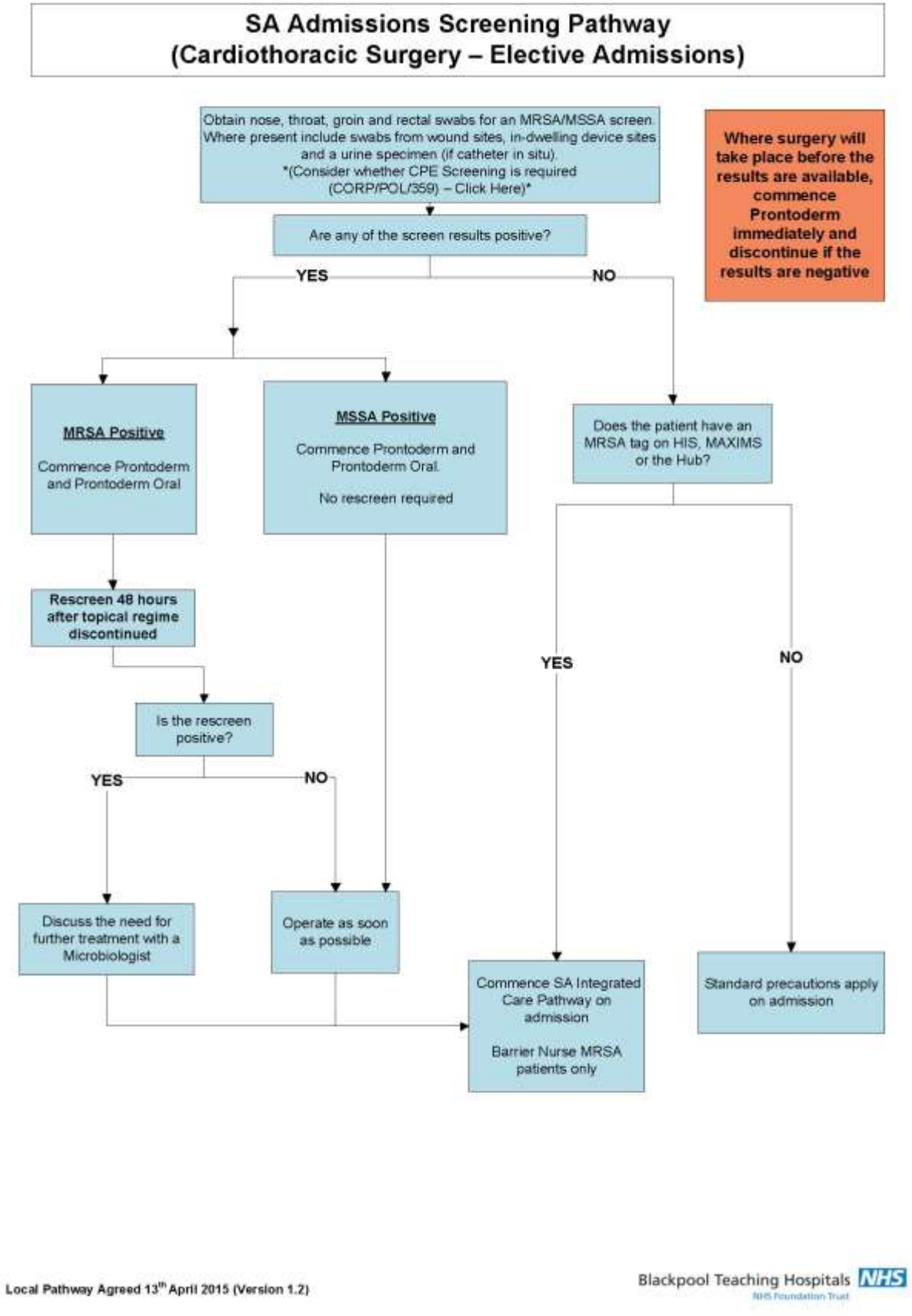

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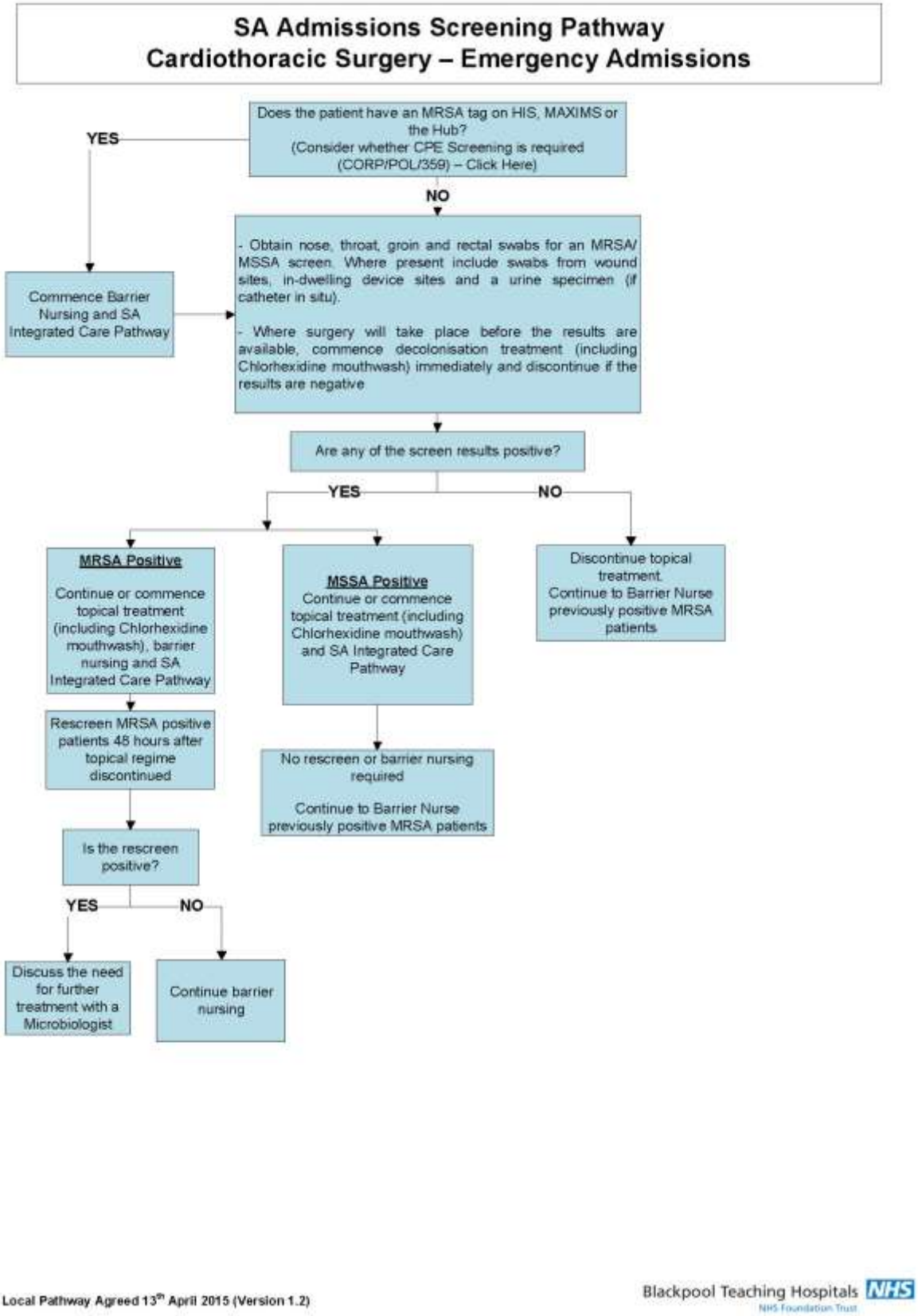

