

## Supplementary material

### Estimation of the potential impact in mortality due to reduction of daily-rate hospital ED visits between March 1 – April 22, 2020

We retrieved the data on ED visits according to the Manchester Triage System<sup>1</sup> from a public database.<sup>2</sup> The estimate was performed in 3 steps:

Step 1- Three-day centered average counts of the daily visits between March 1 - April 22, 2020; We calculated the decrease in the number of ED visits, according to the Manchester System Triage color in the following way: for each triage color, we calculated the 3-day average in the beginning of march (1<sup>st</sup> to 3<sup>rd</sup> of march) (Step 1). From day 3 onwards, within each color, we calculated the difference between the number of each day visits (3-day centered averages) and the 3-day average in the beginning of March (reference).

Step 2- The total number of visits presented in Table S1 ('Difference between daily averages') corresponded to the sum of these daily differences, according to the triage color;

Step 3- The values obtained in step 2 for each Manchester Triage System color were multiplied by the corresponding assumed death rate <sup>1</sup> and the sum of values represented the number of potential deaths (Table S1).

**Table S1.** Average difference in ED visits between March 1 and April 22, 2020, in Mainland Portugal according to the Manchester Triage System.

Manchester Triage System	Step 2	Step 3	
	Difference between daily averages	Death rate*	N potential deaths (step 2 * death rate)
Red color	- 771	10.3 %	79
Orange color	-30159	4%	1206
Yellow color	-160,736	0.00003%	6
<b>Total number of deaths</b>			<b>1291</b>

\* Death rate per Manchester Triage System <sup>1</sup>

Data for the remaining colors of the Manchester Triage System are not shown due to the non-significant contribution to the potential deaths.

Considering the previous steps and assumptions, an estimate of at least 1291 deaths due to the reduction in ED department visits between March 1 and April 22 could be hypothesized. These potential 1291 deaths are considered to be an underestimation of the real number of deaths.

## **Supplemental References**

1. Martins HM, Cuña LM, Freitas P. Is Manchester (MTS) more than a triage system? A study of its association with mortality and admission to a large Portuguese hospital. *Emerg Med J* 2009; 26: 183-186.
2. Serviço Nacional da Saúde (SNS). Portal da transparência. [accessed April 13, 2020] Lisbon: SNS; 2020. Available from: <https://transparencia.sns.gov.pt/explore/?sort=modified>.