

Thirtieth SAGE meeting on Covid-19, 30th April 2020

Held via Zoom

Summary

1. SAGE endorsed papers from the Environmental and Modelling Group and from the Chief Veterinary Officer – and SPI-M's most recent consensus statement on R.
2. SAGE advised on the need for more comprehensive availability and deployment of the seasonal flu vaccine this coming winter.
3. SAGE subgroups will meet on 1 May to provide advice on testing and on options for opening schools.

Situation update

4. Hospital admissions are declining consistently across the country.
5. CO-CIN is recording hospital readmissions – these data will be analysed in due course.
6. CO-CIN evidence shows improving survival rates for ventilated patients compared to the start of the outbreak.
7. SAGE agreed with the most recent SPI-M assessment of R, including regional values.
8. There is no evidence that compliance with social distancing measures is declining in terms of contacts.
9. SAGE noted that genomics data are an increasingly rich source, including for understanding the origins of initial UK cases and identifying nosocomial transmission.

Nosocomial update

10. There is variation in levels of nosocomial transmission, with a rebound and persistent rise in some Trusts, according to CO-CIN data.
11. There remains significant transmission in care homes, but numbers are plateauing. It will take a few more days before there can be greater confidence that these numbers are in fact stabilising.
12. The Nosocomial Working Group has 4 workstreams exploring: evidence synthesis, including work within the UK, international comparators and literature; modelling to understand the role of hospital onset Covid-19 infection and the impact of IPC; surveillance, including CO-CIN data and refining definitions, and intervention/ implementation, including cascading guidance and tools to Trusts.
13. There is sufficient genetic variation to use viral sequencing to help identify specific outbreaks.
14. A substantial surveillance system is needed to reduce transmission.
15. A recent NHS study suggests a positive test rate among asymptomatic healthcare workers of 5-6%.
16. Understanding the causes of transmission in care homes is more challenging, where the key limiting factors are availability of metadata and material to sequence.

ACTION: Nosocomial Working Group and SAGE subgroup on care homes to ensure evidence, strategy and approach are shared and coordinated. Advice needs to be fully linked to NHS for action.

ACTION: Nosocomial Working Group to ensure all relevant SPI-M modelling on hospital-borne infections is incorporated into its analysis

Understanding COVID-19

17. SAGE endorsed the Environmental and Modelling Group paper, which contains additional thinking on maintaining two metres distance in social situations and requested an updated version for final review.
18. SAGE agreed that the single most important metric for understanding the overall impact of pandemic is all-cause mortality, age-standardised, since it accommodates changing

definitions of the disease over time and indirect deaths, and it better enables valid international comparisons.

19. SAGE also noted the value of other metrics, including years of life lost and partitioning of contributory factors to all-cause mortality (although data on these won't be available for some months).
20. SAGE endorsed a paper from the Chief Veterinary Officer on zoonosis, which is not currently contributing to the overall epidemic.
21. SAGE agreed on the importance of sequencing the virus in animals.

ACTION: Cath Noakes to share final version of Environmental and Modelling Group paper with SAGE secretariat to allow a final review, via correspondence, by SAGE

ACTION: APHA to contact Sharon Peacock if animal isolates of Covid-19 suitable for genomic sequencing exist

Therapeutics

22. There are 3 platform trials in the UK for repurposed drugs, of which the biggest is the RECOVERY trial.
23. RECOVERY is currently testing 5 drugs and is looking to begin trialling convalescent plasma shortly. There are currently no safety concerns. Initial outcomes are expected in around a fortnight.
24. The new ACCORD initiative is rapidly evaluating more novel and unlicensed drugs, mainly biologics, in smaller numbers of patients to identify any potentially game-changing signals.
25. The US trial on Remdesivir headline results suggest a statistically significant signal of efficacy that was not seen in a smaller Chinese trial. Full results from the US trial are not yet available.
26. SAGE noted the challenges of manufacturing Remdesivir and the importance of funding trials for therapeutics as well as for vaccines.

Vaccines

27. There are around 200 candidate vaccines worldwide – of which around 70 or so are credible and fewer than a dozen might be considered front runners.
28. SAGE was updated on the status of the Oxford and Imperial vaccine trials – and noted the importance of innovative trial design.
29. SAGE noted the risk of focusing too heavily on the spike protein in developing a viable vaccine, and the value of exploring other protein targets and alternative approaches such as small interfering RNAs and neutralising antibodies.
30. SAGE advised that, in addition to the importance of developing a vaccine for Covid-19, a clear UK plan is required for the seasonal flu vaccine for winter 2020-21, including consideration of whether to vaccinate the entire UK population.