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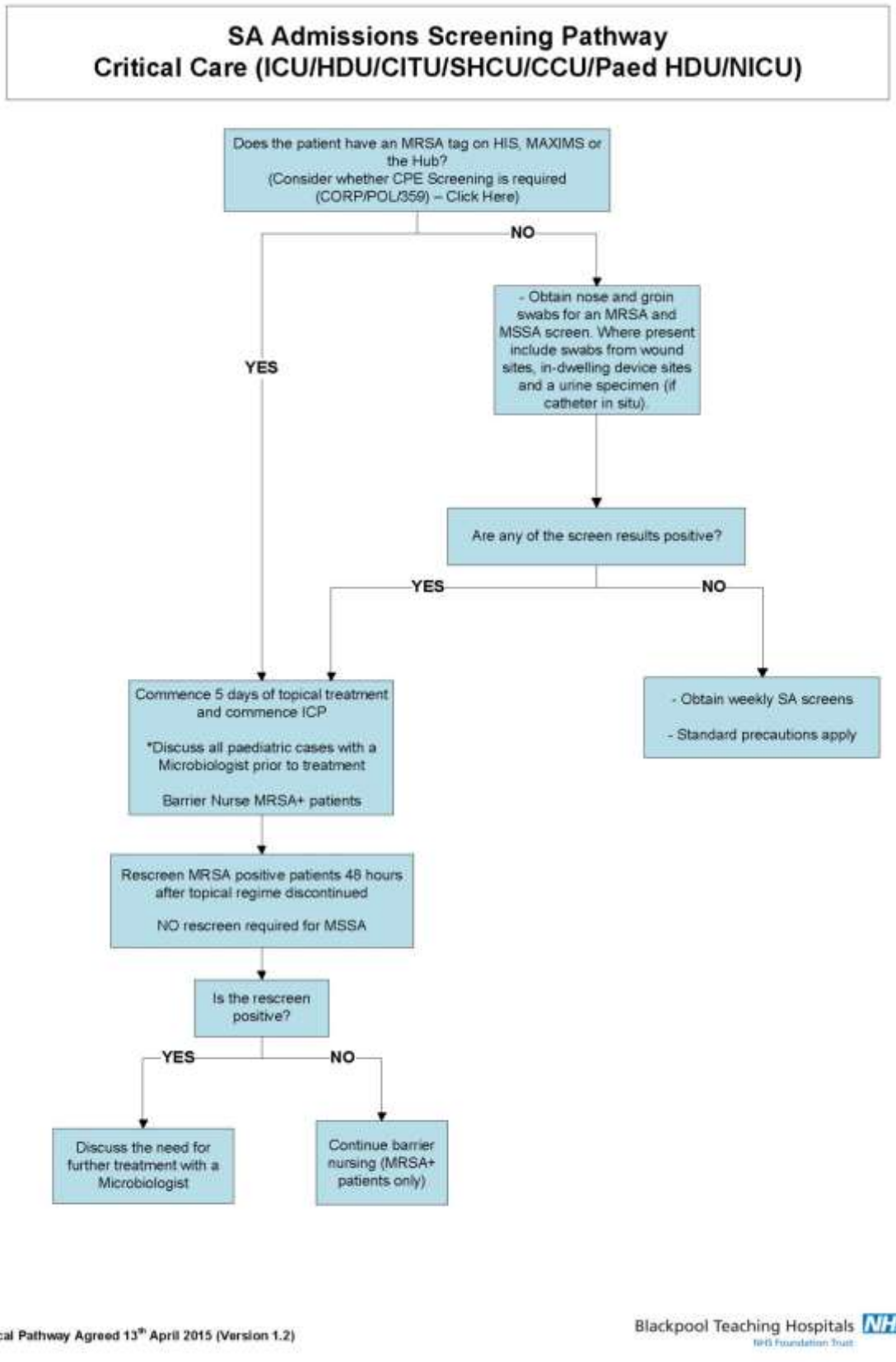

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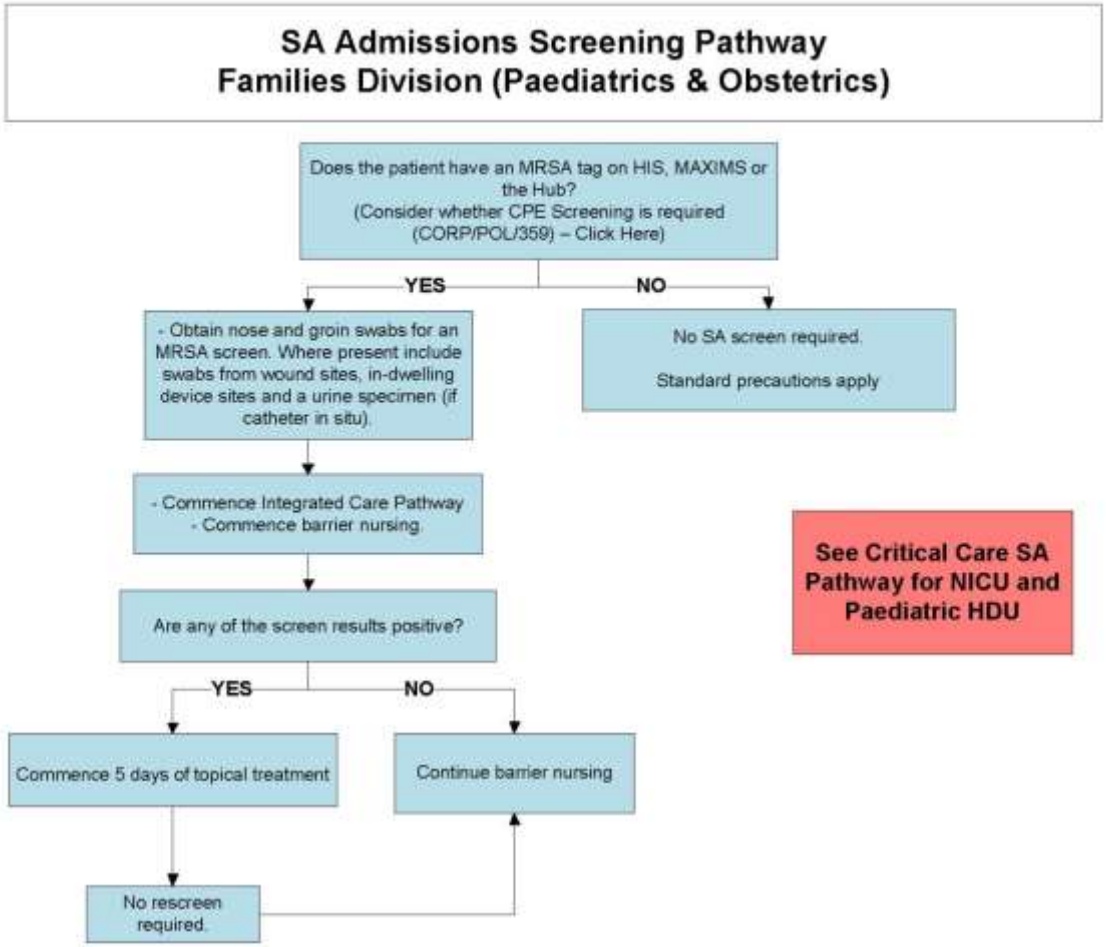

