Sixty-first SAGE meeting on Covid-19, 8th October 2020 Held via Zoom

Summary

- 1. Incidence and prevalence across the UK continue to increase, and data show clear increases in hospital and ICU admissions, particularly in the North of England.
- In England the number of infections and hospital admissions is exceeding the Reasonable Worst Case Scenario (RWCS) planning levels at this time. Projections also indicate the number of deaths is highly likely to exceed Reasonable Worst Case planning levels within the next two weeks.
- 3. Data show lower incidence and prevalence in London compared to some other UK cities, but there is variation within London. The reasons for apparent lower levels in London are not known but could include some degree of immunity (lower than 20%); different population behaviours because London was hard hit in the first wave; the effects of the loss of tourism and people working from home; differences in population structure and housing densities; or differences in levels of deprivation compared to other cities.
- 4. As previously, a package of non-pharmaceutical interventions (NPIs) needs to be adopted to reverse the exponential rise in cases (see SAGE 58). The epidemiological impact of NPIs will depend on context and how they interact, and public behaviours in response to the measures.
- 5. Under any scenario it will be important to protect vulnerable and at-risk sections of the population. There are risks and negative mental health impacts associated with full shielding which should be considered by policymakers when developing advice for more vulnerable people and those who interact with them (see SAGE 50).
- SAGE reiterated the importance of a consistent government strategy, clear public engagement and communication, and transparency, for increasing adherence. Explaining and showing the evidence behind decisions is important.

Situation update

- UK winter forecasts show higher than average risks of cold spells (snow and ice) in November and December, with a greater chance of mild, wet and stormy periods of weather in January to March 2021. This may have a bearing on operational aspects of the COVID-19 response.
- It is almost certain that incidence and prevalence are growing overall across the UK, as shown by data from the latest ONS and REACT surveys and analysis from SPI-M. Data also show clear increases in hospital and ICU admissions, particularly in the North of England.
- 9. The latest estimate of R for the UK is 1.2 to 1.5, while the daily growth rate estimate for new infections is +4% to +9%. The latest estimate of R for England is 1.2 to 1.5, while the daily growth rate estimate is +4% to +8%. SAGE does not have confidence that R is below 1 in England or across large parts of the UK. As previously, these estimates rely on lagged data and mask wide regional variation across the country and should be therefore treated as a guide to the general trend.
- 10. The growth rate estimates equate to a doubling time for new infections of 8 to 16 days but it could be faster in some regions and age groups. These estimates do not fully reflect changes from the last two to three weeks.
- 11. While there are tentative indications in some data streams of a slight slowing in the growth rate of the epidemic, regional variation and inconsistency in data mean this cannot be concluded with any certainty. In all scenarios the epidemic is still growing.
- 12. Operational issues in the testing systems, including the demand for symptomatic testing and testing delays, as well as corrections to the data on positive cases, have increased

the level of uncertainty in estimates. There are also data issues following the return of students to universities relating to where cases are recorded.

