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**Search details**

Is there any national guidance for how near to surgery MRSA screening needs to be done?

**Resources searched**

NHS Evidence; TRIP Database; Cochrane Library; CINAHL; EMBASE; MEDLINE; Google Scholar

**Database search terms**: “Methicillin-resistant Staphylococcus aureus”; “Methicillin resistant Staphylococcus aureus”; METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS; MRSA; “oxacillin resistant staphylococcus aureus”; ORSA; Methicillin-resistant S. aureus”; “Methicillin-resistant S aureus”; HCAI”; “healthcare associated infection””; “healthcare acquired infection””; screen”; HEALTH SCREENING; test”; MICROBIAL CULTURE AND SENSITIVITY TESTS; DIAGNOSTIC TESTS, ROUTINE; surg”; pre- operativ”; preoperative”; PREOPERATIVE CARE; PREOPERATIVE PERIOD; presurg”; pre-surg”; admission; admitted; hosp”; “acute care”; “secondary care”; timing; timed; schedul”; APPOINTMENTS AND SCHEDULES; SURGERY SCHEDULE

**Google search string**: ((MRSA OR HCAI) ~screening) (~surgery OR ~preoperative OR admission) (~guideline OR ~best-practice OR ~policy) (~tim ing OR ~schedule) -site:.nhs.uk

**Summary**

There does not appear to be any national guidance on the timing of pre-operative MRSA screening. Whilst there is research on the efficacy of universal MRSA screening or the particular high-risk groups to target screening, it seems to be up to hospitals to decide when to screen.

A Health Technology Assessment from Canada specifies 5 days prior to admission; however this is collated from local Trust or hospital policies. The DoH says ‘some trusts start suppressive (decolonisation) treatment 3 days before admission and complete the 5 days after admission,’ in which case screening must take place several days previously.
There is some guidance that says screen on admission and then at particular intervals afterwards, depending on the risk. On admission would seem to indicate screening should take place nearer to the time of surgery, although this may raise some practical issues depending on how long it takes for diagnosis to be made and decolonisation to be complete enough to permit surgery.

### Guidelines

#### Bedside Clinical Guidelines

**Screening for MRSA and ESBL/MGNB**

1. If patient at home, screen at least 2 weeks before elective admission
2. If patient at home, screen at least 2 weeks before SA infection high risk surgery
   - If patient not at home and not in UHNS, screen 7 days before transfer and again on admission
   - If patient in UHNS, send samples for STAPH SCREEN 7 days before SA high risk surgery

#### SARI Infection Control Subcommittee (Republic of Ireland)

*The Control and Prevention of MRSA in Hospitals and in the Community 2011*

#### Department of Health

**Screening for Meticillin-resistant *Staphylococcus aureus* 2007**

The majority of elective admissions requiring suppressive (decolonisation) treatment will be identified and will have started, and in many cases completed, the course of suppressive treatment before they are admitted. The treatment should be done as close to the time of admission and the clinical interventions as is reasonably possible. Some trusts start suppressive (decolonisation) treatment 3 days before admission and complete the 5 days after admission, which is consistent with this approach. It must be for clinicians to advise their patients on the most appropriate timing of the process according to individual circumstances.

**Screening for meticillin-resistant staphylococcus aureus (MRSA) colonisation: a strategy for NHS trusts - a summary of best practice 2006**

An alternative strategy would be to screen patients in sufficient time to allow possible decolonisation regimen and three post-decolonisation screening swabs prior to elective admission.

#### Hospital Infection Society

**Guidelines for the control and prevention of meticillin-resistant staphylococcus aureus (MRSA) in healthcare facilities 2006**

#### Health Protection Agency

**Guidance on the diagnosis and management of PVL-associated *Staphylococcus aureus* infections (PVL-SA) in England 2008**

HCWs in direct contact with respiratory secretions (particularly during intubation or mouth-to-mouth resuscitation from a PVL-positive patient) and who were not protected by appropriate PPE should be screened three to seven days after the exposure and advised to report to a physician should symptoms of infection present subsequently.

