

**March 2009**

## **Revised MRSA Screening Policy for Elective and Emergency Admissions at Luton & Dunstable Hospital, including compliance statement**

*These guidelines on MRSA follow the guidelines published by the combined working party of the Hospital Infection Society, the British Society for Antimicrobial Chemotherapy and the Infection Control Nurses Association (Journal of Hospital Infection 2006 635 S1-S44), and the Saving Lives guidance on screening for MRSA (D.O.H 2007) and the DoH MRSA screening operational guidance (2008)*

### **Introduction**

MRSA is a bacterium, which is resistant to the commonly used antibiotics and poses a problem to patients in healthcare facilities. A significant proportion of the population may carry MRSA (known as colonisation) in warm moist areas such as nose, axilla, perineum and groin.

In hospitals the most important reservoir for MRSA are colonized or infected patients.

The most common mode of transmission is on the hands of health care workers or via shared equipment.

Patients in hospital may carry MRSA asymptomatically (skin breaks, wounds and other sites such as catheters) but can also develop infection which can range from mild to severe and occasionally life threatening. Carriage can be treated with a short course of treatment which usually requires application of antibacterial wash to the skin and antibacterial ointment to the nose for 5 to 7 days.

To prevent patients from acquiring MRSA and further infection from occurring surveillance / screening is carried out to identify patients carrying this organism and to offer them treatment.

### **Background**

Concerted efforts have been made in the last 5 years to reduce the incidence of blood infection with MRSA (bacteraemia) in hospitals in England and Wales. The L&D along with many hospitals has been successful in achieving the targets set for reduction in MRSA blood stream infections.

Further progress needs to be made in an effort to reduce bacteraemias to “**zero**”. As hospitals have eliminated many of the causes, root cause analysis of

the reducing number of MRSA bacteraemias have highlighted the increasing number of community acquired / associated infections.

Additionally it is desirable to make an impact on other MRSA related infections i.e. skin & soft tissue, joints, post operative wounds etc.

With these aims in mind it has been proposed by the DoH that healthcare facilities should INCREASE the screening of patients for MRSA. It has been proposed that screening is offered to the majority of admissions in hospitals commencing 1<sup>st</sup> April 2009.

### **Current position**

Most hospitals screen patients based on risk assessment of acquisition and the likely harm if patients were to acquire MRSA. It has therefore been accepted that patients in ITU, HDU, NICU and other intensive care units are at the highest risk, followed by patients who have surgery or other interventions and lastly patients in general medical and DME wards. There are several other categories of patients like those who have been in hospital recently, transfers from teaching / other hospitals, residents of nursing / residential homes are often seen as high risk for being MRSA carriers.

At the L&D we have been following a risk based approach. Additional screening at pre-assessment has been in place for elective surgical patients for the last 18 months.

### **From 1<sup>st</sup> April 2009**

MRSA screening swabs will be taken from all **elective** and **emergency** admissions. The Trust will provide a monthly data return of the number of screening tests undertaken against the number of admissions and attendances of elective patients. Monitor will ensure compliance and hold Boards to account. The DoH will seek assurance from Monitor that the required policies, signoffs, assurances and evidence are in place.

The following categories are deemed low risk and are currently **excluded** from the screening programme:

Day case Ophthalmology

Day case Dental

Day case Endoscopy

Minor dermatology procedures

Children / Paediatrics – unless in high risk groups

Maternity – except elective Caesarean – sections and high risk groups

## **Benefits of extended screening**

**Elective admissions** if screened pre-procedure, patients testing positive will be offered treatment to eradicate carriage before their admission and intended procedure.

