Addendum to twenty-seventh SAGE meeting on Covid-19, 21st April 2020
Held via Zoom

This addendum clarifies the roles of the SAGE attendees listed in the minute. There are three categories of attendee. Scientific experts provide evidence and advice as part of the SAGE process. HMG attendees listen to this discussion, to help inform policy work, and are able to provide the scientific experts with context on the work of government where appropriate. The secretariat attends in an organisational capacity. The list of attendees is split into these groups below.

Attendees

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

Observers and Government officials: *Stuart Wainwright (GoS).*

Secretariat: [redacted]

Names of junior officials and the secretariat are redacted.

Participants who were Observers and Government Officials were not consistently recorded therefore this may not be a complete list.

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Summary

1. SAGE advises that, on balance, there is enough evidence to support recommendation of community use of cloth face masks, for short periods in enclosed spaces where social distancing is not possible.
2. There is heterogeneity among people's antibody response to infection, and longer-term immunity is unclear.

Situation update

3. Hospital numbers are plateauing, with numbers of new admissions falling. NHS remains well within bed capacity, but with challenges around capacity for some forms of specialist treatment such as renal replacement therapy.
4. There is no indication that R is greater than 1 across any region, but there could still be more localised outbreaks.

ACTION: SAGE secretariat to establish destination and use of 'Nowcasts' in Cabinet Office to ensure these are being fed to local planners and NHS (before next SAGE meeting on 23 April)

Understanding COVID-19

5. There is a clear signal that obesity is a risk factor. CMO will consider what the appropriate public advice is, and for which groups.
6. Anosmia is a common symptom. There is little evidence for it presenting ahead of or unaccompanied by other symptoms. It may be possible to analyse data from previous studies to better understand the predictive value of changing the case definition.
7. It will be useful to reconsider other potential symptom clusters, particularly ahead of implementation of any rapid contact tracing.
8. Further work is being carried out on ethnicity, deprivation, and mortality, including making use of multiple datasets to better understand socioeconomic and other factors. This is a high priority and the support of NHSX will be important.

ACTION: CMO to consider public messaging on obesity and risk for Covid-19

ACTION: Calum Semple to provide a further update on ethnicity and mortality to SAGE on 28 April, including indicative timelines for a full report – to include data from Andrew Morris, ONS and research commissioned by NIHR; **NHSX** to confirm it is placing a high priority on collecting data to understand ethnicity and mortality

ACTION: NERVTAG and **dCMO** to finalise assessment of anosmia and consider other symptom clusters which might be critical to contract rapid contact tracing after release of distancing measures

ACTION: CSA FCO to investigate differences in mortality rates between Germany (and other countries) in relation to demography, ethnicity and other factors and report back by 28 April

Community face mask use

9. The evidence on effectiveness of masks for source control (i.e. stopping infectious people – pre-symptomatic/asymptomatic – from infecting others) is weak. Evidence for protecting the mask wearer from becoming infected is also weak. The unusual situation for COVID is the relatively high infectiousness before symptoms appear.
10. Overall, the evidence that exists is marginally positive for the use of masks.

11. The effect of wearing a mask is likely to be small but not zero. The RCT evidence is weak and it would be unreasonable to claim a large benefit from wearing a mask.
12. Any policy decision taken must not jeopardise supply of masks to those settings where the evidence for use of masks is stronger and the effect size important (i.e. Health and Social Care settings).
13. SAGE advice below refers to cloth masks – specifically in the context of releasing lockdown measures.
14. On balance, there is evidence to recommend the use of cloth masks in certain higher-risk settings as a precautionary measure where masks could be at least partially effective.
15. The common denominator is that these settings are enclosed spaces where social distancing is not possible consistently, creating a risk of close social contact with multiple parties the person does not usually meet.
16. Public transport and some shops (if crowded) are examples of such settings. Distancing remains the preferred option where possible.
17. In such settings, evidence would support a policy where cloth masks could be used for short durations where unavoidable closer interactions with others are occurring or likely.
18. By contrast, SAGE does not think there is good evidence for use for long periods where people regularly mix with the same people.
19. Working environments vary in many respects and where there is a risk of close social contact with multiple parties the person does not usually meet, use of masks may offer some benefit.
20. The evidence does not support a recommendation to wear masks outdoors in either urban or non-urban environments, unless in an unavoidable crowded situation.
21. This advice does not replace or change existing advice on other measures – such as hand washing, 2-metre distancing and self-isolation – which remain more important (because of stronger evidence and larger effects).
22. Negative behavioural impacts cannot be ruled out, e.g. those with symptoms who should isolate instead choose to break quarantine wearing a mask or repeated handling of the mask could increase hand-face contact
23. Equally, wearing masks in the context of lifting NPIs could reduce anxiety about release of measures, or reinforce the need for distancing measures.
24. Clear public guidance would be needed on mask design/construction, wearing, handling, cleaning and disposal.

ACTION: PHE, with **NHS** and **HSE**, to review understanding of Covid-19 survival rates on a range of mask types, and processes for mask sterilisation (for next SAGE meeting on 23 April)

ACTION: SAGE secretariat to summarise SAGE advice today on public use of cloth face masks for **CMO** to submit to Ministers alongside policy and operations advice

Testing and immunity

25. There is heterogeneity in people's antibody response to infection, though most have a response within 10 days. In milder cases measurable antibody responses take longer or in some cases are undetectable.
26. It is important to understand whether antibodies being measured are neutralising antibodies or binding antibodies.
27. It is not known how long the antibody response lasts, and there is mixed evidence from other coronaviruses. It will not be possible to develop a clearer answer on the long-term response for some time, given the novelty of Covid-19.
28. This makes using serology to understand how many people have had the virus difficult, and presents challenges around "immunity passports", for which retesting would be required.

29. If vaccines become available, the immunity derived from them may look different from natural immunity.
30. SAGE advises that testing volume requirements for viral tests will be dependent on incidence levels and the extent of contact tracing linked to testing.

ACTION: SAGE secretariat to summarise sampling numbers against various future options to inform testing strategy, including inputs from John Edmunds (paper already reviewed) and from CMO and NHS (on health and social care needs) and send to Cabinet Office

ACTION: UKRI (and other research funders) to consider funding of longitudinal research studies on immunity (as identified in *Immune Response to SARSCoV2* paper)

ACTION: GCSA to discuss seroprevalence studies with **Jeremy Farrar** before next SAGE meeting on 23 April

Principles for reducing transmission

31. SAGE noted the outline principles and agreed that the table developed should be shared with Cabinet Office.
32. Work underway to better understand transmission in schools was noted.
33. Work underway to better understand the impact of distancing measures on vulnerable groups was noted.

ACTION: DfID CSA to provide an update on the role of children in Covid-19 transmission, including the effects of increased school attendance (for next SAGE meeting on 23 April)

SAGE Secretariat to send "Principles for reducing transmission" paper to Cabinet Office by 21 April

Nosocomial transmission

34. SAGE noted plans underway for prevalence studies in hospitals, which could support analysis intended to understand whether nosocomial transmission levels could be correlated to IPC practices.
35. SAGE noted the importance of providing rapid feedback to hospitals where data suggested transmission was a potential issue. The risk of hospitals amplifying transmission in communities was highlighted.
36. PHE confirmed that links to NHS and action to implement changes are all in place and working.

List of Actions

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SAGE secretariat: [redacted]
Stuart Wainwright