### Supplementary Table 1 Cost-consequence analysis results: costs and outcomes (base-case)

|                          | Pre-announcement phase | Preparatory phase | Post-implementation phase | Graphs from interrupted time series analysis |
|--------------------------|------------------------|-------------------|---------------------------|---------------------------------------------|
| **Mean cost per person per month** |                        |                   |                           |                                             |
| PiC outpatient visits   | £3.61                  | £2.76             | £2.48                     |                                             |
| PiC inpatient stays     | £10.40                 | £6.94             | £7.71                     |                                             |
| Service                              | PIC 1  | PIC 2  | PIC 3 |
|-------------------------------------|--------|--------|--------|
| PIC mental health hospital stays    | £321   | £370   | £217   |
| PIC accident & emergency visits     | £1.53  | £1.71  | £1.46  |
| PIC ambulance use                   | £0.74  | £1.15  | £1.35  |
| Service                                      | Price 1 | Price 2 | Price 3 |
|----------------------------------------------|---------|---------|---------|
| PiC medication (nicotine dependence)         | £1.83   | £2.39   | £2.83   |
| PiC medication (smoking related illness)     | £2.55   | £0.88   | £0.79   |
| PiC e-cigarettes                             | N/A (not available to purchase from canteen) | £1.77 | £18.26 |
| PiC GP/nurse visits *                        | £3.64 (SD 10.84) n=2354 | £4.32 (SD 23.54) n=1783 | £4.77 (SD 26.65) n=1336 |
| Outcome per person |
|-------------------|
| **Levels of second-hand smoke (µg/m³)** |
| **Mean PM₂.₅ (SD) across all prisons (not per person)** |
| 38.44 (SD 55.54) | 11.15 (SD 4.93) | 3.14 (SD 5.06) |
| **Health utilities (PiC) Mean (SD)*** |
| 0.736 (0.248) | 0.725 (0.246) | 0.682 (0.270) |
| n=2268 | n=1729 | n=1298 |
| **Health utilities (staff) Mean (SD)*** |
| 0.859 (0.121) | 0.862 (0.127) | 0.863 (0.135) |
| n=1002 | n=925 | n=455 |
| **Prisoner-on-staff assaults ††** |
| Data not available | 0.004 | 0.004 |
| Event Description                      | Data Availability | Actual Value | Predicted Value |
|----------------------------------------|-------------------|--------------|-----------------|
| Prisoner-on-prisoner assaults †       | Data not available| 0.029        | 0.040           |
| All-cause mortality (deaths in custody)† | 0.0003            | 0.0003       | 0.0004          |
| Fires †                               | 0.0009            | 0.0016       | 0.0007          |
| MORS 1† | 0.011 | 0.036 | 0.046 |

Time series analysis; * regression framework; † mean number of events per person in custody per month; MORS - The Management of an Offender at Risk due to any Substance; PiC – person in custody; SD – standard deviation