**Meticillin Resistant Staphylococcus Aureus (MRSA): screening and suppression: quick reference guide for primary care 2007**
1. Regimens aim to reduce MRSA below detection level at time of risk, to decrease chance of infection and spread. Suppression should take place in the 5 days prior to operation, as it may not be successful in the long term.

2. An alternative strategy would be to screen patients in sufficient time to allow possible decolonisation regimen and three post-decolonisation screening swabs prior to elective admission.

NICE
CG139 Infection control: full guideline 2012

Joint Working Party of the British Society of Antimicrobial Chemotherapy, the Hospital Infection Society, and the Infection Control Nurses Association

Guidelines for the control and prevention of meticillin-resistant staphylococcus aureus (MRSA) in healthcare facilities 2006

All patients who are at high risk for carriage of MRSA should be screened at the time of admission unless they are being admitted directly to isolation facilities and it is not planned to attempt to clear them of MRSA carriage (Category 2). Regular (e.g. weekly or monthly, according to local prevalence) screening of all patients on high-risk units should be performed routinely (Category 2). In addition, screening all patients (regardless of their risk-group status) should be considered on admission to high-risk units (Category 2).

Evidence-based reviews

Clinical Immediate Reference
Meticillin-resistant Staphylococcus Aureus (MRSA) 2011
If they are admitted to hospital, where the risk of infection is increased, the ward should be informed so the patient is screened on admission and nursed appropriately.

Database of Abstracts of Reviews of Effects
Rapid screening tests for meticillin-resistant Staphylococcus aureus at hospital admission: systematic review and meta-analysis 2010
The authors concluded that their data did not support use of rapid testing alone to identify MRSA carriers or to reduce acquisition rate in wards in which active screening with enrichment cultures linked to contact isolation were already in use. Active screening for MRSA was more important than the type of test used.

Health Technology Inquiry Service
Pre-Operative Screening for Methicillin-Resistant Staphylococcus aureus (MRSA) Infection: A Review of the Clinical-Effectiveness and Guidelines 2009
With regards to the timing of pre-operative MRSA screening, most of the observational studies had patients undergo decolonization procedures for 5 days following a positive MRSA test, and while some timed the completion of the decolonization process to occur prior to surgery, others did not. Similarly, there was no consistent rule for the timing of screening versus elective surgical procedure in the guidelines that were reviewed. One of the guidelines did specify a preference for screening at least one week prior to admission for elective procedures to allow for 5 days decolonization.

Published research
1. Evaluation of screening risk and nonrisk patients for meticillin-resistant
Staphylococcus aureus on admission in an acute care hospital.


**Citation:** American Journal of Infection Control, June 2012, vol./is. 40/5(411-415), 0196-6553;1527-3296 (2012 Jun)

**Publication Date:** June 2012

**Abstract:** BACKGROUND: Screening for methicillin-resistant Staphylococcus aureus (MRSA) is advocated as part of control measures, but screening all patients on admission to hospital may not be cost-effective. OBJECTIVE: Our objective was to evaluate the additional yield of screening all patients on admission compared with only patients with risk factors and to assess cost aspects. METHODS: A prospective, nonrandomized observational study of screening nonrisk patients <=72 hours of admission compared with only screening patients with risk factors over 3 years in a tertiary referral hospital was conducted. We also assessed the costs of screening both groups. RESULTS: A total of 48 of 892 (5%) patients was MRSA positive; 28 of 314 (9%) during year 1, 12 of 257 (5%) during year 2, and 8 of 321 (2%) during year 3. There were significantly fewer MRSA-positive patients among nonrisk compared with MRSA-risk patients: 4 of 340 (1%) versus 44 of 552 (8%), P <= .0001, respectively. However, screening nonrisk patients increased the number of screening samples by 62% with a proportionate increase in the costs of screening. A backward stepwise logistic regression model identified age > 70 years, diagnosis of chronic pulmonary disease, previous MRSA infection, and admission to hospital during the previous 18 months as the most important independent predictors to discriminate between MRSA-positive and MRSA-negative patients on admission (94.3% accuracy, P < .001). CONCLUSION: Screening patients without risk factors increased the number of screenings and costs but resulted in few additional cases being detected. In a hospital where MRSA is endemic, targeted screening of at-risk patients on admission remains the most efficient strategy for the early identification of MRSA-positive patients.