Local Pathway Agreed 13rd April 2015 (Version 1.1)

Blackpool Teaching Hospitals NHS Foundation Trust

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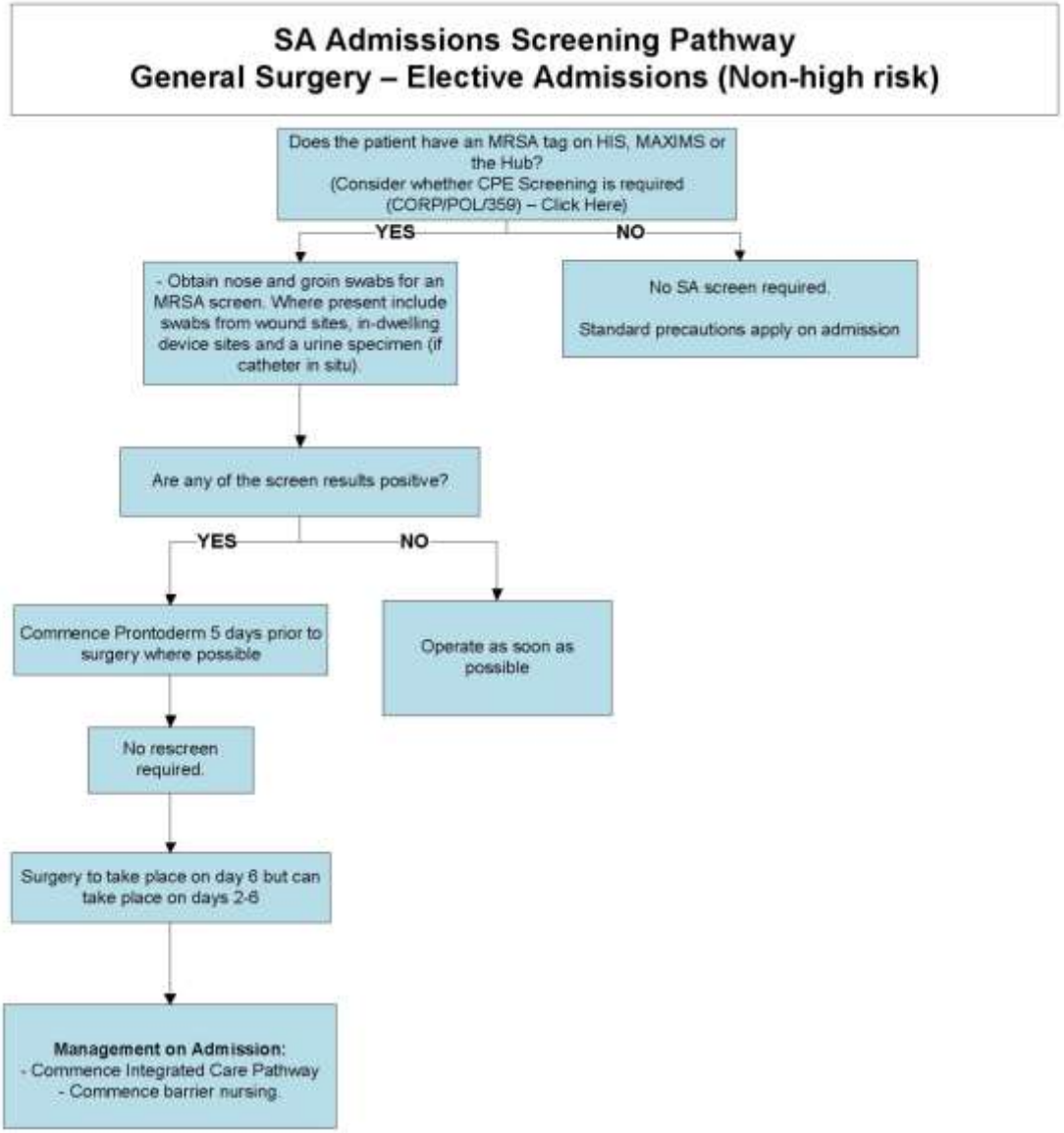

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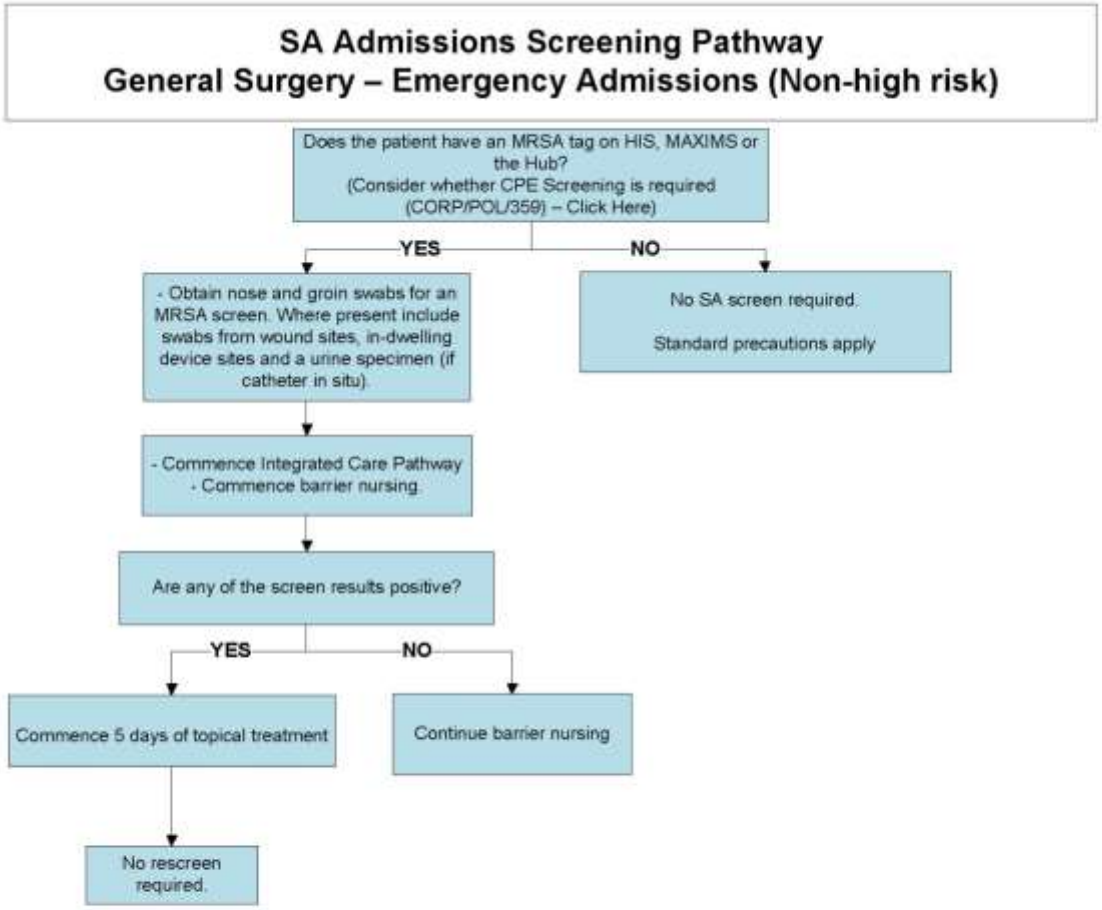