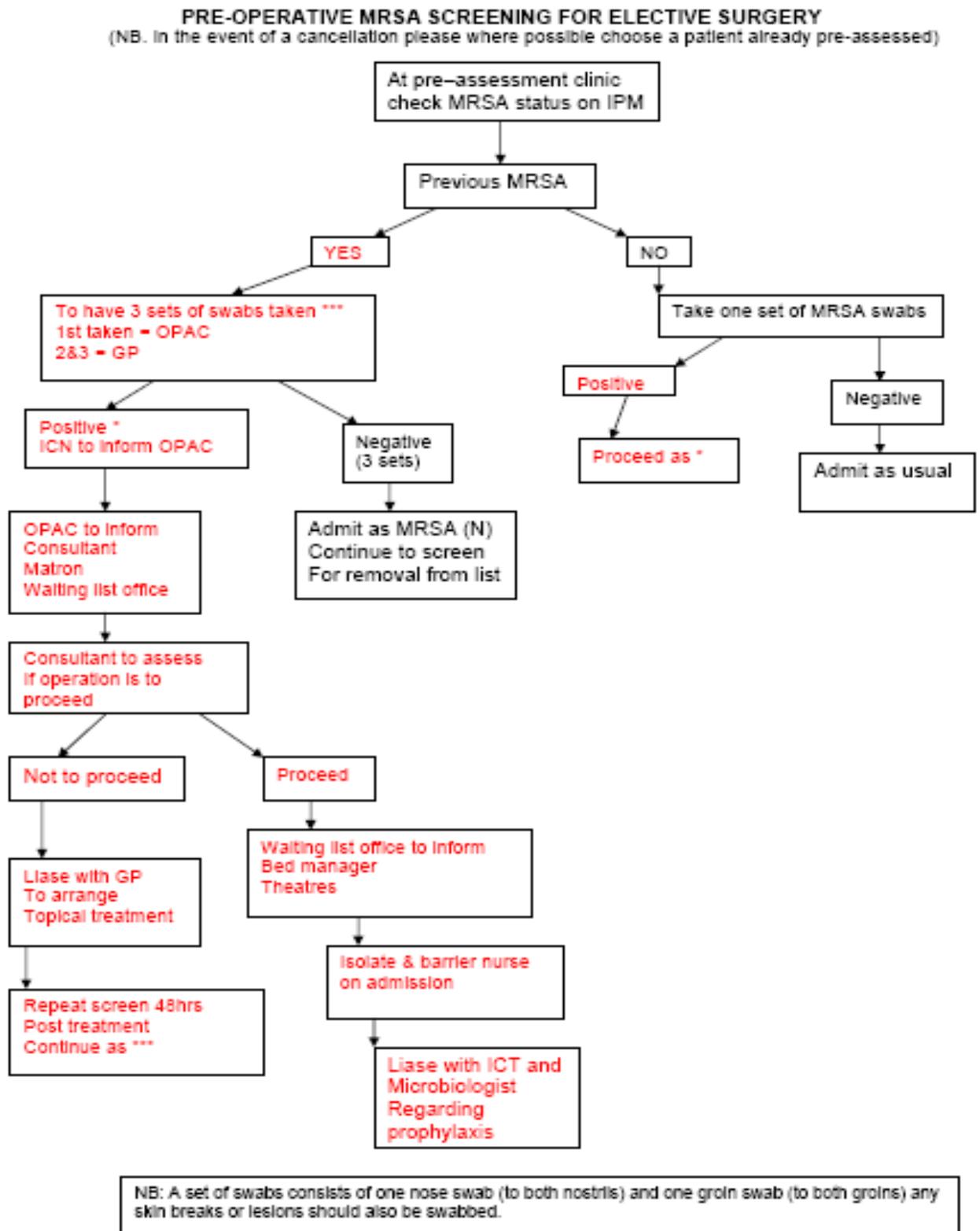
**Emergency admission** screening should allow colonised patients to be identified rapidly and nursed appropriately. The L&D intends to implement **PCR based testing** which is rapid and is amenable to near patient testing.

## **Additional Screening Categories**

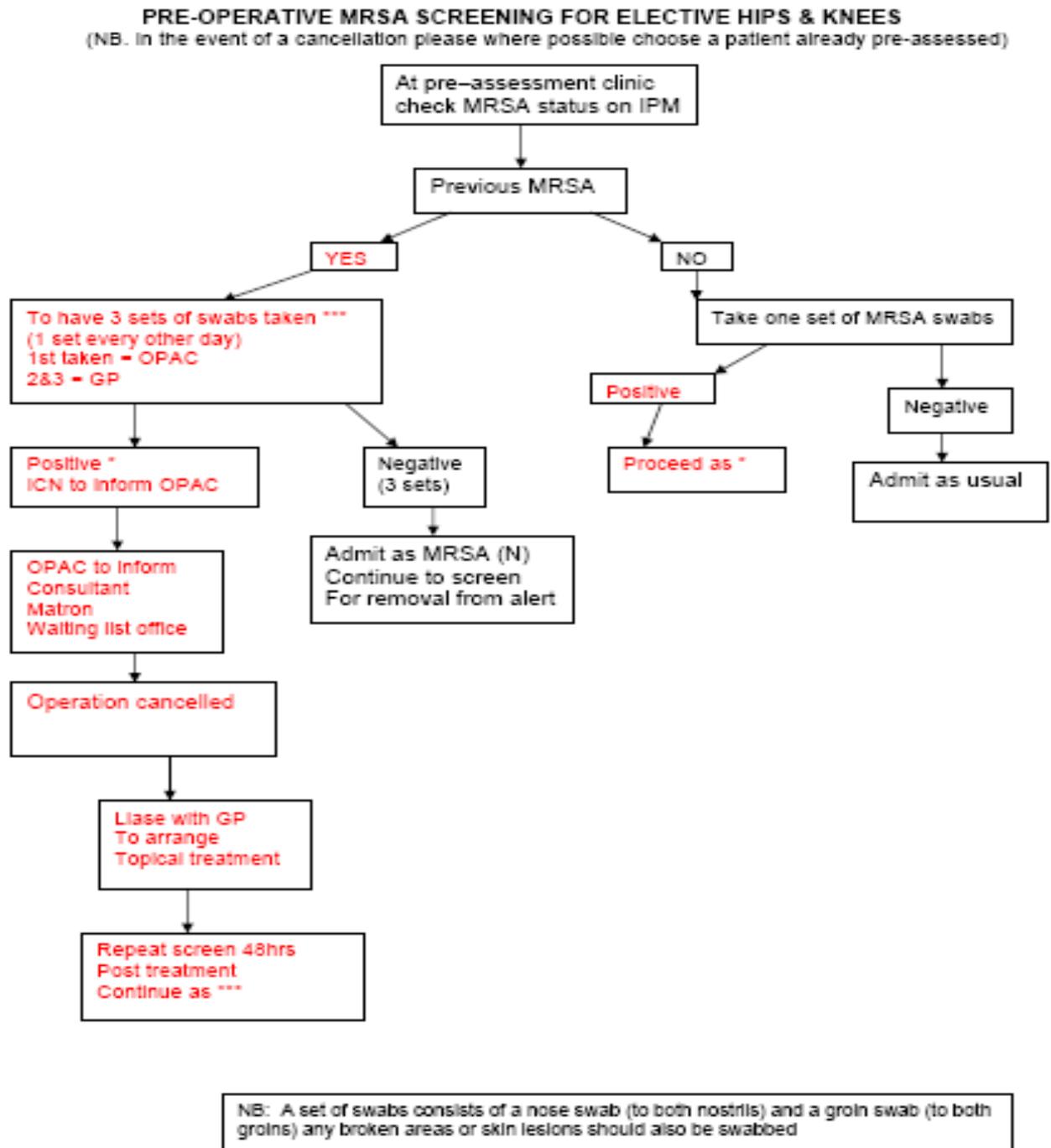
The following groups of patients will be subject to additional screening whilst in hospital.