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**Source:** Medline

Available in print at ULHT journal article requests. Complete the online form to obtain articles.

2. Screening and treatment of methicillin-resistant Staphylococcus aureus in children undergoing open airway surgery

**Author(s)** McCarty Statham M., De Alarcon A., Germann J.N., Tabangin M.E., Cohen A.P., Rutter M.J.

**Citation:** Archives of Otolaryngology - Head and Neck Surgery, February 2012, vol./is. 138/2(153-157), 0886-4470;1538-361X (February 2012)

**Publication Date:** February 2012

**Abstract:** Objectives: (1) To determine the prevalence of methicillin- resistant Staphylococcus aureus (MRSA) colonization in children undergoing open airway surgery using a screening protocol; (2) to examine the rates of postoperative infection in this cohort; and (3) to determine adherence to a MRSA antibiotic protocol. Design: Retrospective cohort study. Setting: Tertiary pediatric referral center. Patients: The study population comprised 180 children undergoing 197 open airway operations from January 2007 to March 2009 at the Cincinnati Children's Hospital Medical Center. Intervention: Methicillin-resistant Staphylococcus aureus screening and treatment protocol. Main Outcome Measures: Prevalence of MRSA colonization, postoperative infection rates, colonization rates by site, and adherence to antibiotic protocol. Results: A total of 180 patients who underwent 197 operations were included in the study. The overall prevalence of MRSA was 32.5%. There were no significant differences between MRSA-colonized and non colonized patients regarding age at surgery, sex, gestational age at birth, or comorbidities. Postoperative infection rates were similar between the 2 groups (16% MRSA colonized; 17% MRSA noncolonized). Three patients who developed postoperative MRSA infections were MRSA negative on preoperative screening. Intraoperative adherence was high in both
groups. Conclusions: We describe a MRSA screening and treatment protocol for children undergoing open airway surgery. We found a high prevalence (32.5%) of MRSA colonization in these patients. Treatment of MRSA-colonized patients resulted in postoperative infection rates similar to those in MRSA-noncolonized patients. Treatment of MRSA-colonized patients resulted in no MRSA-associated postoperative infections, graft loss, or dehiscence. MRSA screening and treatment protocols may be helpful in minimizing MRSA-associated postoperative infections in these patients. 2012 American Medical Association. All rights reserved.

Source: EMBASE
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Author(s) Diekema D, Johannsson B, Herwaldt L, Beekmann S, Jernigan J, Kallen A, Berrios-Torres S, Polgreen P
Citation: Infection Control & Hospital Epidemiology, October 2011, vol./is. 32/10(1042-4), 0899-823X;1559-6834 (2011 Oct)
Publication Date: October 2011
Abstract: We surveyed infectious disease physicians to determine their preoperative Staphylococcus aureus screening and decolonization practices. Sixty percent reported preoperative screening for S. aureus. However, specific screening and decolonization practices are highly variable, are focused almost exclusively on methicillin-resistant S. aureus, and do not include testing for mupirocin or chlorhexidine resistance.