Local Pathway Agreed 23rd April 2015 (Version 1.1)

Blackpool Teaching Hospitals NHS
NHS Foundation Trust

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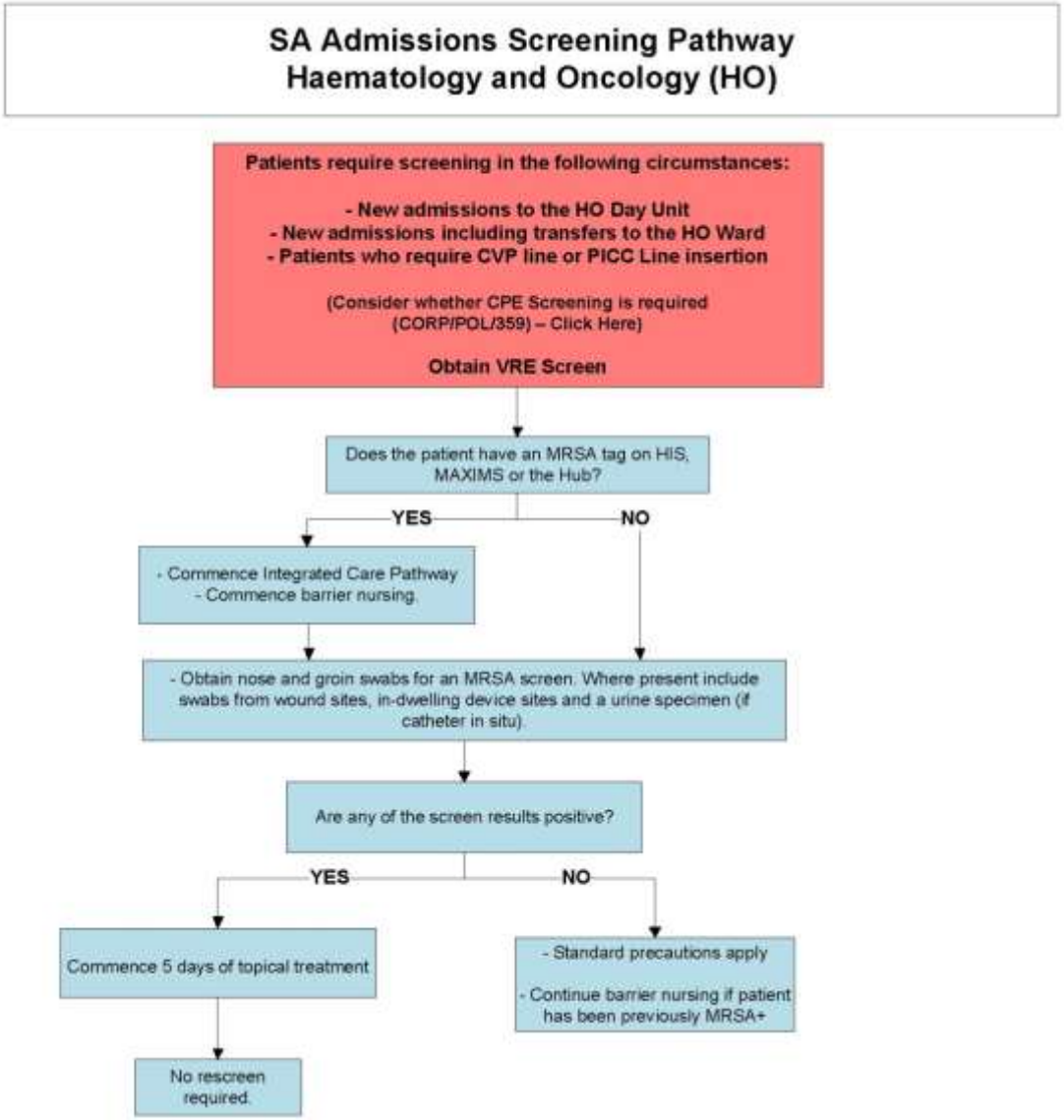

