

Twenty-ninth SAGE meeting on Covid-19, 28th April 2020 Held via Zoom

Summary

1. SAGE agreed priority studies including work on potential Kawasaki like syndrome in children, longitudinal studies on survivors to assess immunology and respiratory function, and further work around biological mechanisms of key risk factors.
2. Hospital admission numbers are currently likely to provide a better basis for ongoing monitoring of the disease than estimated community incidence levels, given the greater certainty in the hospital numbers.
3. The '2m rule' remains appropriate, though closer contacts of a short duration are likely to pose a very low risk. Other considerations for reducing transmission include cleaning, building occupation density and ventilation.

Introduction

4. SAGE welcomed and endorsed plans to increase transparency, including releasing names of consenting participants. Advice on security and media handling will be provided.
5. Ian Boyd suggested ways SAGE might operate more effectively, in his role as an independent challenge function.
6. SAGE agreed to update the minute from SAGE 27 on 21 April to clarify its advice on face masks, to include the line 'the RCT evidence is weak and it would be unreasonable to claim a large benefit from wearing a mask'.

ACTION: SAGE secretariat to circulate advice on personal and cyber security and on responding to media queries to SAGE participants by 30 April, ahead of putting attendance details into the public domain. SAGE participants to provide contact details for security information.

ACTION: SAGE secretariat to place ongoing SAGE action list (with completion status) and summary of SAGE advice to date in the document repository

ACTION: SAGE secretariat to update minutes from SAGE 27 on 21 April to include point on RCT evidence

Situation update

7. Latest numbers indicate a continued reduction in hospital admissions and bed numbers. The peak in care home cases and mortality is later than for hospital cases.
8. Short-term forecasts indicate linear decreases on all measures over the next 2 weeks.
9. The proportion of cases acquired through nosocomial transmission may be increasing again. SAGE noted work underway to test new admissions to hospital, as well as asymptomatic staff.
10. Infection fatality rate and infection hospitalisation rate estimates vary depending on the data sources used. More serology would make this clearer.
11. Death data reporting improvements were noted and welcomed. Excess all-cause mortality was agreed to be the most useful comparison between countries.

ACTION: Angela McLean to work with **SPI-M** to search for consensus across the differing research groups on assumed infection hospitalisation rates by age; **Angela McLean** and **Neil Ferguson** to send their assumptions on infection fatality rates to SPI-M, SAGE secretariat and GCSA by 30 April

Nosocomial working group and PHE to provide full update to SAGE on nosocomial infection at 30 April meeting

Understanding Covid-19

12. Possible Kawasaki-like syndrome in children was noted, with a probable link to Covid-19. SAGE agreed that work to understand this should be coordinated.
13. Previous SAGE advice on immunity remains current. A better understanding would require more serology and longitudinal studies.
14. SAGE reiterated the importance of cohort studies of Covid-19 survivors to understanding longer-term effects.
15. CO-CIN analysis indicates that differences in admissions to ITU and mortality by ethnicity can be explained by comorbidities and are unlikely to be a result of management pathways in hospital. Other studies on this issue are underway, and SAGE will consider these when results are available, which may be next week.
16. SAGE agreed that mechanistic studies of key risk factors such as sex and obesity, and effects of increased thrombogenicity, would be valuable.

ACTION: CMO, NHS Medical Director, Jeremy Farrar and Calum Semple to ensure efforts to understand potential new syndrome in children possibly related to Covid-19 are coordinated

ACTION: UKRI to review whether ISARIC cohort studies following discharged Covid-19 patients are sufficient and to identify any additional longitudinal research required, with input from **Calum Semple, NHS Medical Director, dCMO, and UK Biobank**

ACTION: CMO to present full review of ethnicity risk factors when study results are available

ACTION: NERVTAG to consider risk scoring approaches for propensity to Covid-19, including obesity individually or among a group of factors; **UKRI** to consider funding research on Covid-19 risk factors, including obesity and sex, by end of the week.

Testing strategy and monitoring

17. SAGE agreed that hospital admissions are currently likely a better basis for ongoing monitoring than estimates of incidence in the community (but are a lagging indicator). When considering changes to NPI, an acceptable level of admissions could be determined and tracked against (though this is not for SAGE to determine). Regional and local variation should be expected and needs to be monitored.
18. Estimates of community incidence should improve when the ONS study begins to report.
19. Combining several indicators for monitoring is likely to be preferable to relying upon a single one. This could include some which are more leading indicators than hospital admissions. PHE plans for monitoring and surveillance were noted. SAGE views the urgent establishment of monitoring and surveillance as a key requirement for managing Covid-19.
20. SAGE would be able to provide an estimate of the number of tests required as part of a contact tracing programme based on the policy mix chosen. SAGE has provided a framework for some of the policy choices.
21. SAGE agreed to consider whether there is merit in testing all contacts of index cases.

