

## *Supplementary Material*

**Supplementary Table 1.** Operationalization of morbidities

| Chronic condition      | Operationalization   |
|------------------------|--|
| Cardiovascular disease | Any of the following before the observation period: <ul style="list-style-type: none"><li>- ICPC-2 = K74   K75   K76   K89   K90   K91   K92</li><li>- ATC code B01AC04   B01AC22   B01AC25   B01AC24</li></ul>  |
| Diabetes               | Any of the following before the observation period: <ul style="list-style-type: none"><li>- ICPC-2 = T89   T90</li><li>- Glycated hemoglobin &gt; 6.5%</li><li>- ATC code ^A10</li></ul>   |
| Hypertension           | Any of the following before the observation period: <ul style="list-style-type: none"><li>- ICPC-2 = K85   K86   K87</li><li>- two blood pressure measurements &gt; 140/90 mmHg</li><li>- ATC code ^C02   ^C03A   ^C03EA01   ^C07   ^C08   ^C09A   ^C09B</li></ul> |

ICPC-2, international classification of primary care 2<sup>nd</sup> version; |, logical “OR”; ^, starting with ....; ATC, anatomical technical chemical

**Supplementary Table 2.** Regression results for weekly consultation counts/100 patients

**a) Total general practice population and patients with selected chronic conditions**

| Variable                     | Total general practice population |              |                 | Patients with Hypertension |              |                 | Patients with Diabetes |              |                 | Patients with CVD |              |                 |
|------------------------------|-----------------------------------|--------------|-----------------|----------------------------|--------------|-----------------|------------------------|--------------|-----------------|-------------------|--------------|-----------------|
|                              | Est (%)                           | 95% CI       | <i>p</i> -value | Est (%)                    | 95% CI       | <i>p</i> -value | Est (%)                | 95% CI       | <i>p</i> -value | Est (%)           | 95% CI       | <i>p</i> -value |
| Intercept                    | 18.3<br>(100)                     | 17.7 to 18.9 | <0.001          | 25<br>(100)                | 24.1 to 25.9 | <0.001          | 27.1<br>(100)          | 26 to 28.2   | <0.001          | 30.6<br>(100)     | 29.5 to 31.6 | <0.001          |
| Shutdown                     | -3.1<br>(-17.2)                   | -4 to -2.3   | <0.001          | -4.1<br>(-16.5)            | -5.3 to -3   | <0.001          | -4.7<br>(-17.5)        | -6.1 to -3.4 | <0.001          | -5.4<br>(-17.6)   | -6.8 to -4   | <0.001          |
| Holidays                     | -3.2<br>(-17.6)                   | -4 to -2.5   | <0.001          | -4<br>(-16)                | -5 to -3     | <0.001          | -4.1<br>(-15.2)        | -5.4 to -2.9 | <0.001          | -4.1<br>(-13.5)   | -5.4 to -2.9 | <0.001          |
| Week (Season)                | -0.1<br>(-0.4)                    | -0.1 to 0    | 0.001           | -0.1<br>(-0.3)             | -0.1 to 0    | 0.005           | -0.1<br>(-0.3)         | -0.2 to 0    | 0.006           | -0.1<br>(-0.4)    | -0.2 to -0.1 | <0.001          |
| Year (2019 compared to 2020) | -0.3<br>(-1.7)                    | -0.9 to 0.2  | 0.262           | -0.3<br>(-1.2)             | -1.1 to 0.5  | 0.423           | -0.4<br>(-1.4)         | -1.3 to 0.6  | 0.410           | -1.1<br>(-3.6)    | -2.1 to -0.1 | 0.025           |

CVD; cardiovascular disease; Est (%), estimates (percentages with respect to the intercept); CI, confidence interval

