**Supplementary Table T4. Interrupted time series model results with maximum auto-correlation lag 5**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | pre-trend | | level change | | trend change | | spring | | summer | | autumn | |
|  | estimate (95% CI) | p | estimate (95% CI) | p | estimate (95% CI) | p | estimate (95% CI) | p | estimate (95% CI) | p | estimate (95% CI) | p |
| Hip Admissions | 0.995 (0.987,1.003) | 0.249 | 1.055 (0.917,1.215) | 0.454 | 0.991 (0.978,1.005) | 0.217 | 1.19 (1.04,1.362) | 0.012 | 1.207 (1.104,1.32) | 0.000 | 1.101 (0.993,1.221) | 0.069 |
| Hip Average Age | -0.015 (-0.094,0.065) | 0.714 | 1.571 (0.241,2.901) | 0.021 | -0.06 (-0.168,0.048) | 0.277 | 1.52 (-0.178,3.218) | 0.079 | 2.09 (0.818,3.361) | 0.001 | 1.031 (-0.639,2.701) | 0.226 |
| Hip Prop Women | 0.999 (0.995,1.002) | 0.503 | 0.966 (0.895,1.042) | 0.367 | 1.007 (1.001,1.014) | 0.027 | 1.023 (0.932,1.122) | 0.636 | 1.088 (1,1.184) | 0.051 | 0.981 (0.879,1.094) | 0.727 |
| Hip Prop 2+ Charlson | 0.994 (0.985,1.004) | 0.261 | 1.411 (1.116,1.785) | 0.004 | 1.01 (1,1.02) | 0.042 | 1.195 (0.979,1.459) | 0.079 | 1.306 (1.111,1.535) | 0.001 | 1.003 (0.792,1.27) | 0.981 |
| Hip Prop High Deprivation | 1.003 (0.994,1.012) | 0.551 | 1.027 (0.883,1.195) | 0.729 | 1.004 (0.99,1.018) | 0.577 | 0.937 (0.805,1.091) | 0.400 | 0.877 (0.752,1.022) | 0.092 | 0.996 (0.847,1.171) | 0.961 |
| Hip LoS | -0.006 (-0.029,0.017) | 0.605 | 0.312 (-0.12,0.745) | 0.157 | -0.014 (-0.042,0.015) | 0.346 | 0.502 (0.286,0.718) | 0.000 | 0.135 (-0.191,0.461) | 0.418 | 0.1 (-0.332,0.532) | 0.650 |
| Hip Bed Occ | 0.997 (0.987,1.008) | 0.627 | 1 (0.862,1.161) | 0.996 | 0.987 (0.97,1.004) | 0.128 | 1.291 (1.116,1.492) | 0.001 | 1.283 (1.14,1.444) | 0.000 | 1.146 (0.99,1.326) | 0.068 |
| Hip Public Private | 1.013 (0.985,1.041) | 0.377 | 0.477 (0.29,0.782) | 0.003 | 0.981 (0.951,1.011) | 0.218 | 0.992 (0.809,1.217) | 0.939 | 1.361 (1.166,1.589) | 0.000 | 1.038 (0.847,1.273) | 0.718 |
| Knee Admissions | 0.995 (0.992,0.999) | 0.016 | 0.843 (0.761,0.934) | 0.001 | 1.005 (0.998,1.012) | 0.170 | 1.308 (1.154,1.482) | 0.000 | 1.26 (1.16,1.369) | 0.000 | 1.286 (1.178,1.403) | 0.000 |
| Knee Average Age | -0.078 (-0.152,-0.005) | 0.037 | -1.632 (-2.825,-0.439) | 0.007 | 0.211 (0.128,0.293) | 0.000 | 0.926 (-0.072,1.924) | 0.069 | 0.953 (0.077,1.829) | 0.033 | 0.354 (-0.422,1.13) | 0.371 |
| Knee Prop Women | 1.004 (0.999,1.009) | 0.086 | 0.96 (0.861,1.071) | 0.465 | 0.994 (0.987,1.001) | 0.097 | 1.037 (0.973,1.105) | 0.260 | 1.017 (0.922,1.121) | 0.743 | 1.036 (0.966,1.111) | 0.319 |
| Knee Prop 2+ Charlson | 1.009 (0.993,1.026) | 0.250 | 0.638 (0.468,0.869) | 0.004 | 1.042 (1.021,1.064) | 0.000 | 1.156 (0.931,1.436) | 0.190 | 1.074 (0.841,1.372) | 0.567 | 0.909 (0.626,1.321) | 0.617 |
| Knee Prop High Deprivation | 1.005 (0.999,1.011) | 0.107 | 0.968 (0.835,1.122) | 0.664 | 0.986 (0.977,0.995) | 0.003 | 1.224 (1.082,1.384) | 0.001 | 1.075 (0.95,1.217) | 0.251 | 1.031 (0.924,1.149) | 0.586 |
| Knee LoS | -0.024 (-0.047,-0.001) | 0.042 | 0.176 (-0.2,0.551) | 0.360 | -0.008 (-0.031,0.015) | 0.490 | 0.422 (0.033,0.81) | 0.033 | 0.15 (-0.199,0.499) | 0.398 | 0.396 (-0.011,0.803) | 0.057 |
| Knee Bed Occ | 0.993 (0.986,0.999) | 0.032 | 0.834 (0.728,0.956) | 0.009 | 1 (0.991,1.009) | 0.991 | 1.42 (1.308,1.542) | 0.000 | 1.373 (1.213,1.553) | 0.000 | 1.465 (1.318,1.627) | 0.000 |
| Knee Public Private | 1.006 (0.98,1.032) | 0.667 | 0.621 (0.358,1.077) | 0.090 | 0.985 (0.961,1.01) | 0.225 | 1.119 (0.915,1.369) | 0.274 | 1.318 (1.035,1.678) | 0.025 | 1.139 (0.931,1.394) | 0.205 |
| Elec Emerg Ratio | 0.995 (0.987,1.003) | 0.198 | 0.725 (0.635,0.828) | 0.000 | 0.984 (0.974,0.995) | 0.004 | 0.992 (0.898,1.095) | 0.872 | 0.948 (0.835,1.077) | 0.414 | 0.973 (0.849,1.114) | 0.690 |