Mortality in the ICU. Odds ratios from multilevel logistic regressions, with 95% confidence intervals.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | I | II | III | IV |
| Intercept | 0.251  [0.169,0.372] | 0.255  [0.172,0.378] | 0.256  [0.173,0.380] | 0.189  [0.090,0.398] |
| IM log odds | 2.62  [2.56,2.69] | 2.97  [2.70,3.27] | 2.88  [2.60,3.19] | 2.97  [2.70,3.28] |
| Proportion beds occupied | 1.25  [1.04,1.50] | 1.25  [1.04,1.50] | 1.24  [1.03,1.49] | 1.30  [1.08,1.57] |
| Mean number of daily transfers | 2.37  [1.17,4.80] | 2.37  [1.17,4.81] | 2.37  [1.16,4.81] | 2.19  [1.08,4.44] |
| Number of direct care nurses per bed | 0.929  [0.882,0.977] | 0.927  [0.881,0.976] | 0.928  [0.881,0.976] | 0.926  [0.878,0.976] |
| Number of consultants per bed | 0.800  [0.663,0.965] | 0.798  [0.661,0.963 | 0.792  [0.655,0.957] | 0.742  [0.608,0.905] |
| Intensivist | 0.851  [0.694,1.04] | 0.859  [0.701,1.053] | 0.859  [0.700,1.05] | 0.866  [0.705,1.06] |
| Mean IMlo | 0.950  [0.913,0.988] | 0.950  [0.913,0.988] | 0.950  [0.913,0.988] | 0.947  [0.910,0.985] |
| Average ICU length of stay | 1.52  [1.15,2.01] | 1.51  [1.14,2.00] | 1.51  [1.14,2.00] | 1.55  [1.17,2.06] |
| IMlo \* Number of nurses |  | 0.976  [0.958,0.994] | 0.977  [0.960,0.996] | 0.975  [0.957,0.994] |
| IMlo \* Number of consultants |  |  | 1.05  [0.987,1.12] |  |
| Average cost per nurse |  |  |  | 1.02  [0.993,1.05] |
| Post-basic qualification |  |  |  | 0.826  [0.630,1.08] |
| Standard deviation of random effect | 0.276 | 0.277 | 0.278 | 0.270 |
| Deviance | 23294 | 23287 | 23284 | 22503 |
| Number of admissions | 38168 | 38168 | 38168 | 36935 |
| Number of units | 65 | 65 | 65 | 63 |

Mortality in hospital. Odds ratios from multilevel logistic regressions, with 95% confidence intervals.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | I | II | III | IV |
| Intercept | 0.760  [0.534,1.08] | 0.783  [0.548,1.12] | 0.766  [0.534,1.10] | 0.886  [0.444,1.77] |
| IM log odds | 2.61  [2.56,2.67] | 2.72  [2.50,2.96] | 2.61  [2.39,2.86] | 2.72  [2.49,2.96] |
| Proportion beds occupied | 1.23  [1.05,1.44] | 1.23  [1.05,1.44] | 1.23  [1.05,1.43] | 1.27  [1.08,1.49] |
| Mean number of daily transfers | 2.65  [1.38,5.08] | 2.64  [1.37,5.07] | 2.62  [1.36,5.04] | 2.71  [1.38,5.29] |
| Number of direct care nurses per bed | 0.955  [0.912,0.999] | 0.949  [0.905,0.995] | 0.951  [0.907,0.997] | 0.946  [0.900,0.994] |
| Number of consultants per bed | 0.816  [0.688,0.967] | 0.815  [0.688,0.966] | 0.846  [0.711,1.01] | 0.810  [0.674,0.973] |
| Intensivist | 0.879  [0.730,1.06] | 0.882  [0.732,1.06] | 0.881  [0.731,1.06] | 0.870  [0.717,1.05] |
| Mean IM log odds | 0.958  [0.927,0.991] | 0.958  [0.927,0.991] | 0.958  [0.927,0.991] | 0.959  [0.927,0.992] |
| Average ICU length of stay | 1.30  [1.01,1.68] | 1.30  [1.01,1.68] | 1.30  [1.00,1.68] | 1.30  [0.996,1.69] |
| IMlo \* Number of nurses |  | 0.992  [0.976,1.01] | 0.994  [0.978,1.01] | 0.992  [0.975,1.01] |
| IMlo \* Number of consultants |  |  | 1.07  [1.01,1.14] |  |
| Average cost per nurse |  |  |  | 0.998  [0.974,1.02] |
| Post-basic qualifications |  |  |  | 0.881  [0.683,1.14] |
| Standard deviation of random effect | 0.259 | 0.259 | 0.259 | 0.261 |
| Deviance | 30341 | 30341 | 30334 | 29301 |
| Number of admissions | 37590 | 37390 | 37590 | 36559 |
| Number of units | 65 | 65 | 65 | 63 |