Appendix Table F8. MRSA infection: studies that used 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**  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Chaberny et al., 2008,1 Germany | Expanded Vs Limited Screening |  |  |  |  |  | Segmented regression analysis of interrupted time series, incidence density of MRSA-positive patients per 1000 pd in the whole hospital:Slope before intervention 0.0340 (95% CI .026 to 0.042), p<0.001Change in level after intervention: Not significantChange in slope after intervention: -0.015 (95% CI -0.032 to 0.001), p 0.002 |
| Raineri et al., 2007,13 Italy | Screening of ICU Risk Pts Vs No Screening | 3.5 (2.1-5.4) per 1000 patient days | 1: 1.7 (1.1-2.5) per 1000 patient days | p=0.0023 |  | Chi square, Fisher’s exact test, Kruskal-Wallis analysis of variance | Segmented regression Significant rate level reduction after intervention 1:β2: -3.9, 95% CI -6.31 to -1.40, p=0.003Significant trend change after intervention 1: β3: -0.7, 95% CI -1.22 to -0.24, p=0.005 |
| Reilly et al., 2012,14 Scotland | Targeted screening vs no screening |  |  | P=0.0209 | Incidence of MRSA infection decreased during the year of the intervention |  | Poisson regression revealed a 37% decrease in first non-screening clinical isolates of MRSA for two NHS boards (95% CI: 28.6-44.7%) and 11.7% (95% CI 1.2-21.1%) for the other NHS board. |

C: Control; CI: Confidence interval; Diff: Difference; I: Intervention; ICU: Intensive care unit; MRSA: Methicillin-resistant *Staphylococcus aureus;* Y: Yes