Addendum to twenty-third SAGE meeting on Covid-19, 7th 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), Steve Powis (NHS), Sharon Peacock (PHE), Calum Semple (Liverpool), Maria Zambon (PHE), Ian Diamond (ONS), Angela McLean (CSA MoD), Charlotte Watts (CSA DfID), John Aston (CSA HO), Andrew Morris (Scottish Covid-19 Advisory Group), Jeremy Farrar (Wellcome), Graham Medley (LSHTM), Neil Ferguson (Imperial), John Edmunds (LSTHM), Peter Horby (Oxford), Brooke Rogers (King's College), James Rubin (King's College), Andrew Rambaut (Edinburgh), Ian Young (CMO Northern Ireland), Rob Orford (Health CSA Wales).

Observers and Government Officials: Stuart Wainwright (GoS).

The name of 1 participant has been redacted under the national security exemption.

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.

Twenty-third SAGE meeting on COVID-19, 7th April 2020 Held via Zoom

Summary

 SAGE agreed that a better understanding of some types of transmission (in hospitals, between children, and in the environment) would be valuable.

Situation update

- There is no current evidence that transmission is accelerating; it may be slowing.
- 3. ICU admission doubling times are lengthening, particularly in London, and are now at 8.8 days in London and 6.5 days elsewhere. NHS & SPI-M views are consistent on this.
- 4. There remains NHS capacity in London and elsewhere, with the Nightingale hospitals available in addition to this.
- 5. It was agreed that Local Resilience Forums (LRF) should be given approximate ranges or related descriptions for potential death numbers to support their planning if required.
- SPI-M is continuing to calibrate its outputs to reported data as part of its nowcasting work but is still working on how to reconcile different datasets. SPI-M members noted their preference to carry out more of this work themselves rather than relying on others or specific approaches determined by others.

ACTION: NHS to provide summary of NHS sitrep for SAGE meetings

ACTION: SPI-M to take responsibility for bringing regular expert-reviewed forecasts to SAGE. ONS to work with SPI-M to ensure data consistency as needed

Understanding Covid-19

- 7. CO-CIN data indicate obesity is a significant risk factor, both for admission to hospital and for severity of disease. While not the most critical factor for individuals, its prevalence makes it an important one for the population which may need to be considered in public communications and advice.
- 8. NERVTAG concluded that increased use of masks would have minimal effect (in terms of preventing the uninfected general population from becoming infected), based on a review of the available evidence. Questions were raised about whether this would change if it were found that individuals have high levels of pre-symptomatic/ asymptomatic infectiousness (in which case could masks reduce early pre-symptomatic spread).
- 9. NERVTAG reviewed the evidence on duration of infectiousness and advised that the seven day isolation period remained appropriate.
- 10. The evidence on the impact of children on spread is not clear. SAGE agreed that although children typically have less severe cases than adults, schools are an efficient way of connecting households meaning that closing schools may have a significant effect. The social, developmental and psychological impacts of closing schools were noted.
- 11. It was agreed that a better understanding of environmental dispersal would be useful.

ACTION: NERVTAG to produce paper on facemasks in the context of pre-symptomatic and asymptomatic viral shedding (for 14 April)

ACTION: **NERVTAG** to table a note setting out full rationale for its position on 7 days of self-isolation and any associated risks (for 14 April)

ACTION: SPI-M to produce paper on evidence of role of children in transmission, with clinical input from **NERVTAG** and behavioural input from **SPI-B** – paper to include research priorities (for week commencing 13 April). Involving Russell Viner in this discussion may be helpful

ACTION: SAGE secretariat to gather questions on environmental dispersion today from SAGE participants in order to commission academic paper

Nosocomial infection

- 12. The nosocomial group is looking at: determining rates of nosocomial infection, mechanisms for surveillance and indicators, optimal frontline practices, and existing studies and research gaps.
- 13. SAGE agreed that a focus on solutions was important and that practical measures would need to be implemented in the NHS quickly. Looking at spatial issues and engineering solutions should be part of the process.

ACTION: Nosocomial group to present a paper next week on the major causes of infection in hospitals and what can be done immediately to reduce infection

Excess deaths

14. SAGE noted the work in train and agreed to discuss it further at its next meeting.

NHS app

- 15. It was agreed that the proposed app could be a useful supplement to other measures. SAGE raised some science questions which would need to be resolved.
- 16. There is a decision needed on whether identification of cases would rely on symptoms or testing. The specificity and sensitivity of the diagnosis would need to be understood and the impact modelled in the two scenarios.
- 17. There were also questions about response, including how quickly people needed to isolate after being in contact with an infected person; whether there would be a mechanism to tell people to stop isolating, if a presumed positive diagnosis changed; and how often people might be advised to isolate, particularly those with jobs involving significant human interaction.
- 18. SAGE noted that people using the app as a diagnostic tool needed to be screened for potentially more serious conditions, which NHS111 might be able to advise on.
- 19. There was a view that linking to viral test diagnosis is likely to be important.
- 20. It was highlighted that integration with testing and existing contact tracing approaches needed to be considered, and the impact on testing demand needed to be understood.
- 21. Potential issues around privacy, uptake and accessibility were highlighted. An ethics advisory board has been established. A communications campaign is planned, including promoting the app to users of the King's app.
- 22. The value of trialling the app, possibly regionally, was noted.
- 23. It was agreed that SPI-M and SPI-B would be able to provide useful input.

ACTION: SAGE secretariat to provide summary of key science questions to NHSX. NHSX to return to SAGE having considered these questions, for SAGE to validate the approach and advise on its coordination with other measures

Exit strategy and related testing strategy

- 24. SAGE noted that advice will likely be needed on the impact of different NPI reductions individually and in combination.
- 25. SAGE will consider direct and indirect health impacts of measures, both on Covid-19 cases and more widely (e.g. postponement of other NHS care, and socioeconomic effects). A subset of SAGE participants and other experts will be convened to carry out this work.
- 26. It was agreed that therapeutics and vaccines will have a critical role, but that some decisions on social distancing will be needed much sooner than these will be available.
- 27. It was agreed that a cross-disciplinary subgroup should consider the impact of the interventions and the impacts that lifting them would have.

ACTION: **SAGE** secretariat to coordinate a workshop with a subset of SAGE participants and others later this week

List of Actions

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Rob Orford

SAGE secretariat:	Stuart
Wainwright,	_