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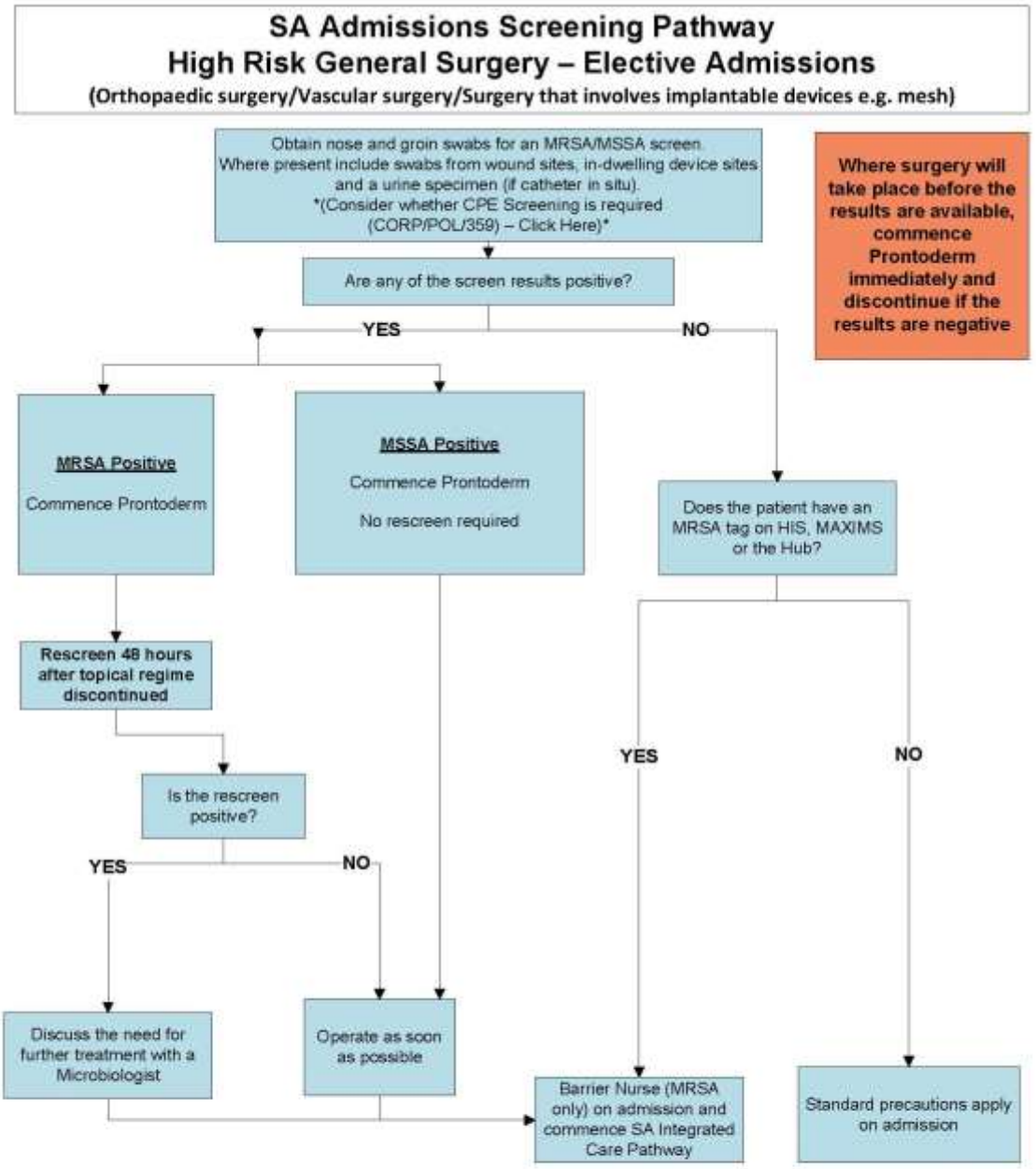

Local Pathway Agreed 13th April 2015 (Version 1.2)

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NHS Foundation Trust

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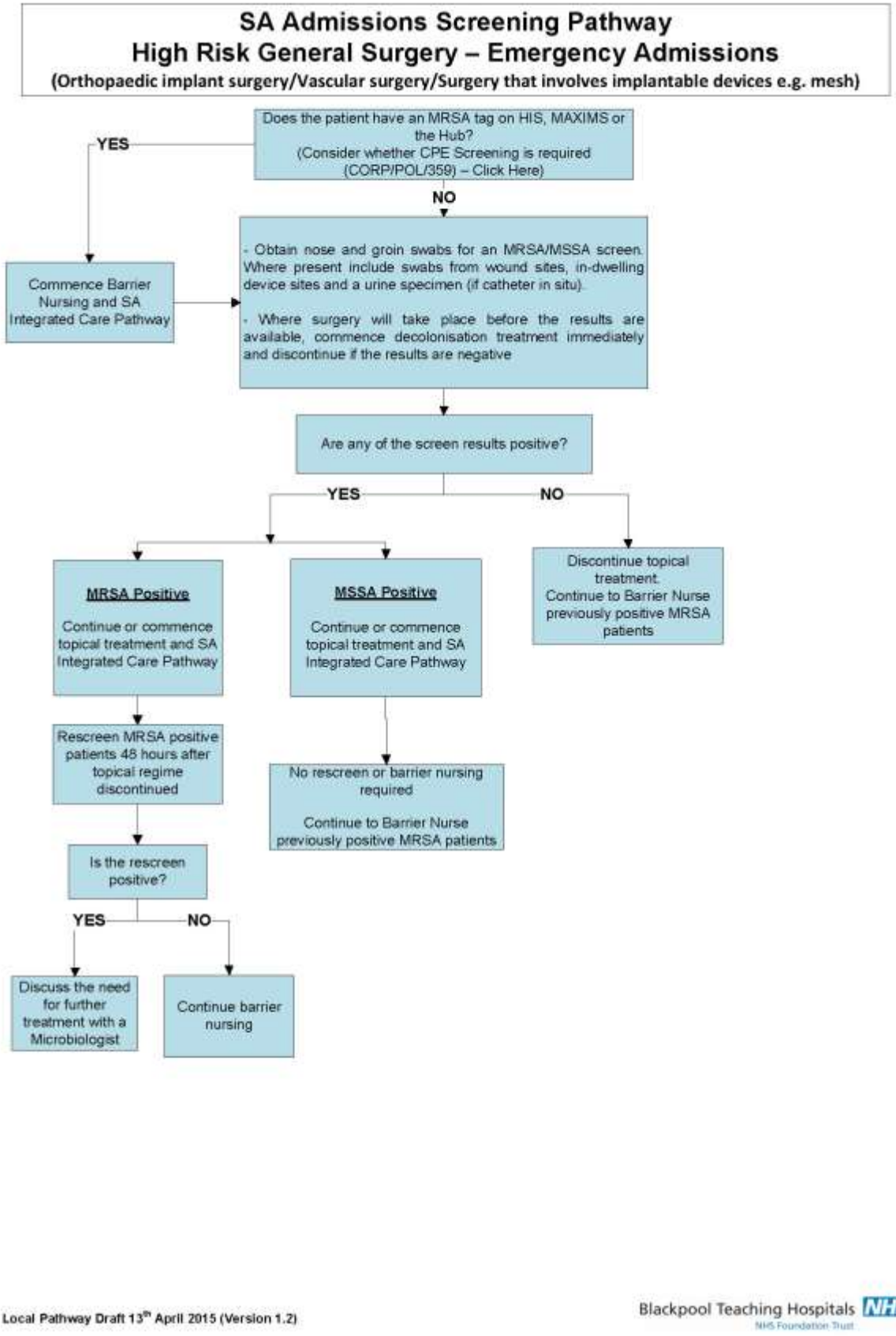

Appendix 2: Screening samples

MRSA screens should consist of standard charcoal swabs of the nose and groin plus culture and sensitivity samples from any wounds sites, indwelling devices and a urine specimen if a catheter is in situ.

MRSA and MSSA screens for patient in the high risk groups as outlined in section 3.6 should consist of **one** standard charcoal swab **of each** the nose and groin (please select the MRSA / MSSA screen test request on cyberlab) plus culture and sensitivity samples from any wound sites, indwelling devices and a urine specimen if catheter in situ.

***Please note that additional throat and rectal swabs are required for patients undergoing Cardiothoracic surgery.**

Occasionally MRSA/MSSA screens may be requested by a microbiologist to manage infected patients and in the investigation of PVL carriage and SA associated outbreaks. If this is the case please add in clinical details 'MICROBIOLOGIST REQUEST MRSA/MSSA screen' and reason for screening.

Turnaround time for screening specimens

24h – 36h (Subject to arrival time of specimen in laboratory). Cultures will be set up and read at frequent intervals throughout the working day (Currently 8am-8pm). Results (negative and provisional positive) will be available 24 hours from the point of plate inoculation (24-36 hours from receipt of specimen in the laboratory allowing for overnight delays).

