DEPARTMENT OF INFECTION CONTROL

MRSA SCREENING POLICY

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Policy Statement

This policy presents recommendations which will reduce the risk of MRSA infection in patients receiving care in Wrightington, Wigan and Leigh NHS Foundation Trust.

Key Principles

The policy requires all elective admissions (with a very small number of exclusions) to be screened for MRSA carriage prior to admission. In addition, all other admissions judged to be at increased risk of MRSA or with a past history of MRSA colonisation must also be screened.

If MRSA carriage is detected by screening, MRSA positive patients require to undergo effective decolonisation. This should be attempted before admission in elective cases. Detection of MRSA in a patient should not affect the eighteen-week pathway limit.

Responsibilities

It is the responsibility of Chief Executive and the Trust Board to ensure that all elective admissions are screened for MRSA carriage. It is the responsibility of all Trust employees to ensure that all patients under their care have been screened appropriately for MRSA carriage and those with a past history of MRSA colonisation are identified and dealt with in accordance with Trust MRSA Guidance.

Human Rights Act

There are no implications under the human rights act.

Monitoring and Review

Compliance with the requirement to screen all elective admissions will be monitored by monthly collection of screen numbers and numbers of elective admissions. This data is submitted monthly to the Department of Health.

Directorates are required to ensure that appropriate decolonisation of MRSA positive patients has occurred and to demonstrate this by audit.

This document will be reviewed every two years or sooner if additional guidance is published. Review is the responsibility of the Infection Control Team and the Consultant Microbiologists.
SCREENING OF PATIENTS FOR MRSA CARRIAGE

Screening method

See Annex A for screening method.

Pre-admission Screening:

All elective admissions (apart from the exclusions listed below) must be routinely screened for MRSA prior to admission. The following groups of patients are exempt from the requirement for screening:

- Day case ophthalmology.
- Day case dental.
- Day case endoscopy.
- Minor dermatological procedures.
- Maternity/obstetrics (except for elective caesarian sections or where baby is likely to require admission to the Neonatal Unit).

Patients found to be colonised with MRSA should undergo effective decolonisation before admission. It is the responsibility of the transferring hospital or patient’s General Practitioner, if in the community, to undertake this in accordance with the method in Annex B. Patients remaining persistently MRSA positive or who require urgent admission should be discussed with the Infection Control Team.

Patients listed for elective procedures should be screened for MRSA carriage before admission. Ideally, this should be done less than six weeks before and more than two weeks before the planned admission date. Patients who have ongoing exposure to MRSA (nursing home residents, health care workers, patients admitted to hospital in the interval between screening and their elective procedure) should be admitted to a side room pending the results of a further screen.

Admission Screening:

Patients in the following groups are at increased risk of MRSA carriage and should therefore be screened on admission:

- Known to be MRSA positive in the past. A full screen, including the site(s) originally colonised with MRSA should be obtained. A decolonisation regime (see Annex B) should be commenced immediately. Annex B should be consulted for further management.
- Frequently readmitted to healthcare facilities.
- Recent inpatient in hospital abroad.
- Transfers direct from another hospital outwith the Trust.
- Residents of residential care facilities with a high incidence of MRSA carriage (the Infection Control Team will notify ward staff of homes experiencing outbreaks and the need to screen their residents).

Patients on the following clinical areas are at increased risk of poor outcome from MRSA infection and should be screened on admission and thereafter as indicated.

**ICU/HDU**

- Screen all patients on admission and weekly thereafter. Admit all patients transferred from another hospital or other areas of high MRSA prevalence direct to a side room.

Commence the MRSA decolonisation regime (see Annex B) whilst awaiting the results of the initial screen. This may be discontinued if initial screen is negative and patient does not have a past history of MRSA.
SCBU
- Screen all patients on admission and weekly thereafter. Admit all patients transferred from another hospital or other areas of high MRSA prevalence to a side room.

ASPUll WARD (Emergency Orthopaedic)
- Admissions (elective and trauma) to Aspull Ward at RAEI should be screened on admission. Commence the MRSA decolonisation regime (see Annex B) whilst awaiting the results of the initial screen. This may be discontinued if the initial screen is negative and patient does not have a past history of MRSA. Patients from other specialities present on the ward should also be managed as above until transfer or discharge.

N.B. Details of previous MRSA colonization are given within the allergies section of the front sheet in the patient's case notes and in the “Alerts” section of the electronic patient record. Previously MRSA positive patients are also flagged on the laboratory computer system.

Screening for MRSA in Areas with Increased Incidence
MRSA colonisations are continually monitored by the Infection Control Team. Decisions to screen patient contacts will be made by the Team following assessment based on: ward type, number of new detections, staffing levels and availability of isolation facilities.

Staff screening is not routinely performed. However, staff will be asked about skin lesions. Staff with skin lesions are at increased risk of MRSA colonisation and transmission. Staff with skin lesions will be referred to the Occupational Health Department for screening and management.

Staff screening may be instigated by the Infection Control Team in the following circumstances:
- Continued transmission in a unit despite active control measures.
- Epidemiology suggestive of staff carriage.

