|  |  |  |
| --- | --- | --- |
| **Parameter** | **Greater London compared with the rest of England (excluding Manchester)** | **HASUs compared with the rest of England (excluding Manchester)** |
| **Estimate (SE)** | **p-value** | **Estimate (SE)** | **p-value** |
|  | Seven-day in-hospital mortality |
| Intercept | 0.044 (0.010) | <.0001 | 0.053(0.012) | <.0001 |
| Admission time (quarter) | -0.002 (0.001) | 0.0626 | -0.003(0.001) | 0.0043 |
| Area  | -0.006 (0.012) | 0.6134 | -0.002(0.015) | 0.8917 |
| Policy | 0.008 (0.0152) | 0.6042 | 0.024(0.019) | 0.1959 |
| Area\*Policy | -0.007(0.015) | 0.6472 | -0.017(0.018) | 0.3567 |
|  | Thirty-day in-hospital mortality |
| Intercept | 0.021 (0.005) | <.0001 | 0.022 (0.006) | 0.0003 |
| Admission time (quarter) | -0.001 (0.0004) | 0.0584 | -0.001 (0.001) | 0.0383 |
| Area  | -0.002 (0.007) | 0.7604 | -0.007 (0.008) | 0.3528 |
| Policy | 0.008 (0.008) | 0.3222 | 0.012 (0.010) | 0.2200 |
| Area\*Policy | 0.0003 (0.008) | 0.9675 | 0.003 (0.009) | 0.7856 |
| Estimate unit is death per admission |

**Supplement table 1. Results of the regression analysis assessing the effect of time, area and policy on the difference between weekend/weekday for seven and thirty-day in-hospital mortality (SE- coefficient standard errors)**

**Supplement figure 1. The difference of adjusted in-hospital mortality rates between weekend/weekday by quarter (vertical grey line presents the time when stroke services were reorganised)**

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**Supplement figure 2. The change of the number of emergency hospital admissions in hyper acute stroke units (HASUs) as a percentage of all hospital admissions in Greater London by quarter**

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**Supplement table 2. Results of the regression analysis assessing the effect of time, area and policy on the difference between weekend/weekday for seven and thirty-day in-hospital mortality (SE- coefficient standard errors) (assuming that the introduction of**

**centralisation started in Oct 2009)**

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Greater London compared with the rest of England**  | **HASUs compared with the rest of England**  |
| **Estimate (SE)** | **p-value** | **Estimate (SE)** | **p-value** |
|  | Seven-day in-hospital mortality |
| Intercept | 0.045(0.005) | <0.001 | 0.043(0.010) | <0.001 |
| Admission time (quarter) | -0.002(0.0004) | <0.001 | -0.002(0.0004) | <0.001 |
| Area  | 0.007(0.015) | 0.617 | 0.022(0.021) | 0.306 |
| Policy | 0.008(0.008) | 0.328 | 0.010(0.009) | 0.231 |
| Area\*Policy | -0.022(0.017) | 0.178 | -0.042(0.024) | 0.077 |
|  | Thirty-day in-hospital mortality |
| Intercept | 0.012(0.002) | <0.001 | 0.013(0.002) | <0.001 |
| Admission time (quarter) | -0.001(0.0002) | 0.001 | -0.001(0.0002) | <0.001 |
| Area  | 0.007(0.006) | 0.235 | 0.007(0.009) | 0.423 |
| Policy | 0.009(0.004) | 0.139 | 0.012(0.004) | 0.072 |
| Area\*Policy | -0.010(0.007) | 0.172 | -0.015(0.010) | 0.146 |
| Estimate unit is death per admission |

**Supplement table 3. Results of the regression analysis assessing the effect of time, area and policy on the difference between weekend/weekday for seven and thirty-day in-hospital mortality (SE- coefficient standard errors) (assuming that the introduction of**

**centralisation started in Oct 2011)**

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Greater London compared with the rest of England**  | **HASUs compared with the rest of England**  |
| **Estimate (SE)** | **p-value** | **Estimate (SE)** | **p-value** |
|  | Seven-day in-hospital mortality |
| Intercept | 0.048(0.006) | <0.001 | 0.047(0.006) | <0.001 |
| Admission time (quarter) | -0.001(0.001) | 0.018 | -0.001(0.001) | 0.025 |
| Area  | -0.008(0.010) | 0.452 | -0.005(0.014) | 0.728 |
| Policy | 0.001(0.001) | 0.938 | 0.004(0.010) | 0.689 |
| Area\*Policy | -0.005(0.014) | 0.734 | -0.014(0.018) | 0.447 |
|  | Thirty-day in-hospital mortality |
| Intercept | 0.014(0.003) | <0.001 | 0.016(0.003) | <0.001 |
| Admission time (quarter) | -0.0003(0.0003) | 0.24 | -0.0004(0.0003) | 0.188 |
| Area  | 0.001(0.004) | 0.760 | -0.001(0.006) | 0.859 |
| Policy | 0.001(0.004) | 0.897 | 0.002(0.005) | 0.713 |
| Area\*Policy | -0.003(0.006) | 0.653 | -0.007(0.008) | 0.436 |
| Estimate unit is death per admission |