Results are recorded onto the lab system as soon as they are known (real-time) hence if there is no result on the computer then it hasn't been read yet by the lab staff. Please therefore do not ring the lab for results in such circumstances as they will not be able to provide any further information.

RESPONSIBILITY OF CLINICAL TEAMS:

- It is the responsibility of the clinical team to ensure that specimens are requested accurately via the cyberlab system and that specimens are sent as soon as they are obtained.
- **It is the responsibility of the nurse in charge to check the MRSA status of any admissions to the ward and to review laboratory system for MRSA results on a regular basis. The laboratory will not telephone positive results through to the requesting ward or department**.

Appendix 3: Protocol for dealing with MRSA/MSSA carriage:

For all MRSA positive patients and high risk MSSA positive patients as outlined in section 3.6 the following regimes apply: -

In patient bio-burden reduction (Adults)

- **Mupirocin 2% nasal ointment** – Apply locally into anterior nares (patient should taste it in back of throat) 3 times a day for 5 days.

- 2nd line for mupirocin resistant strain or mupirocin hypersensitivity OR MUPIROCIN UNAVAILABILITY is Naseptin® (chlorhexidine 0.1% + neomycin) apply 4 times a day for 10 days. (IMPORTANT NOTE – Naseptin contains Arachis oil (peanut oil) and soya and therefore should not be taken / applied by patients known to be allergic to peanuts or soya.)

- **Where patients have an allergy to peanuts (or nuts), soya or chlorhexidine, then Prontoderm gel light should be used THREE times daily for FIVE days**.

- **Chlorhexidine gluconate 4% – (Hibiscrub® or equivalent) – Use undiluted as a liquid soap body wash daily for 5 days (paying particular attention to the axilla and groin). Shampoo hair twice during the 5 day period on days 1 and 2. (Self-caring patients should be encouraged to shampoo their hair daily). Recommended contact time of 3-minutes before washing it off with water. (IF INTOLERANCE DEVELOPS DISCONTINUE USE IMMEDIATELY. Please contact the Infection Prevention team or on call Microbiologist for advice)**.

- **Chlorhexidine gluconate 0.2% mouthwash is required for patients undergoing Cardiothoracic surgery**.

    - 2nd line for Neonates / paediatrics or hypersensitivity to chlorhexidine or exfoliative skin conditions is Octenisan®.

    - **Where the status of the patient is unknown and emergency surgery is required, commence daily Mupirocin and Chlorhexidine gluconate 4% body washes as above and discontinue if the result is negative**.

The nurse caring for the patient MUST promptly affix the prescription sticker on the prescription chart, initiate decolonisation protocol without delay and get it signed by a doctor at the first opportunity but certainly within 24 hours.

Pre admission bio-burden reduction (Adults)

- **Prontoderm® pack number 2. This consists of Prontoderm foam for daily skin and hair application for 5 days and Prontoderm Gel Light for nasal application, three times a day for 5 days**.

- **Prontoderm® Oral is also required for patients undergoing Cardiothoracic surgery**.

Appendix 3: Protocol for dealing with MRSA/MSSA carriage:
Bio-burden reduction - Paediatric and Neonatal

- **Decolonisation and treatment of paediatric patients and neonates must be discussed with a Microbiologist**.

  Pre-operative bio-burden reduction protocol for elective surgical patients with MRSA and MSSA carriage:

  For high risk patients (as defined in section 3.6) when there is more than 10 days before surgery and where the surgeon feels that it is the best interest of the patient to obtain one negative screen: -

  - Where there is more than 10 days before the date of surgery – the patient is to commence on a 5-day Prontoderm bio-burden reducing regime as soon as the positive result or status is known.
  - **A follow up screen for MRSA positive patients only should be obtained 48 hours after completion.**
  - If the screen is negative surgery should take place as soon as possible.
  - **If positive, please discuss the need for further treatment with a microbiologist.**

For high risk patients where there is less than 10 days before surgery: -

- The patient is to commence on a 5-day Prontoderm bio-burden reducing regime 5 days before the planned operation date.
- 5 days of decolonisation is optimal but 2 days of decolonisation treatment greatly reduces the bio-burden of MRSA / MSSA.
- **Surgery is best performed on day 6 but can be performed on day 2 – 6.**
- Procedures should be performed within 7 days of completion of the Prontoderm treatment. If positive please contact a microbiologist for advice. If negative, surgery should take place as soon as possible.
- MRSA positive patients should have a follow up screen on admission if this was not done prior to admission.
- **If positive, please discuss the need for further treatment with a microbiologist.**

For status unknown patients where elective surgery is likely to take place before the results are available, the patient should commence Prontoderm as soon as possible and be discontinued if the result is negative. Surgical antibiotic prophylaxis must include an agent with MRSA cover [as per formulary].

Appendix 3: Protocol for dealing with MRSA/MSSA carriage:

MSSA positive patients require only standard surgical prophylaxis.

<u>Bio-burden reduction protocol for emergency high risk surgical patients with MRSA and MSSA carriage:</u>

Known positive MRSA patients or patients that screen MRSA positive (or MSSA positive if high risk surgery) on admission:-

- **Commence 5 day bio-burden reduction consisting of Chlorhexidine gluconate 4% and Mupirocin as above**.
- **Rescreen MRSA positive patients 48 hours after completion**.
- **If positive contact a microbiologist for advice**.

Where the status of the patient is unknown and emergency surgery is required, commence daily Mupirocin and Chlorhexidine gluconate 4% body washes as above and discontinue if the result is negative.

Surgical antibiotic prophylaxis must include an agent with MRSA cover [as per formulary].

MSSA positive patients require only standard surgical prophylaxis.

Appendix 3: Protocol for dealing with MRSA/MSSA carriage:

Operating Theatre Management of high risk patient group surgery and those whose status is not known at time of operation:-

- **<u>All status unknown high risk emergency patients</u> should be managed as MRSA positive pending screening results**.
- Where possible first application of Mupirocin nasal ointment and Chlorhexidine gluconate 4% body wash should be given prior to surgery.
- If procedure requires antibiotic prophylaxis ensure MRSA cover as well as standard operative cover. **Refer to the antimicrobial formulary and CORP/GUID/101. Antibiotic Prophylaxis in Adults undergoing Surgery** (BTHFT, 2019).
- Place at the end of the operating list where possible or delay next entry until sufficient air changes have occurred, in practice 15 minutes for a standard theatre.
- Recover patient in operating theatre or segregated recovery area.
- Decontaminate surfaces after procedure.

<u>Bio-burden protocol for emergency medical patients with MRSA carriage:</u>

Known positive MRSA patients do not require decolonisation unless they screen positive on admission:-

- **Commence 5 day bio-burden reduction consisting of Chlorhexidine gluconate 4% and Mupirocin as above**.
- **No rescreen required**.