ACTION: DHSC to develop a clear policy on prioritising uptake of seasonal flu vaccine for 2020

Testing and contact tracing

31. SAGE discussed principles for testing in a contact tracing system – as well as the various challenges involved.
32. It agreed that the speed at which test results can be returned and the performance of testing are important factors in determining whether contacts should be isolated following a positive test for the index case, or following reported symptoms only.
33. The speed at which contacts are identified and isolated is important and the paper analysing effects at 24, 48 and 72 hours was noted.

34. Behavioural considerations are also important. Factors such as length of isolation required and the acceptability of tracing methods may impact adherence.
35. SAGE agreed that a sub-group of participants would hold a dedicated meeting on 1 May to seek to finalise advice. At the meeting, the sub-group will discuss/review the following:
 - a) questions -
 - i. Does SAGE agree we would ideally want to isolate contacts of an index case and identify more than 80% of those contacts within 24 hours? What would be the implications of a delay to 48 or 72 hours?
 - ii) If rapid test results (within 24/48 hours) can be turned around is it reasonable only to isolate contacts after a positive test result? It is assumed that contact tracing would happen in advance of test result, this is contact notification.
 - b) principles -
 - iii. While testing of contacts is challenging (because of false negatives), some sample testing of contacts is needed in order to optimise the overall testing and tracing system.
 - iv. It may be possible to work out the number of contact tracing workers required based on the principles SAGE proposes alongside the overall incidence of new cases.
 - v. The effectiveness of the overall system needs to be measured.
 - vi. Backwards contact tracing from index cases may also be useful. Comparison with what other countries have done is essential

Children and schools

36. SAGE noted that evidence concerning the role of children in transmission and their susceptibility to infection remains inconclusive. Data suggest that children who are infected have similar viral loads to adults.
37. The sub-group examining this set of issues has modelled the impacts of 7 scenarios suggested by DfE, with input from SPI-M, SPI-B and NERVTAG.
38. Results from 4 different models – all based on a conservative assumption that children are equal to adults in terms of spreading the virus and in terms of susceptibility to it – were largely consistent across the 7 scenarios.
39. There is uncertainty about whether younger children may be less susceptible than older children and it is possible a differential policy between primary and secondary school might be supportable. This should be explored.
40. SAGE agreed to hold a dedicated meeting on 1 May to discuss the findings of the sub-group and a range of issues, including susceptibility of children to infection, behavioural aspects and the broader context of other social measures which may remain in place.

List of Actions

Nosocomial Working Group and SAGE subgroup on care homes to ensure evidence, strategy and approach are shared and coordinated

Nosocomial Working Group to ensure all relevant SPI-M modelling on hospital-borne infections is incorporated into its analysis

Cath Noakes to share final version of Environmental and Modelling Group paper with SAGE secretariat to allow a final review, via correspondence, by SAGE

APHA to contact Sharon Peacock if animal isolates of Covid-19 suitable for genomic sequencing exist

DHSC to develop a clear policy on prioritising uptake of seasonal flu vaccine for 2020

Attendees

Scientific experts (40): 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) (first half), Charlotte Watts (CSA DfID) (second half), Osama Rahman (CSA DfE), Steve Powis (NHS), Calum Semple (Liverpool), Maria Zambon (PHE), Sharon Peacock (PHE), Yvonne Doyle (PHE), Graham Medley (LSHTM), Julia Gog (Cambridge), Neil Ferguson (Imperial), John Edmunds (LSHTM), [REDACTED] Brooke Rogers (King's), Lucy Yardley (Bristol), 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), [REDACTED], [REDACTED], Jeremy Farrar (Wellcome), Venki Ramakrishnan (Royal Society), Michael Parker (Oxford), Ian Boyd (St Andrews), Mark Walport (UKRI), Jim McMenamin (Health Protection Scotland)

Government officials (9): Vanessa MacDougall (HMT), [REDACTED], [REDACTED] Ben Warner (No. 10), Dominic Cummings (No. 10), [REDACTED] Indra Joshi (NHSX), Stuart Wainwright (GO-S)

SAGE secretariat [REDACTED]
[REDACTED] Simon
Whitfield (GO-S), [REDACTED]

Total participants: 60