- 13. SAGE reviewed the SPI-M medium-term projections noting sensitivities in the modelling. When modelling exponential growth, beyond two weeks projections become more uncertain and there is more variability between models.
- 14. In England the numbers of infections and hospital admissions exceed the Reasonable Worst Case Scenario (RWCS) planning levels at this time. Near-term projections indicate the number of deaths is highly likely to exceed RWCS planning levels within the next two weeks. Well over 100 new deaths per day are projected to occur within 2 weeks, even if strict new interventions are put in place immediately.
- 15. NHS data also show increases in hospital admissions, particularly in the North West, North East and Yorkshire. If there are no decisive interventions, continued growth would have the potential to overwhelm the NHS, including the continued delivery of non-Covid treatments.
- 16. Data show lower prevalence and incidence in London compared to some other UK cities but there is variation within London. The reasons for apparent lower levels in London are not known but could include some degree of immunity (lower than 20%); different population behaviours because London was hard hit in the first wave; the effects of the loss of tourism and people working from home; differences in population structure and housing densities; or differences in levels of deprivation compared to other cities.
- 17. CoMix data suggest lower rates of contact in London than the North West of England over the summer period which may have also influenced current incidence rates.
- 18. ONS data also suggest a greater reduction in activity in the hospitality sector in London than elsewhere, in part due to reduced tourism.
- 19. SAGE has previously advised that a package of non-pharmaceutical interventions (NPIs) needs to be adopted to reverse the exponential rise in cases (see SAGE 58). As previously, the earlier additional measures are introduced the more effective they will be. Longer-term sustained measures will also be essential.
- 20. The interventions previously recommended for consideration are those which will have significant population-level impact on reducing transmission. Case control studies indicate that restaurants and bars are associated with increased transmission risk.
- Policymakers will need to consider potential economic impacts and other associated harms, including of non-COVID health harms, alongside the epidemiological impacts of NPIs on R and growth rates.
- 22. The epidemiological impact of NPIs will depend on context and how they interact, and public behaviours in response to the measures. Substitution behaviours are important (e.g. the impact of closing pubs will be reduced if people instead socialise in restaurants or private homes).
- 23. Further studies (e.g. case control studies, cohort studies) are needed to understand where transmission is taking place and where people are at most risk. As noted previously by SAGE, backward contact tracing data will also be useful and is strongly endorsed.
- 24. SAGE reiterated the importance of protecting the most vulnerable and at-risk parts of the population. There are risks and negative mental health impacts associated with full shielding. This should be considered by policymakers when developing advice for more vulnerable people and those who interact with them (see SAGE 50 and 58). The CMO and dCMO have given specific advice on shielding but broader advice for the wider at risk population should be provided.
- 25. Focus should also be maintained on other key measures, for example increasing adherence to self-isolation and contact tracing. Measures such as social distancing,

hand hygiene, ventilation and appropriate use of face coverings will remain important contributors to reducing transmission.

26. SAGE reiterated the importance of a consistent government strategy, clear public engagement and communication, and transparency, for increasing adherence. Explaining and showing the evidence behind decisions is important.

List of actions

SAGE secretariat (comms) to work with C-19 taskforce to provide SAGE participants with briefing on relevant announcements, where possible.

JBC (Susan Hopkins) to provide an update on case control studies for the next SAGE meeting on 15th October.

Ian Diamond to identify ways in which evaluation can be used to strengthen the evidence around NPIs.

SAGE secretariat to work with CCS and SPI-M to determine an approach to updating the Reasonable Worst-Case Scenario for planning purposes.

John Edmunds to share CoMix data on local interventions with Cabinet Office.

SAGE secretariat and **DHSC** to review existing advice on protecting those most at risk and identify any further advice needs.

SAGE secretariat to work with DfE on understanding the need for any further science advice in relation to universities, by 12th October.

SAGE secretariat to work with Cabinet Office on understanding the need for any further science advice in relation to mass celebrations.

SPI-B to provide paper on behaviour substitution for SAGE meeting on 22nd October

Attendees

Scientific Experts (34): Patrick Vallance (GCSA), Chris Whitty (CMO), Jonathan Van Tam (dCMO), Jenny Harries (dCMO), Andrew Morris (Scottish Government Advisory Committee), Angela McLean (MOD CSA), Calum Semple (Liverpool), Catherine Noakes (Leeds), Charlotte Watts (DfID CSA), Graham Medley (LSHTM), Ian Boyd (St Andrews), Ian Diamond (ONS), Ian Young (NI CSA for Health), Jeremy Farrar (Wellcome), Jim McMenamin (Health Protection Scotland), John Edmunds (LSHTM), Lucy Yardley (Bristol), Maria Zambon (PHE), Mark Wilcox (Leeds), Mark Walport (UKRI), Michael Parker (Oxford), Peter Horby (Oxford), Rob Orford (Wales CSA), Sheila Rowan (Scotland CSA), Simon Ridley (CO), Stephen Belcher (Met Office), Steve Powis (NHS England), Susan Hopkins (JBC), Venki Ramakrishnan (Royal Society), Wendy Barclay (Imperial), Yvonne Doyle (PHE)

 Observers (18): Andrew Curran (HSE CSA), Andy Bracewell (Scotland),

 Ben Warner (No.10),
 Crystal Moore (EA),

 Emma Davies (DfE), John Aston (HO CSA), Julian Fletcher (HO),

 Osama Rahman (DfE CSA), Paul Monks (BEIS CSA), Phil

 Blythe (DfT CSA), Alan Penn (MHCLG CSA), Paul Willgoss (HSE),

 Rupert Shute (HO),

Secretariat (all GO-Science) (14): Stuart Wainwright, Simon Whitfield,

Total: 66