Source: Medline
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4. The utility of screening for methicillin-resistant staphylococcus aureus colonization in hospital admissions

Author(s) Parhizgar F., Satterwhite J., Colmer-Hamood J., Winn R., Nugent K.
Citation: Journal of Investigative Medicine, February 2011, vol./is. 59/2(408-409), 1081-5589 (February 2011)
Publication Date: February 2011
Abstract: Purpose of Study: Methicillin-resistant Staphylococcus aureus (MRSA) causes skin and soft tissue infections, sepsis, necrotizing pneumonia, and toxic shock syndrome. Patients with previous MRSA infections are usually placed on full contact isolation upon readmission. However, most patients with a prior history of MRSA do not remain colonized and do not need isolation during hospitalization. This study evaluated the utility of PCR screening for MRSA in patients with a prior history of MRSA infections and in patients in high risk groups for MRSA colonization. Methods Used: In July and August 2010, 342 patients at University Medical Center in Lubbock, TX between the ages of 18 to 100 years old were screened for MRSA on hospital admission using nasal samples and a PCR assay which tests for the SSCmecA gene. Patients were tested on the first hospital admission day and on day three, if still available. Additional information collected included age, gender, previous history of MRSA colonization, location of previous MRSA infection, and other risk factors (long term care facility, trauma, burns, and scheduled cardiac surgery). Summary of Results: The study sample had 342 patients (51% females) with a mean age of 59 years. There were 147 patients (43% of the study sample) who had a prior history of MRSA infections. Fifty-six of these patients (38%) tested positive on the first hospital day screen. Twenty-seven patients in the other high risk groups (14%, total 195) also tested positive. All results from day 3 screens, when available, were concordant with day 1 screens. Seventy-five percent of the swabs with a positive PCR result submitted for culture (119/158) grew MRSA. Conclusions: This study demonstrates that thirty-eight percent of the patients with a history of MRSA infection remained colonized on readmission and would require contact isolation. Fourteen percent of patients in the other high risk groups were colonized with
5. Importance of methicillin-resistant Staphylococcus aureus eradication in carriers to prevent postoperative methicillin-resistant Staphylococcus aureus surgical site infection

Author(s) Pofahl W.E., Ramsey K.M., Nobles D.L., Cochran M.K., Goettler C.

Citation: American Surgeon, January 2011, vol./is. 77/1(27-31), 0003-1348 (January 2011)

Publication Date: January 2011

Abstract: Although infrequent, postoperative methicillin-resistant Staphylococcus aureus (MRSA) surgical site infection (SSI) is associated with significant morbidity and cost. Previous studies have identified the importance of MRSA screening to diminish the risk of postoperative MRSA SSI. The current study quantifies the importance of eradication of the MRSA carrier state to prevent MRSA SSI. Beginning February 2007, all admissions to an 800-bed tertiary care hospital were screened for MRSA by nasal swab using rapid polymerase chain reaction-based testing. Patients found to be nasal carriers of MRSA were treated with 2 per cent mupirocin nasal ointment and 4 per cent chlorhexidine soap before surgery. The subset of patients undergoing procedures that are part of the Surgical Care Improvement Project ( SCIP) were followed for MRSA SSI (n = 8980). The results of preoperative MRSA screening and eradication of the carrier state were analyzed. Since the initiation of universal MRSA screening, 11 patients undergoing SCIP procedures have developed MRSA SSI (0.12%). Of these, six patients (55%) had negative preoperative screens. Of the five patients with positive preoperative screens, only one received treatment to eradicate the carrier state. In patients who develop MRSA SSI, failure to treat the carrier state before surgery results in MRSA SSI.

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screening rate of 95.7%. One thousand five hundred and eighty-eight (22.6%) of the patients were identified as Staphylococcus aureus carriers, and 309 (4.4%) were identified as methicillin-resistant Staphylococcus aureus carriers. A significantly higher rate of surgical site infection was observed among methicillin-resistant Staphylococcus aureus carriers (0.97%; three of 309) compared with noncarriers (0.14%; seven of 5122) (p = 0.0162). Although a higher rate of surgical site infection was also observed among methicillin-sensitive Staphylococcus aureus carriers (0.19%; three of 1588) compared with noncarriers, this difference did not achieve significance (p = 0.709). Overall, thirteen cases of surgical site infection were identified during the study period, for an institutional infection rate of 0.19%. This rate was significantly lower than that observed during the control period (0.45%; twenty-four cases of surgical site infection among 5293 patients) (p = 0.0093).