**Supplementary Table 2.** Regression results for weekly consultation counts/100 patients

**b) Patients in different age groups**

| Variable                     | < 60 year old patients |              |                 | 60-80 year old patients |              |                 | >80 year old patients |              |                 |
|------------------------------|------------------------|--------------|-----------------|-------------------------|--------------|-----------------|-----------------------|--------------|-----------------|
|                              | Est (%)                | 95% CI       | <i>p</i> -value | Est (%)                 | 95% CI       | <i>p</i> -value | Est (%)               | 95% CI       | <i>p</i> -value |
| Intercept                    | 15.1<br>(100)          | 14.5 to 15.7 | <0.001          | 20.6<br>(100)           | 19.9 to 21.3 | <0.001          | 30.2<br>(100)         | 29.1 to 31.3 | <0.001          |
| Shutdown                     | -2.4<br>(-15.7)        | -3.2 to -1.6 | <0.001          | -4.2<br>(-20.4)         | -5.1 to -3.3 | <0.001          | -4.4<br>(-14.5)       | -5.8 to -3   | <0.001          |
| Holidays                     | -2.8<br>(-18.9)        | -3.6 to -2.1 | <0.001          | -3.6<br>(-17.5)         | -4.4 to -2.8 | <0.001          | -4.3<br>(-14.1)       | -5.5 to -3   | <0.001          |
| Week (Season)                | -0.1<br>(-0.5)         | -0.1 to 0    | <0.001          | 0<br>(-0.2)             | -0.1 to 0    | 0.096           | -0.1<br>(-0.4)        | -0.2 to -0.1 | <0.001          |
| Year (2019 compared to 2020) | -0.3<br>(-2.1)         | -0.9 to 0.2  | 0.254           | -0.3<br>(-1.4)          | -0.9 to 0.3  | 0.345           | -0.3<br>(-1)          | -1.3 to 0.7  | 0.532           |

Est (%), estimates (percentages with respect to the intercept); CI, confidence interval

**Supplementary Table 3.** Regression results for weekly blood pressure measurement counts/100 patients

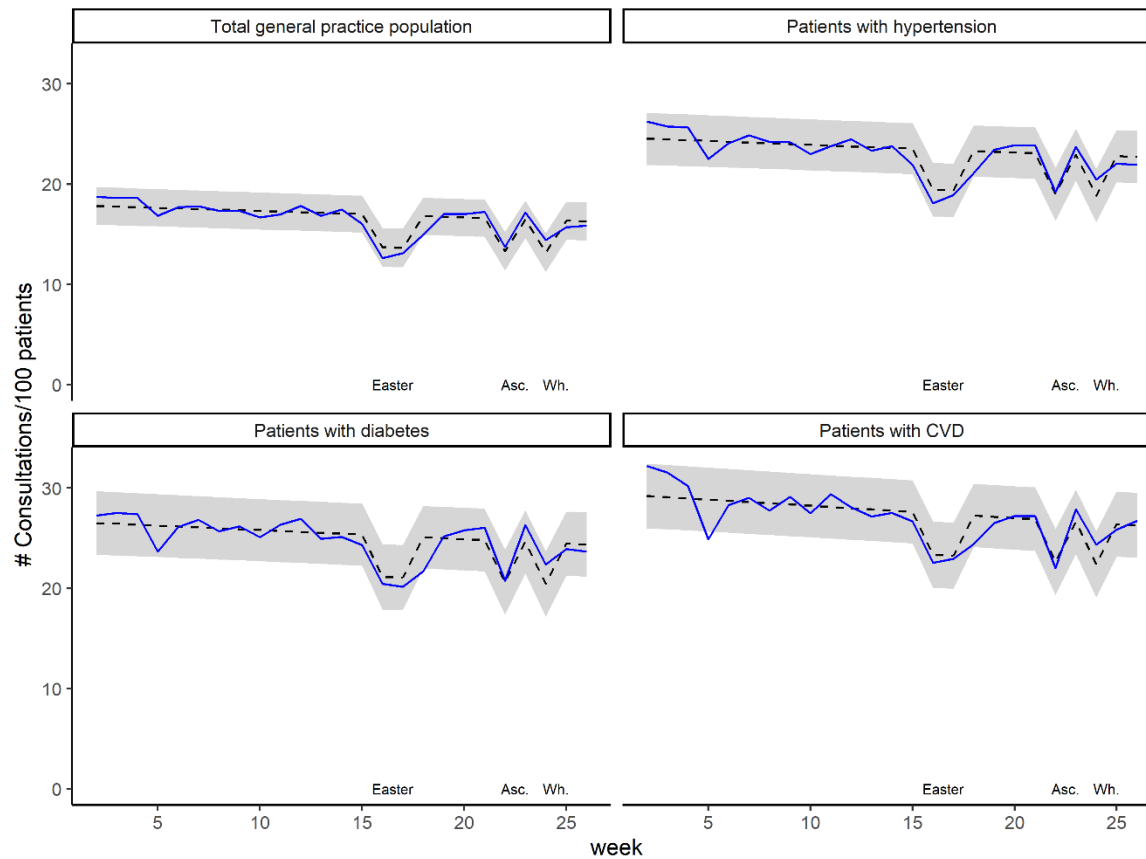
| Variable                     | All patients     |                |                 | Patients with hypertension |                |                 |
|------------------------------|------------------|----------------|-----------------|----------------------------|----------------|-----------------|
|                              | Est (%)          | 95% CI         | <i>p</i> -value | Est (%)                    | 95% CI         | <i>p</i> -value |
| Intercept                    | 2.28<br>(100)    | 2.14 to 2.43   | <0.001          | 4.31<br>(100)              | 4.03 to 4.6    | <0.001          |
| Shutdown                     | -0.81<br>(-35.3) | -0.99 to -0.62 | <0.001          | -1.51<br>(-35.0)           | -1.87 to -1.15 | <0.001          |
| Holidays                     | -0.38<br>(-16.7) | -0.55 to -0.21 | <0.001          | -0.64<br>(-14.9)           | -0.97 to -0.32 | <0.001          |
| Week (Season)                | -0.01<br>(-0.4)  | -0.02 to 0     | 0.036           | -0.01<br>(-0.3)            | -0.03 to 0     | 0.113           |
| Year (2019 compared to 2020) | 0<br>(-0.1)      | -0.13 to 0.13  | 0.973           | -0.04<br>(-1)              | -0.29 to 0.2   | 0.723           |

