

Thirty-seventh SAGE meeting on Covid-19, 19th May 2020

Held via Zoom

Summary

1. Current modelling indicates that an effective Test, Trace, and Isolate system will be necessary (but not sufficient on its own) to allow further substantive adjustments to distancing measures without pushing R above 1.
2. SAGE noted the continued importance of measures such as hand hygiene, particularly as other measures are adjusted, and the role of supporting systems and infrastructure (e.g. hand sanitising points) in enabling and prompting individual behaviours. The importance of integration of measures (e.g. hand hygiene and face coverings) in some settings was noted.

Reasonable Worst-Case Scenario (RWCS)

3. The RWCS being developed is unlikely (but possible) and is one of several scenarios modelled by SPI-M.
4. Four groups have modelled the scenarios. There are differences between results from different models, primarily due to different assumptions about projected incidence on June 1. Once numbers are normalised to the presumed number of weekly hospitalisations on June 1 the models give similar results. Three of the models give rather similar absolute numbers of deaths each week, whilst the fourth has numbers more than twice as large. SPI-M has selected a single model to provide the consensus RWCS.
5. The RWCS is one where behavioural and social interventions (BSI) easing on 1 June pushes R to 1.7 for four weeks, at which point reversal of BSI easing brings R down to 0.7 until incidence levels are similar to those at 1 June, and R returns to 1 for the rest of 2020. This RWCS is based on assumptions of system failure that should be made clear in the presentation of the scenario.
6. This RWCS is a short-term tool, and does not consider winter pressures, which are the subject of another piece of work.
7. SAGE noted that a period of 4 weeks with R at this level would require multiple system failures, such as a failure to quickly identify increasing incidence and failure to respond in a timely manner.
8. SAGE will review the RWCS again at its next meeting, informed by a more detailed explanation of the assumptions used and the models' sensitivity to them.

ACTION: SAGE participants, including NHS, to review latest reasonable worst case for final consideration, including underlying assumptions, at next meeting on 21 May

Situation update

9. SAGE noted the short-term forecasts and agreed that a better understanding of hospital readmissions (and their effect on data and modelling outputs) is important as readmissions that are not due to new infections may be included in current data flows (this would lead to a potential overestimate of R).
10. ONS' most recent published deaths data contain a bank holiday effect from VE day and may not be directly comparable to other weeks.
11. CO-CIN data indicate a decreasing number of new cases due to nosocomial transmission.

ACTION: SAGE secretariat to provide paper for next SAGE meeting combining age related risk of Covid-19 hospitalisation, severe disease, and death, with the ONS data on age profiles of parents and grandparents of primary school aged children.

ACTION: NHS Medical Director to investigate underlying data in relation to apparent hospital readmission of Covid-19 cases, and liaise with SPI-M

Environmental transmission

12. SAGE endorsed the Environmental and Modelling Group papers on disinfection technologies and on risk mitigation on public transport.
13. SAGE noted the continued importance of measures such as hand hygiene, particularly as other measures are adjusted, and the role of supporting systems and infrastructure (e.g. hand sanitising points) in enabling and prompting individual behaviours. The importance of integration of measures (e.g. hand hygiene and face coverings) in some settings was noted.

ACTION: SAGE secretariat to circulate SAGE-endorsed **Environmental and Monitoring Group** papers: a) *Summary of disinfection technologies for microbial control* to DHSC and b) *Transmission and control of SARS-CoV-2 on public transport*, to BEIS, DfT, HSE and other relevant departments with instructions to act on relevant recommendations (by 19 May)

Test, Trace, and Isolate (TTI)

14. SAGE noted the Royal Society DELVE report on Test, Trace, and Isolate (TTI). The key findings reinforce existing SAGE advice.
15. An effective Test, Trace and Isolate system will be necessary (but not sufficient on its own) to allow further adjustments to distancing measures without pushing R above 1. It is a consensus view of current SPI-M modelling that high-quality contact tracing will be needed to keep R below 1 under any substantive adjustments to distancing measures.
16. As noted previously the system should be based on testing rather than symptoms alone, and the process from case identification to testing, contact tracing and isolation needs to be fast. SAGE has previously advised that isolation of contacts within 48 hours of identification of an index case is desirable. The DELVE paper has longer timelines, but SAGE advice remains with this shorter recommendation. International evidence indicates that this is achievable.
17. A high degree of adherence to instructions on reporting, testing, and isolation is also required for the system to be effective.
18. Other factors in system effectiveness are the ability to target contact tracing resource based on intelligence from monitoring, and integration of systems (e.g. digital and manual contact tracing, local and national systems). This is part of the proposed Joint Biosecurity Centre (JBC).
19. There are potential approaches which combine both symptoms and testing (e.g. using symptoms to assess risk to contacts in the period while awaiting test results). The effectiveness of these could be assessed in trials. This was discussed previously at SAGE
20. Approaches to isolation affect transmission within households. In some cases, isolation away from the rest of the household may be preferable, e.g. in households containing clinically vulnerable people.
21. Manual contact tracing may be able to collect useful information about the environments in which outbreaks happen.
22. SAGE will incorporate its views on TTI into advice for the Joint Biosecurity Centre (JBC) and advice on adjustments to BSIs.

Future meetings

23. The next meeting will consider the Joint Biosecurity Centre, TTI, schools, and adjustments to BSIs.

List of actions

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SAGE secretariat to provide paper for next SAGE meeting combining age related risk of Covid-19 hospitalisation, severe disease, and death, with the ONS data on age profiles of parents and grandparents of primary school aged children.

NHS Medical Director to investigate underlying data in relation to apparent hospital readmission of Covid-19 cases, and liaise with SPI-M

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Attendees

Scientific experts (33): Patrick Vallance (GCSA), Chris Whitty (CMO), Angela McLean (CSA MoD), Robin Grimes (CSA MoD), John Aston (CSA HO), Charlotte Watts (CSA DfID), Carole Mundell (FCO CSA), Andrew Curran (CSA HSE), Stephen Powis (NHS), Mark Wilcox (NHS), Yvonne Doyle (PHE), Maria Zambon (PHE), Graham Medley (LSHTM), John Edmunds (LSHTM), Ian Diamond (ONS), Andrew Morris (Scottish Covid-19 Advisory Group), Nicola Steedman (dCMO Scotland), Sheila Rowan (CSA Scotland), Jim McMenamin (Health Protection Scotland), Rob Orford (Health CSA Wales), Fliss Bennee (Wales Technical Advisory Cell), Ian Young (CMO Northern Ireland), Peter Horby (Oxford), Cath Noakes (Leeds), Michael Parker (Oxford), James Rubin (KCL), Brooke Rogers (KCL), Andrew Rambaut (Edinburgh), Wendy Barclay (Imperial), Calum Semple (Liverpool), Ian Boyd (St Andrews), Jeremy Farrar (Wellcome), Venki Ramakrishnan (Royal Society), Anne Johnson (Royal Society), Mark Walport (UKRI)

Observers and government officials (6): [REDACTED]
[REDACTED] Vanessa MacDougall (HMT), Ben Warner (No. 10)

SAGE secretariat (14): [REDACTED]
[REDACTED] Simon Whitfield, [REDACTED] Stuart Wainwright, Paul McCloghrie,
[REDACTED]

Total participants: 53