Addendum to twenty-first SAGE meeting on Covid-19, 31st March 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), Steve Powis (NHS), Maria Zambon (PHE), Angela McLean (CSA MoD), Charlotte Watts (CSA DfID), Carole Mundell (CSA FCO), John Aston (CSA HO), Gregor Smith (dCMO Scotland), Rob Orford (Health CSA Wales), Ian Diamond (ONS), Andrew Morris (Scottish Covid-19 Advisory Group), Peter Horby (Oxford), Graham Medley (LSHTM), Neil Ferguson (Imperial), James Rubin (King's College), Calum Semple (Liverpool), Jeremy Farrar (Wellcome), Brooke Rogers (King's College), John Edmunds (LSTHM), Wendy Barclay (Imperial), Andrew Rambaut (Edinburgh).

Observers and Government Officials: Indra Joshi (NHSX), Vanessa MacDougall (HMT), Ben Warner (No. 10), Stuart Wainwright (GoS), Simon Whitfield (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.

Twenty-first SAGE meeting on COVID-19, 31st March 2020 Held via Zoom

Summary

- 1. NHS will set up a group to urgently understand and tackle nosocomial transmission. This group should include a range of science disciplines and engineering.
- 2. SAGE agreed scientific priorities for future work.

Situation update

- 3. SAGE noted that the trends in ICU admissions and deaths appeared consistent with a straight line increase rather than an exponential increase.
- 4. NHS reported that critical care bed occupancy has not yet reached saturation levels, with around 1,000 beds in London, but that surge capacity was being used, with large teaching hospitals under most pressure.
- 5. It was noted that data on deaths in the community are now available, as well as hospital deaths. These will be reported weekly. This would include deaths where a doctor identified Covid-19 as a cause, although testing would not necessarily have been carried out. This added 40 extra deaths to the week ending 20th March. Getting an agreed single source of information of deaths, with dates and test status is important.
- 6. R is estimated to be around 0.6, with an upper bound of 0.9.
- 7. NHS reported that the doubling time in HDU/ICU is 5 days (±0.12) nationally and 6.2 days (±0.14) in London.
- 8. The true community infection rate is not yet available.
- 9. More detailed clinical coding will provide better understanding of the disease.

ACTION: NHS, PHE and ONS to work together to agree a single source of information on deaths and test status

ACTION: PHE to take responsibility for ascertaining the true community infection rate with testing and report back to SAGE (w/c 6 April)

ACTION: SPI-M to clarify for **NHSX** what key questions it needs to answer based on NHS data within 24 hours

ACTION: SAGE secretariat to confirm data coding requirements (with input from Andrew Morris) and send to NHS within 24 hours

<u>Understanding Covid-19 and nosocomial transmission</u>

- 10. NHS provided some research options on nosocomial transmission and potential interventions, noting that ongoing work on PPE guidance is also linked to this.
- 11. CO-CIN data appear to indicate an increasing proportion of nosocomial cases among overall cases. The data indicate a trend but not the scale of the issue (it was noted that clear definition of nosocomial transmission will be important, rather than cases simply being identified in hospital).
- 12. SAGE agreed that viral genome sequencing of cases from healthcare settings is important to understand the transmission, and that these cases should be a priority for sequencing by the Covid-19 Genomics UK Consortium. This work is underway and a report will be produced for next SAGE.
- 13. SAGE noted ongoing research to understand the impact of ACE inhibitors on the disease. MHRA has produced a report. Current advice from MHRA is that there is no need to discontinue treatment.

ACTION: NERVTAG to review duration of infectiousness (and whether the recommendation for 7 days isolation remains appropriate); whether anosmia or ageusia are reliable diagnostic

features to trigger self-isolation; and markers of disease severity (and which studies are underway or needed to understand this better)

ACTION: PHE to ensure samples from hospitals are being sent to Covid-19 Genomics UK consortium for priority sequencing

ACTION: NHS to urgently create and chair a nosocomial infection sub-group, with **dCMO** support, involving modelling, genomics, clinical expertise and engineering: the sub-group needs to consider the role of healthcare workers in nosocomial spread, the risk to care homes and solutions for reducing nosocomial spread

SAGE Forward look

- 14. SAGE discussed priorities for research and discussion in the coming weeks and agreed some additional topics.
- 15. SAGE agreed that the Royal Society's international work should be supported, and that coordination between this and other international work led by FCO/DfID is important.
- 16. HMT provided an update on economic work being considered elsewhere.

ACTION: SAGE secretariat to update paper on future questions for SAGE to include:

- Long-term impacts of interventions on health, including socioeconomic effects on health
- Applying the findings of clinical trials
- · Community testing strategies and options
- · Psychological impacts in the short, medium and long terms
- International issues, including comorbidities such as malaria and malnutrition

Testing and treatments

17. The importance of testing was re-emphasised. It was agreed that SAGE will not consider operational questions, but rather clarify the scale and requirements from the testing programme – the scale of testing required to manage the next phase

ACTION: DHSC and PHE to define future UK testing requirements at an upcoming meeting, including required scale and approaches (i.e. serology and community testing, tracing and isolation) and public understanding/interpretation of testing

List of Actions

NHS, PHE and ONS to work together to agree a single source of information on deaths and test status

PHE to take responsibility for ascertaining the true community infection rate and report back to SAGE (w/c 6 April)

SPI-M to clarify for **NHSX** what key questions it needs to answer based on NHS data within 24 hours

SAGE secretariat to confirm data coding requirements (with input from **Andrew Morris**) and send to **NHS** within 24 hours

NERVTAG to review duration of infectiousness (and whether the recommendation for 7 days isolation remains appropriate); whether anosmia or ageusia are reliable diagnostic features to trigger self-isolation; and markers of disease severity

PHE to ensure samples from hospitals are being sent to Covid-19 Genomics UK consortium for priority sequencing

NHS to urgently create and chair a nosocomial infection sub-group, with **dCMO** support, involving modelling, genomics, clinical expertise and engineering: the sub-group needs to consider the role of healthcare workers in nosocomial spread, the risk to care homes and solutions for reducing nosocomial spread

SAGE secretariat to update paper on future questions for SAGE to include:

- Long-term impacts of interventions on health, including socioeconomic effects on health
- Applying the findings of clinical trials
- · Community testing strategies and options
- Psychological impacts in the short, medium and long terms
- International issues, including comorbidities such as malaria and malnutrition

DHSC and PHE to define future UK testing requirements at an upcoming meeting, including scale and required approaches (i.e. serology and community testing, tracing and isolation) and public understanding/interpretation of testing

<u>Attendees</u>

SAGE participants: Patrick Vallance, Chris Whitty, Jonathan Van Tam, Jenny Harries, Steve
Powis, Indra Joshi, Maria Zambon, Angela Mclean, Charlotte Watts, Carole
Mundell, John Aston, Gregor Smith, Rob Orford, Ian Diamond, Vanessa MacDougall, Ben
Warner, Andrew Morris, Peter Horby, Graham Medley, Neil Ferguson, James Rubin, Calum
Semple, Jeremy Farrar, Brooke Rogers, John Edmunds, Wendy Barclay, Andrew Rambaut

SAGE secretariat: Stuart Wainwright, Simon Whitfield