Est (%), estimates (percentages with respect to the intercept); CI, confidence interval

**Supplementary Table 4.** Regression results for weekly glycosylated haemoglobin measurement counts/100 patients

|                              | All patients     |                |                 | Patients with diabetes |                |                 |
|------------------------------|------------------|----------------|-----------------|------------------------|----------------|-----------------|
|                              | Est (%)          | 95% CI         | <i>p</i> -value | Est (%)                | 95% CI         | <i>p</i> -value |
| Intercept                    | 0.9<br>(100)     | 0.83 to 0.96   | <0.001          | 4.17<br>(100)          | 3.81 to 4.54   | <0.001          |
| «Lockdown»                   | -0.3<br>(-33.2)  | -0.38 to -0.21 | <0.001          | -1.24<br>(-29.8)       | -1.71 to -0.78 | <0.001          |
| Holidays                     | -0.18<br>(-19.7) | -0.25 to -0.1  | <0.001          | -0.71<br>(-17)         | -1.13 to -0.29 | 0.002           |
| Week (Season)                | 0<br>(-0.5)      | -0.01 to 0     | 0.025           | -0.03<br>(-0.7)        | -0.05 to -0.01 | 0.007           |
| Year (2019 compared to 2020) | 0.08<br>(8.6)    | 0.02 to 0.14   | 0.012           | 0.69<br>(16.6)         | 0.37 to 1.01   | <0.001          |

Est (%), estimates (percentages with respect to the intercept); CI, confidence interval



**Supplementary Figure 1.** Weekly consultation counts per 100 patients in 2019, for the total general practice population and the at-risk patient groups. Black dashed lines represent predicted values with 95% prediction interval (grey area), blue lines represent observed values. Temporary decrease in predicted consultation counts are attributable to public holidays: Easter, Ascension Day (Asc.), and Whitsun (Wh.)