<u>Bio-burden protocol for critical care patients with MRSA and MSSA carriage:</u>

Known positive MRSA patients or patients that screen MRSA or MSSA positive on admission:-

- **Commence 5 day bio-burden reduction consisting of Chlorhexidine gluconate 4% and Mupirocin as above**.
- **Rescreen <u>MRSA positive surgical patients</u> 48 hours after completion and discuss the need for further treatment with a Microbiologist if positive**.
- **No rescreen required for medical patients**.

Appendix 4: Surveillance and Audit			
TYPE		**Report To**	**Frequency**
External	Department of Health MRSA Bacteraemia Monitoring Programme	DoH / Health Protection Agency **(COSERV)**	Quarterly Report issued to Trusts Annual Report to Parliament Benchmarked
Internal	Review of MRSA Bacteraemia figures Outbreak Reports MRSA admission rates **(HISS)** MRSA clinical isolate rates	Trust Board HICC Divisions Divisions	Quarterly Bi-Monthly Annually Annually until Infection Control database in place then more frequently
Audit	Bacteraemia Critical incident review Recording MRSA status plus time to Initiation of Barrier Nursing/ Treatment Appropriate use of MRSA Empiric Treatment Appropriate use of Antibiotics versus topical regimes for MRSA management	HICC/Divisions	Rolling programme over three years

Appendix 5: Management Of *Staphylococcus aureus* (SA) - Meticillin-Resistant (MRSA) and Meticillin-Sensitive (MSSA) within Adult Community Long Term Conditions (ACLTC)

Information for ACLTC staff caring for patients in treatment / clinic rooms (other than Clifton hospital) or a domestic setting.

- **Direct spread can be prevented by decontamination of hands following direct contact with a colonised or infected patient and the environment. Effective hand hygiene (WHO 5 Moments) is the single most important Infection Prevention and Control measure. (Refer to CORP/POL/056 Hand Hygiene Policy and CORP/PROC/418 Hand Hygiene Procedure)** (BTHFT, 2019) (BTHFT, 2019).

- **Staff with active eczema or psoriasis on hands or exposed parts of the body must seek advice from Occupational Health**.

- **Personal Protective Equipment (PPE) must be worn when undertaking direct patient care. (Refer to CORP/POL/116 Infection Prevention)** (BTHFT, 2019).

- **Disposal of infectious or recognisable healthcare waste must be carried out as per policy (Refer to CORP/POL/185, Waste Management Policy)** (BTHFT, 2017) (BTHFT, 2017).

- **All staff must ensure that the patient's infection status is clearly communicated when patients are transferred outside the organisation or when patients are referred to other disciplines within the organisation. (Refer to Clinical Handover of Care of Patients- CHS/PROC/027** (BTHFT, 2013) **and The Discharge of Patients from Community Health Services-CHS/PROC/028)** (BTHFT, 2012).

- **Patients known to be colonised or infected should whenever possible be seen at the end of a treatment room / clinic session**.

- **Environmental cleaning must be of a high standard at all times. Horizontal**.

- **Surfaces, patient trolleys and patient equipment must be cleaned with hot water and detergent or Trust approved wipes**.

Appendix 6: Example of death certification

Example A:

If a healthcare associated infection (HCAI) was part of the sequence leading to death, it should be written in part I of the certificate, and you should include all the conditions in the sequence of events back to the original disease being treated.

Ia. MRSA bacteraemia
Ib. Multiple antibiotic therapy
Ic. Community acquired pneumonia with severe sepsis

II. Immobility, Polymyalgia Rheumatica, Osteoporosis

Example B:

If your patient had a HCAI that was not a part of the direct sequence, but which you think contributed at all to their death, it should be mentioned in part II

Ia. Bronchopneumonia
Ib. Carcinomatosis and renal failure
Ic. Adenocarcinoma of the prostate

II. MRSA pneumonitis infection secondary to antibiotic therapy for recurrent bronchopneumonia.

Appendix 7: SA Integrated Care Pathway

FILE IN SECTION 3

"Your Anticipated Journey Through our Healthcare Service"

This Document is Private and Confidential

Visitors and members of the public must not view without the consent of the patient.

Patient Information

- This is a Multidisciplinary Integrated Care Pathway (ICP).
- The pathway will be kept at the foot of your bed as it is a document that all members of staff will refer to whilst providing your care, however if you wish it to be kept at the Nursing station please inform the Nursing staff. Patients nursed in the community will have the documentation stored with their home notes.
- It contains a record of your planned treatment/management, if you want to know more about your care please follow the pathway.
- If you have any questions please do not hesitate to ask one of the nursing staff or doctors.
- Remember this pathway is a guide to your expected care.
- As an individual your health care requirements may vary from this pathway.
- Do not worry if events do not occur at the exact time stated in the pathway, patients progress at different rates and the team involved in your care will use their professional judgement to adapt your care accordingly.
- Any variation from the pathway will be recorded and explained to you at your request.
- If you would like to know more about how we use your information please ask a member of staff for the leaflet "*How we use your Health Records"*

Appendix 7: SA Integrated Care Pathway

Instruction and information for staff

- This pathway is to be completed by ALL members of the multidisciplinary team involved in the patients care and will form part of the patients health record
- All sections (*where relevant*) must be completed
- All professionals using this pathway must complete all parts of the accountability section
- It supports decision making but does not constrain your clinical autonomy
- Where available the pathway is evidence-based
- When an activity has been completed sign and record the time. If responsibility for completion of an activity is shared all disciplines must sign
- In exercising professional judgement alteration from the pathway must be noted as a variance and must be recorded on the variance sheet
- Please note variances may be positive or negative
- Put a V in the box next to the activity and then record the variance on the variance sheet
- Record an explanation of the variance on the variance sheet
- Record action taken as a result of the variance on the variance sheet
- There is a multidisciplinary notes/communication section to record e.g. additional care given. These must be signed and dated
- Any additional documentation e.g. blood results must be filed with the ICP in the patients casenotes upon discharge
- If you have any queries about using the ICP please contact the author/originator

Appendix 7: SA Integrated Care Pathway

Staphylococcus Aureus

FILE IN SECTION 4 OF THE ACUTE HEALTH RECORD FOLDER OR FILE IN THE COMMUNITY HEALTH RECORD

Abbreviations used in this document to be listed here with the full description:

SA	Staphylococcus Aureus
MRSA	Meticillin Resistant Staphylococcus Aureus
MSSA	Meticillin Sensitive Staphylococcus Aureus
ICP	Integrated Care Pathway
+ve	Positive
-ve	Negative
IPN	Infection Prevention Nurse
E-discharge	Electronic discharge

Write patient details or affix Identification label
Hospital Number:
Name:
Address:

Postcode:
Date of Birth:
NHS Number:

ONCE COMPLETED PLEASE FILE ICP IN PATIENTS HOSPITAL/COMMUNITY HEALTH RECORD

Appendix 7: SA Integrated Care Pathway

Accountability Section

All Staff must **print name in full; sign using the signature/initials to be used throughout the document and then sign the entry with your normal signature.**

Printed Name	Designation (e.g. Doctor, Staff Nurse)	Signature/initials to be used	Initials

Appendix 7: SA Integrated Care Pathway

Patient's Name……..Date of Birth…….

