Addendum to twenty-sixth SAGE meeting on Covid-19, 16th 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), Angela McLean (CSA MoD), John Aston (CSA HO), Charlotte Watts (CSA DfID), Osama Rahman (CSA DfE), Carole Mundell (CSA FCO), Andrew Morris (Scottish Covid-19 Advisory Group), Steve Powis (NHS), Sharon Peacock (PHE), Maria Zambon (PHE), Yvonne Doyle (PHE), 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), Therèse Marteau (Cambridge), Ian Diamond (ONS), Jeremy Farrar (Wellcome), Ian Young (CMO Northern Ireland), Fliss Bennee (Health CSA Wales), Gregor Smith (dCMO Scotland), Venki Ramakrishnan (Royal Society), Mike Parker (Oxford), Ian Boyd (St Andrews).

Observers and Government Officials: [none]

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 the complete list.
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Summary
1. SAGE agreed on the importance of getting an accurate estimate of R and community prevalence over the next few weeks to inform decisions on lifting or modifying social distancing measures. SAGE advised that sufficient testing capacity needs to be reserved for repeated large-scale community testing.
2. SAGE will produce revised advice on masks in the week commencing 20th April.
3. SAGE agreed to advise that the Nosocomial Working Group’s recommendations to reduce nosocomial spread should be adopted immediately.

Situation update
4. Hospital numbers are plateauing, with numbers of new admissions falling. There has been a small drop in ICU numbers and in ventilated cases. Daily death numbers are not increasing.
5. There is some regional variation in compliance with distancing measures — with London having the highest compliance and the South West of England and Wales the lowest.
6. There appears to be a relationship between compliance levels and epidemic growth levels. It was noted that the epidemic entered the South West of England last.
7. CO-CIN data indicate clinician bedside-defined obesity as a risk factor for Covid-19.

ACTION: Calum Semple to refine definition of obesity, with a view to providing public health advice

ACTION: NERVTAG to review anosmia evidence from symptom tracking app (for week starting 20th April)

ACTION: Calum Semple and Sharon Peacock to review and ensure common expectations and appropriate use of ISARIC samples

Community viral testing
8. SAGE agreed on the importance of getting an accurate estimate of R and community prevalence over the next 2-3 weeks to inform decisions on lifting or modifying social distancing measures and to fill knowledge gaps. SAGE advised that sufficient testing capacity needs to be reserved for repeated large-scale community testing.
9. PHE confirmed it was unable to deliver a community testing programme. SAGE agreed that if PHE is unable to undertake the programme then this should be undertaken within a repeated ONS-led household survey programme.
10. SAGE also discussed testing for contact tracing. Even in scenarios featuring low incidence of infection, contact tracing would require testing capacity running into the hundreds of thousands per day (and commensurate quarantining of people).

ACTION: Jeremy Farrar to lead a small group to design approach for surveying infection to establish true prevalence in the population (by close of play on 17th April)

ACTION: GCSA to send a letter today to SoS DHSC regarding testing capacity and prioritisation, in relation establishing infection prevalence in the population

ACTION: Angela McLean to ensure actuarial work coordinated by RAMP and any relevant data from ONS are connected to CO-CIN data on vulnerable groups; Calum Semple to assess whether CO-CIN data can be filtered to identify vulnerable group presentations

Ethnicity and clinical outcomes
11. CO-CIN data are giving a signal that black people have a higher risk of being admitted to hospital and of death, when adjusted for them having fewer comorbidities. CO-CIN data on this issue will become clearer over the coming weeks.
12. RCGP data are producing a similar signal.
13. Investigation is also underway to understand why relatively more BME healthcare workers are dying.
14. PHE has identified a signal - from weak evidence - of South Asian communities disproportionately testing positive and experiencing severe symptoms, but not dying.

**ACTION:** Calum Semple, Andrew Morris, Jonathan Van Tam and Charlotte Watts to develop robust study on ethnicity in mortality data, drawing where necessary on other data sources (for week commencing 20th April)

**Transmission among children**
15. A sub-group comprising SPI-M, SPI-B and NERVTAG members has looked at this issue.
16. Evidence is patchy, with very limited evidence on pre-school and other non-school settings.
17. Children typically present with milder symptoms, but their susceptibility to infection relative to adults is unclear.
18. Results from an Australian study into school-based clusters and related households may be available shortly.
19. Whole-household testing could be the best way to understand infectivity of children.
20. SAGE advised that any release of school closures needs to be predicated on the clear understanding that children are not a homogenous group and feature a range of educational, psychological and potentially, if facing more serious symptoms, clinical needs.
21. SAGE further advised that changes to school-related measures should be based on integrated science and policy thinking.
22. SAGE recognised that there are inevitably value judgements in any decisions which might be taken on schools and in the reactions of parents and children to those decisions.