1. High-risk groups include, previously MRSA positive patients, Residential or Care home residents and transfers from other hospitals.
2. Previously MRSA positive patients who are identified by an alert placed by their name on the hospital patient information system.
3. Pre-operative patients (elective patients) are to be screened at least 2 weeks prior to surgery to enable MRSA positive patients to be identified pre-admission. Screening is undertaken at pre-assessment and repeated on admission.
4. Patients admitted to ITU, HDU, CCU and NICU should be screened on admission and at weekly intervals during their stay.

**Diagram (a) = Flow chart pre-op screening elective surgery**



**Diagram (b)** = Flow chart pre-op screening elective hip and knee surgery



## **Testing of Emergency Admissions**

Patients admitted as emergency admissions will be tested on admission to their initial in-patient ward. The majority of such tests will be undertaken within the Acute Care Unit. However, in the event that a patient is admitted directly to a specialty ward or other department then the MRSA test will occur on admission to that ward. The management of patients identified as MRSA positive will be in accordance with approved Trust Policy.

## **Management of MRSA positive patients at the L&D**

Patients admitted to the hospital known to be MRSA positive either with an infection or carrying MRSA asymptomatically will be nursed in a single side room or on ward 5 the MRSA isolation ward. If there are no beds available in single rooms or ward 5 patients will be barrier nursed at the bedside as an individual or as part of a cohort.

Staff and visitors will be required to use personal protective equipment e.g. gloves and aprons for contact with the patient or their environment. Strict adherence to hand washing is essential.

## **Decolonisation / Treatment**

As soon as a patient is identified as MRSA positive they should be considered for topical treatment the aim is to reduce the risk of MRSA positive patients acquiring infection from their own skin colonization and reduce the chance of transmission to others.

The treatment to be prescribed is as follows,

- (A) All patients – 2% mupirocin in paraffin base nasal ointment 3 times a day for 5 days and 4% chlorhexidine gluconate body wash daily for 5 days.
- (B) Selected patients – Positive throat swabs Chlorhexidine mouthwash 10mls twice a day for 5 days and positive lesions or wounds 2% mupirocin in polyethylene glycol may be applied to small lesions but not large raw areas or burns.
- (C) Infections – Systemic treatment for infections as advised by the Consultant Microbiologist

If patients are sensitive to chlorhexidine the Infection Control team should be contacted regarding alternative treatments. Those patients with eczema or psoriasis will need to be referred to the Consultant Dermatologist for expert advice.

## **Post treatment screening**

Three sets of negative swabs are required before a patient can be considered to be currently negative.

## **Discharge of MRSA positive patient**

The Intra-Healthcare form will be used on discharge and transfer of MRSA positive patients.

## **Reporting, performance management and accountability:**

Healthcare acquired MRSA is reported monthly to all wards, results are displayed on run charts and rates are used to monitor compliance with infection control precautions.

MRSA blood infections (bacteraemia) are reported to the General Manager and Clinical Director of the area for investigation using the MRSA root cause analysis tool (RCA).

RCA is to be completed within 5 days and returned to the Director of Infection Prevention and Control.

## **Compliance Statement**

In outlining the above, the Trust believes it will be compliant with the Department of Health Screening-Operational Guidance 2 document, issued on 31 December 2008.

**Dr R Mulla**  
**Director of Infection Prevention & Control**

16 March 2009