Appendix Table F19. Healthcare associated MRSA surgical site infection: studies that did not use statistical methods to attempt to control for confounding or secular trends

| **Author, Year,**  **Country** | **MRSA Strategy** | **Control** | **Intervention** | **p value** | **Diff (I-C)** | **Statistical Test** | **Multivariate Analysis** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Chen et al., 2012,20 US | Screening of surgical patients vs no screening | 5/17 | 1/17 | Those tested and treated for MRSA showed a trend toward fewer MRSA wound complications (p=0.118) |  | Fisher’s exact test |  |
| Jog et al., 2008,26 UK | Screening of Surgical Pts Vs No Screening | 1.15% | 0.26% | Relative risk reduction: 0.77, 95% CI: (0.056-0.95), p<0.05 | 0.89% | Chi square, Koopman's likelihood-based approximation for relative risk |  |
| Keshtgar et al., 2008,28 UK | Screening of High Risk Pts Vs No Screening | 1.44 per 1000 patient-days | 1.25 per 1000 patient-days | p=0.021 |  | Fisher’s exact test | 1.44 per 1000 patient-days |
| Kim et al., 2010,29 USA | Screening of Surgical Pts Vs No Screening | 0.19% | 0.06% | p=0.0315 | -0.13% | Chi square, Fisher exact test |  |
| Lipke et al., 2010,31 USA | Screening of Surgical Pts Vs No Screening | 0.73% | 0.16% | p=0.0538 | 0.57% | Fisher exact test |  |
| Malde et al., 2006,32 UK | Screening of Surgical Pts Vs No Screening | Elective surgery: 55.6% | Elective surgery: 22.4% | p=0.002 for trend | 33.2% | Chi square |  |
| Emergency surgery: 62.5% | Emergency surgery: 43.8% | p=0.042 for trend | 18.7% | Chi square |  |
| Nixon et al., 2006,33 UK | Screening of Surgical Pts Vs No Screening | Trauma: 1.57% | Trauma:0.69% | p=0.035 for trend | 0.88% | Chi square |  |
| Admissions: 0.56% | Admissions: 0.17% | p=0.06 for trend | 0.39% | Chi square |  |
| Pofahl et al., 2009,35 USA | Screening of Surgical Pts Vs No Screening | 0.23% per 100 procedures | 0.09% per 100 procedures |  | 0.14% | Chi-Square with Yate's continuity correction | Overall SSI, Non-significant p-value;   Hysterectomy: Control= ~0.11 Intervention= ~0.08, Non-significant p-value; Orthopedics: Control= 0.30 Intervention= 0.00, p-value=0.04; Cardiac: Control= ~0.24 Intervention= ~0.19, Non-significant p-value; |
| Schelenz et al., 2005,38 UK | Expanded Vs Limited Screening | Sternal wound: 2.6% (28/1075)  Leg wound: 1.5% (16/1075) | Sternal wound 1.4% (13/956)  Leg wound 0.7% (7/956) | RR 1.92 (95% CI 1.00-3.68), p 0.057  RR 2.03 (95% CI 0.84-4.92), p 0.141 |  |  |  |
| Supriya et al., 2009,42 Scotland | Screening of Surgical Pts Vs No Screening | 28.57% | 9.68% | p= 0.034 | 18.89% | Chi square |  |
| Thomas et al., 2007,43 UK | Screening of Surgical Pts Vs No Screening | 19% | 2% |  | 17% | Chi square with Yates correction | MRSA PEG site infections by year for the control period:  12% (5 of 42) in 2002 20% (7 of 35) in 2003  29% (7 of 24) in 2004;  an overall infection rate of 19%.   Intervention period vs. overall rate chi-square= 5.16, P < 0.025;  intervention period vs.  2004 chi-square= 6.76, P < 0.01;  intervention period vs. 2003 chi-square= 4.35, P < 0.05 |
| Walsh et al., 2011,46 USA | Screening of Surgical Pts Vs No Screening | 1.16% | 0.08% | RR= 0.069; (95% CI: 0.016-0.286); P< 0.001) | 1.08% | Chi square and relative risk reduction |  |

C: Control; CI: Confidence Interval; Diff: Difference; I: Intervention; MRSA: Methicillin-resistant *Staphylococcus aureus;* N: No; PEG: percutaneous endoscopic gastrostomy; RR: Relative risk; SSI: Surgical Site Infection