ACTION: Charlotte Watts to present paper on testing in care homes at 7 May meeting

ACTION: SAGE secretariat to circulate small-group meeting note on monitoring to SAGE participants today; **PHE** to provide comments by 30 April on potential early monitoring indicators and their sensitivity to detecting outbreaks

ACTION: SPI-M and NERVTAG to provide testing paper for 30 April meeting, addressing whether all contacts need to be tested - **SPI-B** and **Mike Parker** to provide input and international evidence to be considered

NPI modelling

22. SAGE endorsed the SPI-M consensus paper and agreed it was not practical to give detailed quantitative advice on the impact of changes to individual measures.
23. SAGE will provide principles to Cabinet Office to support design of policy packages and will provide advice on the possible impact of options developed. SAGE will provide a summary chart of removal of BSIs and broad magnitude of effect (similar to the chart produced for starting BSIs).

Environmental Transmission

24. SAGE endorsed the paper from the Environmental and Modelling group.
25. The 2m rule remains appropriate, though short-duration closer contacts are likely to present very low risk.
26. SAGE noted that the virus is likely to survive much longer on surfaces than in air. The risk of airborne transmission is relatively low outside healthcare settings.
27. Cleaning will remain important as changes are made to BSIs and it will be important to enable that (e.g. through appropriate provision of materials and facilities). This may also need to be reflected in guidance to organisations such as employers and service providers.
28. Other factors to consider will include building occupancy density, and ventilation.
29. SAGE noted the importance of understanding the different activities that make up different jobs in order to assess associated risks.

ACTION: Cath Noakes to prepare shareable version of EMG paper for SAGE endorsement for 30 April meeting, ahead of circulation within HMG

Borders

30. As the number of cases in the UK decreases, the potential proportion of imported cases may increase. It is possible to estimate the number of cases which may be imported and their proportion of the total.
31. Determining a tolerable level of risk from imported cases requires consideration of a number of non-science factors and is a policy question.
32. Measures implemented at the border may change the level of risk and these will be reviewed.

ACTION: SAGE secretariat to provide COG evidence on overseas seeding of Covid-19 in UK to CSA HO by 28 April; CSA HO to present SAGE advice to Cabinet Office, and follow up with SAGE as required

List of actions

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CMO to present full review of ethnicity risk factors when study results are available

NERVTAG to consider risk scoring approaches for propensity to Covid-19, including obesity individually or among a group of factors; **UKRI** to consider funding research on Covid-19 risk factors, including obesity and gender by 5 May

Charlotte Watts to present paper on testing in care homes at 7 May meeting

SAGE secretariat to circulate small-group meeting note on monitoring to SAGE participants today; **PHE** to provide comments by 30 April on potential early monitoring indicators

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Scientific experts: Patrick Vallance (GCSA), Chris Whitty (CMO), Jonathan Van Tam (dCMO), Jenny Harries (dCMO), Andrew Curran (CSA HSE), Angela McLean (CSA MoD), John Aston (CSA HO), Carole Mundell (CSA FCO), Charlotte Watts (CSA DfID), Steve Powis (NHS), Calum Semple (Liverpool), Maria Zambon (PHE), Yvonne Doyle (PHE), Graham Medley (LSHTM), Neil Ferguson (Imperial), John Edmunds (LSHTM), James Rubin (King's), Brooke Rogers (King's), Cath Noakes (Leeds), Andrew Rambaut (Edinburgh), Wendy Barclay (Imperial), Peter Horby (Oxford), Andrew Morris (Scottish Covid-19 Advisory Group), Ian Diamond (ONS), Ian Young (CMO Northern Ireland), Rob Orford (Health CSA Wales), Fliss Bennee (Health CSA Wales), Sheila Rowan (CSA Scotland), Nicola Steedman (dCMO Scotland), Jeremy Farrar (Wellcome), Venki Ramakrishnan (Royal Society), Mike Parker (Oxford), Ian Boyd (St Andrews), Mark Walport (UKRI)

HMG: Vanessa MacDougall (HMT), Ben Warner (No. 10), Stuart Wainwright (GO-S), Paul McCloghrie (GO-S), [REDACTED] Bev Nash (PHE), Laura Pimpin (No. 10), [REDACTED]. A number of other departments were in attendance.

SAGE secretariat: [REDACTED]
[REDACTED]