

Thirty-third SAGE meeting on Covid-19, 5th May 2020

Held via Zoom

Summary

1. The overall reproduction number, R is in the range 0.5-0.9. If health and social care settings are excluded it is likely to be at the lower end of this range. As community incidence decreases, hospitals and care homes account for an increasing proportion of the overall number of cases. These settings can then drive transmission elsewhere.
2. SAGE advises that, based on current data, focus should be maintained on reducing transmission in health and care settings. Urgent action should be taken in establishments where relevant measures are not already in place, in line with previous advice (such as avoiding movement of patients or staff between establishments, separating people as far as is practical, and testing extensively).
3. SAGE advises that the timing of any changes to NPIs should be determined based on incidence levels and other relevant data and not on predetermined dates.
4. The first phase of the modelled option (as set out in paper 2d – consensus statement) will have a modest impact on R and is unlikely to push it above 1 (high confidence). The second phase of the modelled option is not likely to push R above 1, but this is dependent on an effective test and trace programme being in place (moderate confidence). As this currently stands phase 4 of the modelled option is highly likely to push R above 1 (high confidence).
5. For workers with a high number of contacts, changes to working arrangements may be needed (e.g. half shifts, week on/week off). SAGE recommends against reopening of personal care service businesses as one of the earlier changes to measures.
6. Effective monitoring will need to be in place at a local level when any changes are made, in order to identify and respond to any outbreaks. Monitoring should include sampling of high contact professions.

Reproduction number, incidence and prevalence

7. The overall epidemic can be considered as three separate, but interacting, epidemics: in the community; in hospitals; and in care homes.
8. The overall reproduction number, R is in the range 0.5-0.9. If health and social care settings are excluded it is likely to be at the lower end of this range. A higher degree of precision will be possible with the reporting of the prevalence data being collected by ONS.
9. The rate of decline of hospital Covid-19 admissions is slowing and appears to be flattening in some regions. The rate of decline in R is decreasing, probably driven by the spread related to health and care sectors.
10. As community incidence decreases, hospitals and care homes account for an increasing proportion of the overall number of cases. These settings can then drive transmission elsewhere.
11. It is therefore necessary to reduce transmission in care homes and hospitals in order to effectively manage the epidemic. Reducing this transmission will become a prerequisite to any larger changes in NPIs.
12. Analysis of hospital data indicates that those with better IPC have lower levels of nosocomial transmission, as might be expected. Similar data are not available from care homes.
13. Better data are needed from care homes, as is a better understanding of the different environmental factors affecting spread in care home settings.
14. Data suggest that urgent action should be taken in settings where it is not already underway, in line with previous advice (such as avoiding movement of patients or staff between establishments, separating people as far as is practical, and testing extensively).

15. Estimates of community incidence and prevalence were noted. There is a wide range of estimates for incidence, due to uncertainty about the proportion of infections which are asymptomatic. Currently, it is estimated from ONS data that the prevalence is about 179,000 (based on the number of people who would have swabbed positive with SARS-Cov-2 on 3rd May), and based on this the daily incidence can be estimated at around 18,000 using the assumption that an individual would swab positive for around 10 days. These estimates have very high confidence intervals (confidence in estimates is low).
16. Preliminary swabbing results indicate that a significant proportion of infections are associated with healthcare workers, in both patient-facing and other roles, and in both COVID and non-COVID areas.
17. More work is needed to understand transmission mechanisms, including in care homes and hospitals and in different contact situations. This should include understanding behaviours of healthcare workers.

PHE to confirm the data on different types of transmission in hospitals (healthcare worker to patient, patient to patient, and health care worker to health care worker), by 7 May

ONS to include and over-sample healthcare workers in the next phase of its work on incidence and seroprevalence

Nosocomial Working Group and Environmental Measures Group to work together to consider key questions and data (including international comparators) required to understand more about the detail of transmission in different situations and feed these to UKRI/NIHR for potential research call into Covid-19 transmission mechanisms (including in children and different contact jobs)

Andrew Morris, with **Charlotte Watts** and **Cath Noakes** to identify available data and further requirements on infection transmission of Covid-19 within care home settings, as soon as possible (to be discussed at SAGE on 12 May)

SPI-B to consider adherence to social distancing by healthcare workers, by 12 May

Options for changing non-pharmaceutical interventions

18. SAGE advises that the timing of any changes to measures should be made based on incidence levels and other relevant data and not on a set predetermined date. Modelling of options has been based on some indicative dates provided as part of the Cabinet Office commission (set out in paper 2d), but these should not be seen as fixed. The modelling undertaken relies on assumptions around contact patterns.
19. Though SAGE has primarily considered the effect of these options on R, the starting level of incidence is of critical importance. Setting the tolerable level of incidence which allows for changes to measures is a decision for policy makers. SAGE advises keeping the level of incidence low.
20. The scale required of an effective contact tracing and isolation system is dependent on incidence. App-based contact tracing efficacy scales with the square of uptake (as both contacts need to have it), and needs to be part of an integrated system of contact identification and rapid isolation.
21. The first phase of the modelled option (as set out in paper 2d) will have a modest impact on R and is unlikely to push it above 1 (high confidence). This phase of this option includes encouraging those who are already permitted to work or attend school to do so, allowing exercise more than once per day, permitting use of outdoor spaces for leisure and opening of some additional outdoor workplaces.
22. The second phase of the modelled option (as set out in paper 2d) is not likely to push R above 1, but this is dependent on having an effective test and trace programme being in

place (moderate confidence). This phase of the option is modelled based on some further changes around retail, leisure and schools.

23. As things currently stand Phase 4 of the modelled options is highly likely to push R above 1 (high confidence). This phase of the option involves more extensive relaxing of measures across a range of areas.
24. For workers with a high number of contacts, working patterns which reduce the number, duration and/or variety of contacts should be considered to reduce risk both to those individuals, but also the wider community.
25. SAGE recommends against reopening personal care services as one of the earlier changes to measures, as these typically rely on highly connected workers who may accelerate transmission.
26. Effective monitoring will need to be in place at a local level when any changes are made, in order to identify and respond to any outbreaks. This should include monitoring of people in high contact jobs.
27. The idea of 'bubbles' has many merits and should be explored further. There are both positive and negative behavioural aspects to be considered. Experience from other countries should be drawn upon.

SPI-B to provide further advice to BEIS and CO on behavioural aspects within work environments following release of measures

SPI-B and SPI-M to provide an integrated view on 'social bubbles', by 12 May

Ian Diamond to provide an update from the evaluation subgroup to SAGE

SAGE participants to send any comments on Mike Parker's paper '*Ethics of emerging from lockdown*' to SAGE secretariat by 6 May ahead of it being endorsed out of committee

SAGE secretariat to issue a summary of all advice to date and to update this document following each meeting with specific, defined advice

List of actions

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