Fiftieth SAGE meeting on Covid-19, 6th August 2020
Held via Zoom

Summary

1. SAGE endorsed analysis showing a statistically significant increased mortality risk associated with HIV. It was also noted that HIV could be associated with atypical Covid-19 presentations. Papers should be published for medical profession to consider any actions.
2. Considering all available data, it is likely that incidence is static or may be increasing, meaning R may be above 1 in England. A significant proportion of new cases are in hard-to-reach communities, where early indicators, such as testing data, may not reveal a more advanced epidemic.
3. It is important that as many symptomatic people and contacts of known cases as possible are tested. The right incentives and support need to be in place to encourage this.
4. SAGE agreed that good adherence to local measures to control outbreaks will require more and clearer public messaging.
5. The impact of interventions to reduce transmissions will depend on factors including their duration, effect on contact rates, spatial scale and public adherence: these factors should not be considered independently of each other. Strong measures introduced early for short periods are likely to be more effective in reducing transmission than less stringent measures which would need to be implemented for longer.
6. Those protecting vulnerable people may benefit from guidance on how to protect themselves. There are likely to be pros and cons to more formal measures for protectors.
7. SAGE agreed that more analysis is needed on shielding to date to understand all-cause mortality and to produce a more holistic view of the impact of shielding's health and societal impacts. SAGE will consider shielding again once this analysis is done. The concept of special measures for 'protectors' will also be reviewed in light of the data.

Situation update

8. SAGE participants were thanked for their efforts to date by Simon Case and in a letter from the Prime Minister.
9. SAGE endorsed analysis showing a statistically significant increased mortality risk associated with HIV. It was also noted that HIV could be associated with atypical Covid-19 presentations. Papers should be published for the medical profession to consider any actions.
10. SAGE endorsed a paper on air quality, which showed that PM2.5 and NO2 may correlate with increased mortality rates from Covid-19 infection but that the scale of the association appears smaller than that reported in some other papers. It is not possible to infer causation from this and there are significant confounding variables, most notably related to location, socio-economic confounders and ethnicity.
11. SAGE approved R and growth rate estimates – and the SPI-M consensus statement, subject to minor amendments to the latter.
12. The latest estimate of R for the UK is 0.8 to 1.0, while the daily growth rate estimate is -5% to 0%. These estimates mask wide regional variation across the country of case numbers and trends. As noted previously, these estimates of R rely on lagged data (e.g. number of deaths).
13. Analysis of pillar 2 testing data shows a daily growth rate of around +2% in England; however, this should be treated with caution given that pillar 2 testing is not based on systematic sampling. The intention is for pillar 2 testing data to be published soon and SAGE strongly supports publication.
14. Considering all available data, it is likely that incidence is static or may be increasing, meaning R may be above 1 in England.

15. As previously, SAGE does not have confidence that most regional R estimates are sufficiently robust to inform decisions, since they are based on low numbers and/or are dominated by clustered outbreaks.
16. A significant proportion of new cases are in hard-to-reach communities, where a more advanced epidemic may not show up in early indicators such as testing data. In some of these populations R is probably above 1.
17. It is important that as many symptomatic people and contacts of known cases as possible are tested. The right incentives and support need to be in place to support this and need not be financial. Effective communications as well as data transparency will help to build public trust and engagement. Using the right metrics is also important.

ACTION: SAGE secretariat to publish CO-CIN and Smeeth/Goldacre papers on HIV by 7 August

ACTION: SAGE secretariat to arrange meeting between small subset of SAGE participants and Dido Harding's team to discuss test and trace system and offer additional scientific support; **SAGE participants** to express interest in attending meeting to SAGE secretariat by 10 August

ACTION: CMO and **GCSA** to contact Clare Gardiner (JBC) to reiterate offer of SAGE support and importance of having all JBC data in public domain, by 10 August

Local measures to control outbreaks

18. SAGE agreed that adherence to local measures to control outbreaks will require more and clearer public communication.
19. The impact of interventions to reduce transmission will depend on factors including their duration, effect on contact rates, spatial scale, public adherence and on local travel patterns and connectivity between places: these factors should not be considered independently of each other.
20. Evidence suggests that local interventions should aim to target an area wider than that of the known outbreak.
21. Adherence to interventions may differ between areas, different groups of the population, and at different points in the epidemic. Local knowledge is important. Local interventions should be monitored consistently to ensure effectiveness.
22. Strong measures introduced early for short periods are likely to be more effective in reducing transmission than less stringent measures which would need to be implemented for longer.
23. Access to better, ideally real-time data on travel is required to further develop models and design interventions intelligently, and to monitor transmission and adherence to local measures.
24. Transmission rates within households remain high. There may be merit in considering quarantine measures outside the home and there is some evidence of public demand for this.