Hospital Number…….NHS Number……...

Author/Originator……Designation……

PLEASE REFER TO BLACKPOOL TEACHING HOSPITAL NHS FOUNDATION TRUST STAPHYLOCOCCUS AUREUS POLICY CORP/PROC/408

Positive Screen on Admission YES / NO Date/Time result received……/……..	Known positive MRSA previously YES / NO

SECTION ONE – COMMENCE ON ADMISSION OR IMMEDIATELY RESULTS KNOWN

PLEASE ENSURE ALL BOXES ARE TICKED THEN SIGN AND DATE ONCE FULLY COMPLETED

Patient Informed of status	☐	Questions answered by ward staff or IPN	☐
Nurse in Charge of patient's care informed	☐	Next of Kin Informed (with patient's consent)	☐
Medical team informed	☐	Patient informed of isolation measures and rationale	☐
MRSA status ticked on the Prescription Sheet	☐	Patient agrees to comply	☐
MRSA Sticker applied to case notes	☐	Patient barrier nursed in a side room	☐
Allergy Card in Section 1 of the patient's notes completed	☐	Patient barrier nursed in a bay.	☐
Information leaflet given to patient	☐	Sign.....	
		Date……/……/……	

SECTION TWO – TREATMENT

PLEASE ENSURE ALL BOXES ARE TICKED THEN SIGN AND DATE ONCE FULLY COMPLETED

Topical regime prescribed as per Staph Aureus Policy ☐
(NB: Topical treatment can be started prior to being prescribed)
(5 days Chlorhexidine/ 5 days Mupirocin for emergency admissions). (5 days Prontoderm for elective surgical admissions).

Date and Time topical treatment commenced……/……/……

Topical Treatment for eradication has been given: ☐

(If not fully completed document on the variance sheet)

Patient is self-administering treatment ☐

Patient is competent and has been observed administering treatment ☐

Appropriate Antibiotics prescribed for systemic or localised MRSA infections ☐

Date treatment completed on……../……../…….

Sign…….. Date……/……/……..

Appendix 7: SA Integrated Care Pathway

Patient's Name……..Date of Birth……

Hospital Number…….NHS Number……...

SECTION THREE –INTER-WARD OR HOSPITAL TRANSFERS

PLEASE ENSURE ALL BOXES ARE TICKED THEN SIGN AND DATE ONCE FULLY COMPLETED

In the event of a ward or hospital transfer you must:

Inform the receiving ward or hospital of the patient's SA status ☐

Sign……

Date……/……/……

Not applicable (i.e. the patient has not been transfe ☐ l)

NB: Check previous MRSA status prior to transfer. Although the patient may have had a negative result, must still be barrier nursed as once positive always positive.

SECTION FOUR – RESCREENING POST DECOLONISATION FOR SURGICAL PATIENTS ONLY

PLEASE ENSURE ALL BOXES ARE TICKED THEN SIGN AND DATE ONCE FULLY COMPLETED

Patient is rescreened 48 hours after completion of topical treatment ☐

Sign……

Date……/……/……..

- If positive discuss the result with a Microbiologist
- If negative continue with barrier nursing

Results of rescreen and further treatment if recommended are documented in the patients notes ☐

Sign……..

Date……/……/……

SECTION FIVE – DISCHARGE

COMPLETE THIS SECTION ON DISCHARGE

Patient discharged midway through treatment ensure decolonisation treatment and instructions given to the patient to continue for the full 5 days (Chlorhexidine body wash 5 days, Mupirocin 5 days) ☐

SA Status added to e-discharge letter ☐

Sign……

Date……/……/……..

Appendix 7: SA Integrated Care Pathway

Patient's Name……..Date of Birth…….

Hospital Number…….NHS Number……...

VARIATIONS FROM THE PATHWAY

DATE/ TIME	VARIATION	ACTION TAKEN/EVALUATION	SIGNATURE

Appendix 8: Equality Impact Assessment Form

Department	Infection Prevention and Control	**Service or Policy**	CORP/PROC/408	**Date Completed:**	August 2014

GROUPS TO BE CONSIDERED

Deprived communities, homeless, substance misusers, people who have a disability, learning disability, older people, children and families, young people, Lesbian Gay Bi-sexual or Transgender, minority ethnic communities, Gypsy/Roma/Travellers, women/men, parents, carers, staff, wider community, offenders.

EQUALITY PROTECTED CHARACTERISTICS TO BE CONSIDERED

Age, gender, disability, race, sexual orientation, gender identity (or reassignment), religion and belief, carers, Human Rights and social economic / deprivation.

QUESTION	**RESPONSE**		**IMPACT**	
	Issue	Action	Positive	Negative
What is the service, leaflet or policy development? What are its aims, who are the target audience?	To identify patients presenting with colonisation, infection or infectious diseases that may be a risk to others. To take timely action to prevent the spread of potentially infectious conditions by appropriate isolation of the source patient and the appropriate use of personal protective equipment.			
Does the service, leaflet or policy/ development impact on community safety • Crime • Community cohesion	No			
Is there any evidence that groups who should benefit do not? i.e. equal opportunity monitoring of service users and/or staff. If none/insufficient local or national data available consider what information you need.	No			
Does the service, leaflet or development/ policy have a negative impact on any geographical or sub group of the population?	No			
How does the service, leaflet or policy/ development promote equality and diversity?	No			
Does the service, leaflet or policy/ development explicitly include a commitment to equality and diversity and meeting needs? How does it demonstrate its impact?	No			
Does the Organisation or service workforce reflect the local population? Do we employ people from disadvantaged groups	No			
Will the service, leaflet or policy/ development i. Improve economic social conditions in deprived areas ii. Use brown field sites iii. Improve public spaces including creation of green spaces?	No			
Does the service, leaflet or policy/ development promote equity of lifelong learning?	No			
Does the service, leaflet or policy/ development encourage healthy lifestyles and reduce risks to health?	No			
Does the service, leaflet or policy/ development impact on transport? What are the implications of this?	No			
Does the service, leaflet or policy/development impact on housing, housing needs, homelessness, or a person's ability to remain at home?	No			

Appendix 8: Equality Impact Assessment Form

Are there any groups for whom this policy/ service/leaflet would have an impact? Is it an adverse/negative impact? Does it or could it (or is the perception that it could exclude disadvantaged or marginalised groups?	No			
Does the policy/development promote access to services and facilities for any group in particular?	No			
Does the service, leaflet or policy/development impact on the environment i. During development ii. At implementation?	No			

ACTION:				
Please identify if you are now required to carry out a Full Equality Analysis		~~**Yes**~~	**No**	**(Please delete as appropriate)**
Name of Author: **Signature of Author:**	Sharon Mawdsley		**Date Signed:**	**June 2015**
Name of Lead Person: **Signature of Lead Person:**	Dr Ruth Palmer		**Date Signed:**	June 2015
Name of Manager: **Signature of Manager**			**Date Signed:**	