CONCLUSIONS: Implementation of an institution-wide prescreening program for the identification and eradication of methicillin-resistant and methicillin-sensitive Staphylococcus aureus carrier status among patients undergoing elective orthopaedic surgery is feasible and can lead to significant reductions in postoperative rates of surgical site infection. LEVEL OF EVIDENCE: Therapeutic Level III. See Instructions to Authors for a complete description of levels of evidence.

Source: EMBASE

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7. Cluster randomized trials in comparative effectiveness research: Randomizing hospitals to test methods for prevention of healthcare-associated infections


Citation: Medical Care, June 2010, vol./is. 48/6 SUPPL.(S52-S57), 0025-7079 (June 2010)

Publication Date: June 2010

Abstract: Background: The need for evidence about the effectiveness of therapeutics and other medical practices has triggered new interest in methods for comparative effectiveness research. Objective: Describe an approach to comparative effectiveness research involving cluster randomized trials in networks of hospitals, health plans, or medical practices with centralized administrative and informatics capabilities. Research Design: We discuss the example of an ongoing cluster randomized trial to prevent methicillin-resistant Staphylococcus aureus (MRSA) infection in intensive care units (ICUs). The trial randomizes 45 hospitals to: (a) screening cultures of ICU admissions, followed by Contact Precautions if MRSA-positive, (b) screening cultures of ICU admissions followed by decolonization if MRSA-positive, or (c) universal decolonization of ICU admissions without screening. Subjects: All admissions to adult ICUs. Measures: The primary outcome is MRSA-positive clinical cultures occurring >=2 days following ICU admission. Secondary outcomes include blood and urine infection caused by MRSA (and, separately, all pathogens), as well as the development of resistance to decolonizing agents. Results: Recruitment of hospitals is complete. Data collection will end in Summer 2011. Conclusions: This trial takes advantage of existing personnel, procedures, infrastructure, and information systems in a large integrated hospital network to conduct a low-cost evaluation of prevention strategies under usual practice conditions. This approach is applicable to many comparative effectiveness topics in both inpatient and ambulatory settings. Copyright 2010 by Lippincott Williams & Wilkins.

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8. [Is it possible to detect Staphylococcus aureus colonization or bacteriuria before orthopedic surgery hospitalization?]. [French] Le depistage en ambulatoire des
patients porteurs de Staphylococcus aureus ou présentant une colonisation urinaire et devant bénéficier d’une chirurgie orthopédique est-il réaliste ?

Author(s) Bajolet O, Toussaint E, Diallo S, Vernet-Garnier V, Dehoux E

Citation: Pathologie Biologie, April 2010, vol./is. 58/2(127-30), 0369-8114;1768-3114 (2010 Apr)

Publication Date: April 2010

Abstract: AIM OF THE STUDY: Evaluate the feasibility of Staphylococcus aureus nasal colonization and bacteriuria screening in outpatients before realizing a decolonization treatment in S. aureus carriers and a bacteriuria treatment before hospitalization.METHODS: All patients undergoing hip, knee or back surgery in which prosthesis were implanted between October 2007 until the end of June 2008 were included. Microbiological studies were performed before hospitalization. Notice for S. aureus decolonization regimen was delivered to each patient and to the general practitioner only if the patient had nasal carriage.RESULTS: Only 91.2% (240/263) of patients had microbiological results. Prevalence of S. aureus colonization was 21.4% (48 positives/224). Three patients were colonized with methicillin-resistant staphylococci. Decolonization regimen was applied before surgery to 70.8% (n=34) of the colonized patients. Among the patients, 8.9% (20/225) had bacteriuria, Escherichia coli being the most frequent microorganism (n=16).CONCLUSION: Preoperative search and management of S. aureus colonization and of bacteriuria in outpatients is possible. Monitoring record must be performed by a member of the hospital staff. Copyright 2009 Elsevier Masson SAS. All rights reserved.