ACTION: SPI-M secretariat to send 'Local interventions and spatial scales' paper to MHCLG, JBC and directors of public health, with offer to discuss contents further alongside SPI-B, by 10 August; **SPI-M** to discuss other available travel data with ONS (Ian Diamond) and DfT (Phil Blythe) by 12 August; **Cabinet Office** to consider recommendations

Reasonable worst-case scenario (RWCS), with excess deaths updated

25. SAGE approved the ONS paper modelling adjustments to excess deaths.
26. SPI-M has carried out additional modelling of a range of scenarios which are designed to support planning, covering the period August 2020 until the end of March 2021.

27. The revised models are aligned to ONS's weekly death registration data and include deaths where Covid-19 is mentioned on the death certificate irrespective of whether a test for Covid-19 was completed.
28. Data show an increase in deaths not related to Covid-19, which might result from the interruptions to healthcare services, hesitancy to access healthcare or from NPIs. However, assumptions are subject to significant uncertainty.

ACTION: SPI-M secretariat and **ONS** to send final reasonable worst-case scenario paper to Cabinet Office by 7 August

Segmentation of vulnerable people

29. In thinking about protecting vulnerable people, society can be divided into three groups: vulnerable people, their 'protectors', and the rest of the population.
30. Protectors are those who have regular close contact with vulnerable people, often playing an important caring role. Reducing incidence of infection in this group may in turn protect the vulnerable group.
31. There are various measures which protectors could take to reduce their risk of infection, from reducing their contacts with the wider population, to use of masks or physical barriers. Many already seek to protect the vulnerable through regulating their own social contacts or other measures.
32. Protectors may benefit from clearer guidance on how best to do this, which also touches on ethical issues regarding the health and economic impact on protector themselves. It is important that protectors do not become isolated from society, and there are pros and cons to increased actions.
33. The wider population may in turn benefit from guidance on how they can support protectors and vulnerable people through their behaviour.
34. More analysis is needed on the overall impact of shielding to date (positive and negative), both health and societal, to ascertain the effectiveness of this intervention. SAGE will consider shielding again once this analysis is done. The concept of special measures for 'protectors' will also be reviewed in light of the data.

ACTION: SAGE secretariat to arrange for Scottish Government Advisory Group work on segmentation of the vulnerable (and protectors) to be discussed at SAGE once complete; **CMO**, **Ian Diamond** and **Calum Semple** to agree plan for how to fully analyse impacts of shielding on the vulnerable by 12 August

List of actions

SAGE secretariat to publish CO-CIN and Smeeth/Goldacre papers on HIV by 14 August

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Attendees

Scientific Experts (30): *Patrick Vallance (GCSA), Chris Whitty (CMO), Angela McLean (CSA MoD), John Aston (CSA HO), Phil Blythe (CSA DfT), Andrew Curran (CSA HSE), Charlotte Watts (CSA DfID), Andrew Morris (SG Advisory Group), Steve Powis (NHS), Mark Wilcox (NHS), Maria Zambon (PHE), Yvonne Doyle (PHE),* [redacted] *Calum Semple (Liverpool), Wendy Barclay (Imperial), Graham Medley (LSHTM), John Edmunds (LSHTM), Catherine Noakes (Leeds), Lucy Yardley (Bristol/Southampton), Brooke Rogers (KCL), Ian Diamond (ONS),* [redacted] *Ian Boyd (St Andrews), Michael Parker (Oxford), Jeremy Farrar (Wellcome), Mark Walport (UKRI), Sheila Rowan (CSA Scotland), Rob Orford (Health CSA Wales), Nicola Steedman (dCMO Scotland)*

Observers (10): *Simon Case (No.10),* [redacted] *Vanessa MacDougall* [redacted]

Secretariat (all GO-Science) (14) [redacted] *Simon Whitfield,* [redacted]

Total: 54