REFERENCES:


ANNEX A  SCREENING METHOD FOR MRSA

1) Routine microbiology swabs should be used.
2) The swab should be moistened with sterile saline.
3) The swab should be rubbed and rotated 10 to 20 times over the area to be sampled.
4) The swab should be labelled with patient name, number, date, ward, sampling site. Swabs taken for preadmission screens for elective procedures must be appropriately labelled as being from a preadmission clinic. They must not be labelled as originating from a Ward area as this will lead to failure to identify them as preadmission screening samples.
5) The following sites should be sampled in all cases:
   - Nose.
   - Perineum.
   - Umbilicus (neonates only).
6) The following should also be sampled if present:
   - Lesions/wounds.
   - Catheter urine.
   - Intravascular catheter sites.
   - Tracheostomy site.
   - Sputum if productive cough present.

Other sites will not be routinely processed by the Laboratory.

7) The samples should be sent with a completed request form to the Microbiology Laboratory at RAEI. If they cannot be sent immediately, they should be refrigerated at 4°C.
8) The minimum interval between MRSA screens is 48 hours.
9) Three sets of negative screens are necessary for clearance. They must all include the site(s) originally found to be positive for MRSA. The patient must have discontinued any treatment for MRSA (including antibiotics active against MRSA such as teicoplanin) at least 48 hours before the screens are taken.
10) Screening samples from those colonized with MRSA in the community will only be processed if a relevant clinical indication is given e.g. awaiting surgery.
ANNEX B DECOLONISATION OF MRSA POSITIVE PATIENTS

Decolonisation method

Use of Mupirocin - (‘Bactroban Nasal’)

- Apply a small amount of mupirocin (‘Bactroban Nasal’) to the inside of both nostrils with a cotton-wool swab three times daily for five days. Alternatively, the tip of a gloved finger may be used.
- If the strain is resistant to mupirocin, the Infection Control Team will advise on alternative agents.
- Mupirocin should always be used in conjunction with antiseptic skin wash (see below).
- Do not re-sample the nose until treatment has been stopped for at least 48 hours.
- Mupirocin should not normally be used for more than two 5-day courses.

Application of antiseptic skin wash

- Patients should bathe or shower daily for 5 days with antiseptic skin wash using the following method:
  - The skin should be moistened and the antiseptic skin wash applied directly to all areas before rinsing in a bath or shower. The skin wash should not be added to the bath water.
  - Particular attention should be paid to known carriage sites: axilla, groin and perineum.
  - The hair should be washed daily with the same antiseptic skin wash preparation.
  - The hair may subsequently be washed with conventional shampoo if desired.
  - If skin irritation develops, the Infection Control Team should be contacted.
  - The standard antiseptic skin wash is “Octenisan” containing 0.3% octenidin hydrochloride. Alternative preparations that can be used in case of intolerance/allergy or product non-availability include:
    - 4% Chlorhexidine cleansing solution (Hibiscrub).
    - 7.5% or 10% povidone iodine skin wash (Betadine, Videne).
    - 2% triclosan skin wash (Aquasept).

- Patients who are pregnant, have abnormal thyroid function or are hypersensitive to iodine should not use skin washes containing iodine.
- Patients with eczema, dermatitis or other skin conditions are likely to require treatment for these before eradication therapy. The Dermatology Department should be consulted for advice.
- Clean clothing and bedding should be provided each day and at the end of a course of treatment.

Decolonisation regime

Follow flow charts below for either:

- New MRSA positive patients (Figure B1).
  Or
- Emergency admission of patients known previously to be MRSA positive (Figure B2).

The decolonisation regime should recommence immediately after the screen is obtained. If the screening result is negative then decolonisation can stop immediately.
FIGURE B1 - SCREENING AND DECOLONISATION OF NEW MRSA POSITIVE PATIENTS

New MRSA positive patient

Obtain full MRSA screen

Commence decolonisation regime – skin wash and Bactroban

Stop decolonisation regime after completing five full days

Re-screen 48 hours after stopping decolonisation regime and then commence a further cycle of the decolonisation regime

Check for MRSA screen results from 1 working day after submission to laboratory

MRSA Screen Result

MRSA detected

MRSA negative

Stop decolonisation regime immediately

Re-screen ≥ 48 hours after stopping decolonisation regime

MRSA Screen Result

MRSA detected

MRSA negative

Re-screen ≥ 48 hours after previous MRSA screen

MRSA Screen Result

MRSA detected

MRSA negative

Cleared of MRSA. Manage using Standard Infection Control Precautions
ANNEX B continued

**FIGURE B2 - SCREENING AND DECOLONISATION OF EMERGENCY ADMISSIONS KNOWN PREVIOUSLY TO BE MRSA POSITIVE**

- Previously MRSA positive patient admitted as an emergency
  - Obtain full MRSA screen
  - Commence decolonisation regime - skin wash and nasal Bactroban
  - Review and record the number of negative MRSA screens present on the laboratory system since last MRSA positive result
  - Review results of current MRSA screen from 1 working day onwards after submission to laboratory

- Admission MRSA Screen Result
  - MRSA detected
    - Complete 5 full days of decolonisation regime (skin wash and Bactroban)
    - Re-screen ≥ 48 hours after stopping decolonisation regime and then recommence decolonisation regime
  - MRSA negative
    - One or more negative MRSA screen results in past?
      - No
        - MRSA negative
        - Stop the decolonisation regime
      - Yes
        - Wait 48 hours and re-screen
  - MRSA negative
    - Three negative MRSA Screens obtained since last positive result?
      - No
        - MRSA detected
          - Commence further 5 day decolonisation regime
      - Yes
        - MRSA is cleared
  - MRSA detected