Source: Medline

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9. MRSA screening of elective surgery day-case patients.

Author(s) Enoch DA, Carter NM, Karas JA

Citation: Journal of Hospital Infection, March 2010, vol./is. 74/3(291-2), 0195-6701;1532-2939 (2010 Mar)

Publication Date: March 2010

Source: Medline

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10. Survey of meticillin-resistant Staphylococcus aureus policies in UK eye departments

Author(s) Rathod D., Luqmani N., Webber S.K., Hosein I.K.

Citation: Journal of Hospital Infection, August 2009, vol./is. 72/4(314-318), 0195-6701 (August 2009)

Publication Date: August 2009

Abstract: The purpose of this study was to investigate meticillin-resistant Staphylococcus aureus (MRSA) screening and decolonisation practices for patients undergoing routine cataract surgery in ophthalmology departments across the UK. A postal questionnaire survey of all ophthalmology departments in the UK was carried out, with 75 of 152 (49.3%) questionnaires returned. Sixty-three percent of units had a departmental MRSA policy. Preoperative MRSA screening was performed in 50 (66.7%) units, three of which screened all preoperative patients and the remainder performed selective screening. The proportion of patients screened for MRSA ranged from 0 to 100%, with a median of 2% and a mean of 9.9% (95% confidence interval: 3.5-16.2%). Overall, 65.3% of respondents felt that their departmental policy was reasonable, although there was considerable dissatisfaction and confusion, with comments identifying lack of evidence and the need for guidelines applicable to day-case cataract surgery. The survey demonstrates significant
inconsistencies in preoperative MRSA screening practice in ophthalmology departments throughout the UK. Current recommendations from the Department of Health suggest that day-case ophthalmology patients do not require routine screening, although the implication appears that high risk patients continue to do so. Further investigation is required to ascertain the scientific validity of these recommendations. 2009 The Hospital Infection Society.

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11. **Active surveillance screening of MRSA and eradication of the carrier state decreases surgical-site infections caused by MRSA.**

**Author(s):** Pofahl WE, Goettler CE, Ramsey KM, Cochran MK, Nobles DL, Rotondo MF

**Citation:** Journal of the American College of Surgeons, May 2009, vol./is. 208/5(981-6; discussion 986-8), 1072-7515;1879-1190 (2009 May)

**Publication Date:** May 2009

**Abstract:** BACKGROUND: Surgical-site infections (SSI), because of MRSA, are a challenge for acute care hospitals. The current study examines the impact of best practices and active surveillance screening for MRSA on reduction of MRSA SSIs. STUDY DESIGN: Beginning February 2007, all admissions to a 761-bed tertiary care hospital were screened for MRSA by nasal swab using polymerase chain reaction-based testing. Positive nasal carriers of MRSA were treated before operation. The subset of patients undergoing procedures that are part of the Surgical Infection Prevention Project were followed for MRSA SSIs. SSI rates (per 100 procedures) were determined using the National Nosocomial Infection Surveillance definitions. MRSA SSI rates were compared before and after the MRSA screening intervention. Differences were analyzed using Fisher's exact test and chi-square with Yate's continuity correction. Where specimens were available, genotyping of MRSA was performed using a commercially available assay. RESULTS: After universal MRSA surveillance, 5,094 patients underwent Surgical Infection Prevention Project procedures. The rate of MRSA SSI decreased from 0.23% to 0.09%. The reduction was most pronounced in joint-replacement procedures (0.30% to 0%; p = 0.04). No other differences were statistically significant. Of the seven patients in whom MRSA SSI developed after universal screening, four had positive MRSA screens; none had received preoperative eradication of MRSA. In two of these patients, the genotype of MRSA detected on screening and in SSI was genetically indistinguishable. CONCLUSIONS: Surveillance for MRSA and eradication of the carrier state reduces the rate of MRSA SSI.