**ACTION:** Julia Gog to lead an integrated group of SPI-M, SPI-B and NERVTAG members to provide recommendations on transmission of Covid-19 in children and within schools, ensuring research questions are fed into relevant studies and research requiring new funding is fed directly into UKRI (by week starting 27th April)

**Facemasks**
23. SAGE agreed that any additional advice on community face mask use is for the purposes of consideration as part of releasing SD measures and not relevant to the current situation where strong SD measures are still in place.
24. SAGE remained of the view that mask supply should be prioritised for high-risk environments, where they are clearly necessary. Beyond healthcare settings, evidence of effectiveness is weak but as noted at the last meeting, marginally positive. If increasing community use were to threaten stocks of masks for medical, nursing, social care or other high-risk environments this would be a net increase in risk in public health terms.
25. Symptomatic individuals should self-isolate. Masks cannot be used to allow such individuals to leave their homes.
26. SAGE advised that if there is ultimately a policy decision in favour of mask use in certain situations and for vulnerable groups, this should not be linked to or confused with lifting or modification of other measures (i.e. masks will not substitute for other measures).
27. SAGE will produce revised advice on masks in the week starting 20th April,
28. Advice will then need to be integrated with other considerations, such as availability.
**ACTION:** SPI-M and NERVTAG to provide a numerical value on the effectiveness or otherwise of wearing face masks (including different mask types), concentrating on absolute (rather than relative) risk of not doing so – to share with CMO

**ACTION:** CMO to produce a summary of recommendations on wearing face masks, drawing on evidence synthesis from DELVE and SPI-M/ NERVTAG numerical modelling

**Releasing measures**
29. SAGE discussed the challenges of evaluating the effectiveness of shielding vulnerable groups.

**ACTION:** SPI-M to provide indicative numbers for testing volumes required for a track and trace approach against a range of epidemiological case rates

**ACTION:** SAGE Secretariat to convert SPI-M paper on principles of transmission into a table for use by policy makers (for presentation to SAGE on 21st April)

**Nosocomial infection**
30. The Nosocomial Working Group has identified marked variation among hospital trusts on implementation of infection prevention control (IPC) guidelines. IPC policy will be updated and circulated, as will guidelines on cleaning and on use of face masks.
31. The Group is continuing to review segregation practices when individuals present at hospitals, and options for using dedicated non-Covid-19 sites to deliver elective procedures safely. Testing is an important part of controlling transmission in hospitals and care homes.
32. SAGE advises that the Group's recommendations should be adopted immediately in a coordinated fashion across all 4 nations.
33. Notwithstanding the challenges, SAGE advised that longer-term thinking on using separate sites for confirmed Covid-19 patients should be considered – as well as repeat testing of patients testing negative.

**ACTION:** Nosocomial Working Group to review how to operationalise recommendations urgently to reduce nosocomial infection

**Next meeting**
34. The agenda will include an update on vaccine and therapeutics developments, serology, and principles for releasing measures.

**List of Actions**
- **Calum Semple** to refine definition of obesity, with a view to providing public health advice
- **NERVTAG** to review anosmia evidence from symptom tracking app (for week starting 20th April)
- **Calum Semple and Sharon Peacock** to review and ensure common expectations and appropriate use of ISARIC samples
- **Jeremy Farrar** to lead a small group to design approach for surveying infection to establish true prevalence in the population (by close of play on 17th April)
- **GCSA** to send a letter today to SoS DHSC regarding testing capacity and prioritisation, in relation establishing infection prevalence in the population
Angela McLean to ensure actuarial work coordinated by RAMP and any relevant data from ONS are connected to CO-CIN data on vulnerable groups; Calum Semple to assess whether CO-CIN data can be filtered to identify vulnerable group presentations

Calum Semple, Andrew Morris, Jonathan Van Tam and Charlotte Watts to develop a robust study on ethnicity in mortality data, drawing where necessary on other data sources (for week commencing 20th April)

Julia Gog to lead an integrated group of SPI-M, SPI-B and NERVTAG members to provide recommendations on transmission of Covid-19 in children and within schools, ensuring research questions are fed into relevant studies and research requiring new funding is fed directly into UKRI (by week starting 27th April)

SPI-M and NERVTAG to provide a numerical value on the effectiveness or otherwise of wearing face masks (including different mask types), concentrating on absolute (rather than relative) risk of not doing so – to share with CMO

CMO to produce a summary of recommendations on wearing face masks, drawing on evidence synthesis from DELVE and SPI-M/NERVTAG numerical modelling

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Nosocomial Working Group to review how urgently to operationalise recommendations to reduce nosocomial infection

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SAGE secretariat: