SPI-M-O: Consensus Statement on COVID-19

Date: 22th December 2020

FINAL

Probability statements are based on the framework given in the Annex

Situation update

1. SPI-M-O's estimates for R and growth rate are given in Table 1. R is a lagging indicator and so our estimates cannot account for the most recent impact of policy changes or changes in transmission that have not yet been reflected in epidemiological data. R continues to increase, and is clearly above 1 in London, the Midlands, the South East and the East of England. It is also concerning that estimates have now moved above 1 in the South West of England where capacity to cope with increased admissions is more limited.
2. If the generation time (the time between primary and secondary infections), or the duration of the infectious period of the novel variant is different to that of other strains, the relationship between R and growth rates will change. SPI-M-O's estimates of R may be less accurate until more is known about the novel variant.
3. Doubling time estimates are currently very heterogeneous, likely reflecting a changing situation. The different models weight data streams in different ways, and some data streams can be earlier indicators of change. In some regions, estimates of doubling time based on confirmed cases are around one week.

Novel variant

4. Four different groups have analysed data on the new variant of SARS-COV-2. Most of the analysis has been based on data around rates of S-gene target failure and not necessarily the new variant itself. The proportion of samples with S-gene target failure that are the new variant is very high but varies by geography and time. All analysis has been undertaken rapidly and there is currently very limited understanding of the new variant. Only one of the modelling groups has so far specifically modelled a November-style lockdown with the addition of school closures.
5. There is currently no evidence that the new variant is associated with increased levels of hospital acquired infection. There are increasing trends of care home outbreaks in some areas, and they are not closely aligned with the prevalence of the new variant.
6. There is currently no clear consensus on whether or not there is disproportionate prevalence of the new variant in school age children.

7. The growth rate of the novel variant is almost certain to be significantly higher than other SARS-CoV-2 virus variants currently circulating in the UK.
8. The underlying cause of that faster spread is, as yet, unclear. If some of the increased growth rate is the result of a shorter generation time, then any corresponding increase in R would be slightly smaller than that inferred under an assumption of equal generation times. There is no signal from either mobility data or studies of contact patterns to suggest the rapid growth in infections in much of the country could be consistent with being purely the result of changes in behaviour.
9. It is highly unlikely that measures with stringency in line with November's England measures (i.e. with schools open) and adherence would be sufficient to maintain R below 1 in the presence of the new variant.
10. R would be lower with schools closed. It is unclear whether or not closing schools and measures with similar stringency and adherence in line with that observed in the spring would be sufficient to get R below 1 in the presence of the new variant. The introduction of Tier 4 measures in England combined with the school holidays will be informative of the strength of measures required to control the new variant.

Annex: PHIA framework of language for discussing probabilities

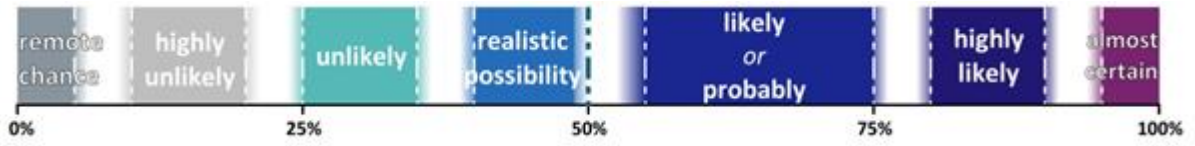

Table 1: Combined estimate of R and the growth rate in the UK, four nations and NHS England regions (90% confidence interval)[1]

Nation	R	Growth rate per day
England	1.1 – 1.4	+2% to +5%
Scotland	0.9 – 1.1	-2% to +2%
Wales	1.0 – 1.3	+1% to +4%
Northern Ireland	0.8 – 1.1	-2% to +1%
UK	**1.1 – 1.3**	**+1% to +6%**

NHS England region	R	Growth rate per day
East of England	1.2 – 1.5	+4% to +7%
London	1.2 – 1.5	+4% to +8%
Midlands	1.0 – 1.2	0% to +3%
North East and Yorkshire	0.9 – 1.1	-2% to +2%
North West	0.9 – 1.1	0% to +3%
South East	1.2 – 1.4	+4% to +7%
South West	1.0 – 1.2	+1% to +4%

[1] The estimate intervals for R and growth may not exactly correspond to each other due to the submission of different independent estimates and rounding in presentation.