**Supplementary Appendix**

**Comparison of hand hygiene adherence rates for each hospital by unit and healthcare worker subgroup between the pre- and post-intervention periods**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Ward/Unit** | **Healthcare worker subgroup** | **Pre-intervention period** | | **Post-intervention period** | | **Improvement after intervention (%)** | **P value** |
| **Number of observations** | **Hand hygiene adherence (%)** | **Number of observations** | **Hand hygiene adherence (%)** |
| Hospital A |  |  |  |  |  |  |  |
| Surgery | Nurse | 147 | 8 | 173 | 39 | 31 | <0.001 |
|  | Physician | 136 | 14 | 137 | 47 | 33 | <0.001 |
|  | All | 283 | 11 | 310 | 43 | 32 | <0.001 |
| Medicine | Nurse | 158 | 10 | 191 | 58 | 48 | <0.001 |
|  | Physician | 157 | 12 | 180 | 42 | 30 | <0.001 |
|  | All | 315 | 11 | 371 | 50 | 39 | <0.001 |
| ICU | Nurse | 151 | 11 | 202 | 32 | 21 | <0.001 |
|  | Physician | 57 | 7 | 111 | 40 | 33 | <0.001 |
|  | All | 208 | 10 | 313 | 35 | 25 | <0.001 |
| ED | Nurse | 30 | 13 | 38 | 34 | 21 | 0.05 |
|  | Physician | 92 | 12 | 98 | 12 | 0 | 0.95 |
|  | All | 122 | 12 | 136 | 18 | 6 | 0.18 |
| ALL | Nurse | 486 | 10 | 604 | 42 | 32 | <0.001 |
|  | Physician | 442 | 12 | 526 | 37 | 25 | <0.001 |
|  | All | 928 | 11 | 1130 | 40 | 29 | <0.001 |
|  |  |  |  |  |  |  |  |
| Hospital B |  |  |  |  |  |  |  |
| Surgery | Nurse | 152 | 30 | 147 | 44 | 14 | 0.01 |
|  | Physician | 142 | 33 | 147 | 35 | 2 | 0.78 |
|  | All | 294 | 31 | 294 | 39 | 8 | 0.05 |
| Medicine | Nurse | 146 | 20 | 149 | 31 | 11 | 0.04 |
|  | Physician | 147 | 32 | 155 | 42 | 10 | 0.07 |
|  | All | 293 | 26 | 304 | 37 | 11 | 0.007 |
| ED | Nurse | 140 | 16 | 135 | 25 | 9 | 0.73 |
|  | Physician | 140 | 16 | 176 | 7 | -9 | 0.02a |
|  | All | 280 | 16 | 311 | 15 | -1 | 0.75 |
| ALL | Nurse | 438 | 22 | 431 | 33 | 11 | <0.001 |
|  | Physician | 429 | 27 | 478 | 27 | 0 | 0.99 |
|  | All | 867 | 25 | 909 | 30 | 5 | 0.01 |
|  |  |  |  |  |  |  |  |
| Hospital C |  |  |  |  |  |  |  |
| Surgery | Nurse | 156 | 20 | 160 | 39 | 19 | <0.001 |
|  | Physician | 146 | 8 | 164 | 46 | 38 | <0.001 |
|  | All | 302 | 15 | 324 | 42 | 27 | <0.001 |
| Medicine | Nurse | 151 | 40 | 168 | 26 | -14 | 0.007 a |
|  | Physician | 131 | 2 | 117 | 5 | 3 | 0.15 |
|  | All | 282 | 22 | 285 | 18 | -4 | 0.15 |
| ICU | Nurse | 154 | 30 | 177 | 17 | -13 | 0.008 a |
|  | Physician | 146 | 10 | 157 | 20 | 10 | 0.009 |
|  | All | 300 | 20 | 334 | 19 | -1 | 0.72 |
| ALL | Nurse | 461 | 30 | 505 | 27 | -3 | 0.30 |
|  | Physician | 423 | 7 | 438 | 26 | 19 | <0.001 |
|  | All | 884 | 19 | 943 | 27 | 8 | <0.001 |

Abbreviations: ICU, Intensive Care Unit; ED, Emergency Department

a Significantly worse than in pre-intervention period.