**Supplementary Table T2. Interrupted time series model results with maximum auto-correlation lag 2**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 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 (0.986,1.004) | 0.300 | 1.055 (0.912,1.221) | 0.469 | 0.991 (0.977,1.006) | 0.239 | 1.19 (1.034,1.37) | 0.015 | 1.207 (1.094,1.332) | 0.000 | 1.101 (0.982,1.234) | 0.099 |
| Hip Average Age | -0.015 (-0.102,0.072) | 0.737 | 1.571 (-0.1,3.242) | 0.065 | -0.06 (-0.175,0.055) | 0.307 | 1.52 (-0.07,3.111) | 0.061 | 2.09 (0.811,3.368) | 0.001 | 1.031 (-0.598,2.66) | 0.215 |
| Hip Prop Women | 0.999 (0.995,1.003) | 0.582 | 0.966 (0.861,1.083) | 0.549 | 1.007 (0.999,1.016) | 0.089 | 1.023 (0.941,1.111) | 0.596 | 1.088 (1.001,1.183) | 0.048 | 0.981 (0.888,1.083) | 0.700 |
| Hip Prop 2+ Charlson | 0.994 (0.982,1.007) | 0.380 | 1.411 (1.064,1.873) | 0.017 | 1.01 (0.994,1.027) | 0.220 | 1.195 (0.982,1.455) | 0.075 | 1.306 (1.096,1.557) | 0.003 | 1.003 (0.788,1.276) | 0.982 |
| Hip Prop High Deprivation | 1.003 (0.993,1.013) | 0.587 | 1.027 (0.869,1.214) | 0.754 | 1.004 (0.986,1.022) | 0.660 | 0.937 (0.815,1.076) | 0.358 | 0.877 (0.752,1.022) | 0.093 | 0.996 (0.84,1.18) | 0.963 |
| Hip LoS | -0.006 (-0.034,0.021) | 0.660 | 0.312 (-0.193,0.818) | 0.225 | -0.014 (-0.047,0.02) | 0.425 | 0.502 (0.214,0.79) | 0.001 | 0.135 (-0.194,0.463) | 0.422 | 0.1 (-0.288,0.488) | 0.613 |
| Hip Bed Occ | 0.997 (0.987,1.008) | 0.643 | 1 (0.844,1.186) | 0.997 | 0.987 (0.97,1.005) | 0.149 | 1.291 (1.11,1.501) | 0.001 | 1.283 (1.125,1.463) | 0.000 | 1.146 (0.988,1.328) | 0.071 |
| 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 (0.99,1.001) | 0.106 | 0.843 (0.728,0.976) | 0.022 | 1.005 (0.996,1.014) | 0.256 | 1.308 (1.157,1.479) | 0.000 | 1.26 (1.138,1.396) | 0.000 | 1.286 (1.164,1.42) | 0.000 |
| Knee Average Age | -0.078 (-0.157,0.001) | 0.054 | -1.632 (-2.988,-0.276) | 0.018 | 0.211 (0.117,0.305) | 0.000 | 0.926 (-0.112,1.965) | 0.080 | 0.953 (-0.021,1.927) | 0.055 | 0.354 (-0.531,1.24) | 0.433 |
| Knee Prop Women | 1.004 (0.998,1.01) | 0.150 | 0.96 (0.85,1.084) | 0.513 | 0.994 (0.986,1.003) | 0.193 | 1.037 (0.963,1.117) | 0.336 | 1.017 (0.924,1.118) | 0.735 | 1.036 (0.958,1.12) | 0.375 |
| Knee Prop 2+ Charlson | 1.009 (0.993,1.026) | 0.249 | 0.638 (0.455,0.894) | 0.009 | 1.042 (1.017,1.067) | 0.001 | 1.156 (0.911,1.467) | 0.234 | 1.074 (0.849,1.359) | 0.551 | 0.909 (0.628,1.315) | 0.612 |
| Knee Prop High Deprivation | 1.005 (0.997,1.013) | 0.189 | 0.968 (0.786,1.191) | 0.758 | 0.986 (0.974,0.998) | 0.021 | 1.224 (1.077,1.39) | 0.002 | 1.075 (0.942,1.227) | 0.282 | 1.031 (0.902,1.178) | 0.656 |
| Knee LoS | -0.024 (-0.049,0.001) | 0.058 | 0.176 (-0.279,0.63) | 0.449 | -0.008 (-0.036,0.02) | 0.566 | 0.422 (0.073,0.771) | 0.018 | 0.15 (-0.166,0.467) | 0.352 | 0.396 (0.015,0.777) | 0.042 |
| Knee Bed Occ | 0.993 (0.984,1.002) | 0.103 | 0.834 (0.704,0.989) | 0.037 | 1 (0.989,1.011) | 0.993 | 1.42 (1.297,1.556) | 0.000 | 1.373 (1.218,1.547) | 0.000 | 1.465 (1.312,1.635) | 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 (0.987,1.002) | 0.171 | 0.725 (0.64,0.821) | 0.000 | 0.984 (0.974,0.995) | 0.003 | 0.992 (0.887,1.109) | 0.886 | 0.948 (0.833,1.08) | 0.424 | 0.973 (0.86,1.1) | 0.661 |