**Source:** Medline

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12. **Should MRSA protocols include screening for surgical patients?**

**Author(s):** anonymous

**Citation:** Or Manager, February 2008, vol./is. 24/2(1, 7, 9-10), 8756-8047;1944-8198 (2008 Feb)

**Publication Date:** February 2008

**Source:** Medline

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13. **Preoperative screening of elective orthopaedic patients for MRSA.**
14. Infection control measures for adult cardiac surgery in the UK—a survey of current practice

Author(s) Kendall J.B., Hart C.A., Pennefather S.H., Russell G.N.

Citation: The Journal of hospital infection, July 2003, vol./is. 54/3(174-178), 0195-6701 (Jul 2003)

Abstract: The aim of the study was to define current UK practice for antimicrobial prophylaxis and preoperative screening for bloodborne viruses and methicillin-resistant Staphylococcus aureus (MRSA) before routine cardiac surgery. An e-mail survey was sent to the Association of Cardiothoracic Anaesthetists (ACTA) Linkmen in all 36 UK adult cardiac surgical units, during May 2001. Questions were asked regarding MRSA, hepatitis B, C and human immunodeficiency virus (HIV) screening. Regarding antimicrobial prophylaxis questions were asked regarding agent(s), dose, frequency and duration of use for coronary artery and valve surgery. Responses were received from 29 units (response rate 81%). There was a wide variety of practices for all units surveyed. For MRSA screening, 19 units (65%) screened all patients before surgery, but two (7%) screened none, with the remaining eight units (28%) screening selected high-risk groups. Regarding screening for bloodborne viruses: eight units (28%) tested all patients routinely for hepatitis B, 11 units (39%) selectively tested only high-risk patients and transplant recipients. No units tested for hepatitis C and HIV infection routinely. All units used prophylactic antibiotics routinely, but the type and number of agents, along with dose and duration of therapy all varied widely. For coronary artery bypass graft (CABG) surgery, a single agent was used by 16 units (55%), two agents by 12 units (41%) and three agents by one unit (4%). There is a wide variation in infection control practice in adult cardiac units throughout the UK. Rationalization of preoperative screening and use of prophylactic antibiotics, by adopting nationally agreed practice guidelines, could significantly reduce costs and potentially reduce the incidence of resistant organisms.

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We sought to determine an AC program that has optimal results measured by the MRSA detection rate and infection control implications. Project: This project took place after 4/2008 and included three phases. Phase I was an ad-hoc point prevalence (PP) study, while Phase II increased to a monthly point-prevalence (PP) AC program and included all patients in the units at the time of screening. Based on Phase II results, Phase III changed to MRSA AC upon admission to the unit and included patients who were newly admitted or transferred to ICUs and had no documented history of MRSA. Nasal swab specimens were tested for MRSA using real-time PCR. Results: In Phase I, a high prevalence was identified in both the PICU and CICU and prompted more frequent AC. Since prevalence remained high in Phase II, Phase III adjusted AC from once a month to upon admission to determine if there was a high prevalence of MRSA carriage upon admission. The average prevalence upon admission for the PICU in Phase III between 6/2010 and 11/2010 was 8.4% compared to 2.0% in the CICU. These results confirmed a high prevalence of MRSA carriage upon admission in the PICU and prompted early isolation. A MRSA AC upon admission program was suitable for PICU, while monthly AC was applicable to the CICU. (Graph presented).

Source: EMBASE
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Universal MRSA nasal surveillance: characterization of outcomes at a tertiary care center and implications for infection control

N Parvez, C Jinadatha, R Fader… - Southern medical …. 2010 - journals.lww.com
... Isolation of MRSA screen positive patients alone as an intervention did not reduce the surgical site infection rates. ... Universal nasal MRSA polymerase chain reaction (PCR) screening was implemented as part of a global surveillance and infection control policy at our institutio.

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MRSA in outpatient surgery: Now what?

TD Link - OR Nurse 2012, 2012 - journals.lww.com
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An Evaluation of Universal Screening for MRSA at the Ottawa Hospital

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