One-hundred-and-third SAGE meeting on COVID-19, 13 January 2022

Held via Video Teleconference

<u>**Situation update**</u>

1. There is uncertainty about current trends in the number of new infections, particularly as a result of changes to testing policy and behaviours. This includes differences in people's approach to testing before and after Christmas. The ONS infection survey will continue to be the most reliable measure of infections and therefore the best way of identifying whether a peak has occurred. These prevalence data lag the number of new infections, so the national peak will not be reliably identified until after it has passed. Many infections will occur after the peak has been reached, with the total number depending on how rapid the decline is. Trends in the number of positive tests reported remain a useful additional measure for understanding infection levels.

2. The number of hospital admissions in England is level overall, though with differences between regions. Admissions are declining in London but increasing in the North of England where levels are now comparable to previous peaks. An increasing proportion of these reported admissions are positive tests amongst people admitted primarily for reasons other than COVID-19, reflecting the very high community prevalence.

3. A decreasing proportion of those in hospital require ICU admission, which suggests that the reduction in severity if measured by ICU admission risk is even greater than the reduction when measured by hospital admission risk. This appears to be particularly the case in a highly immunised population; in some parts of the USA and Europe where immunity levels are lower there have been increases in hospital and ICU admissions more in line with infection levels. Further analysis will be better able to assess the severity reduction in the UK for Omicron compared to Delta with ICU admission and use of ventilation as endpoints when more data are available.

4. There is increasing evidence that the generation time for Omicron is shorter than for Delta. As previously noted, a shorter generation time will result in an earlier and lower peak in infections and hospital admissions for a given growth rate and probably greater impact of interventions. There is also some evidence that the range of generation times might be wider.

5. The increase in hospitalisations, which is anticipated following the observed increase in cases in older age groups, has not been seen so far. This may be due to higher vaccine levels of protection against hospitalisation, slower waning of vaccine protection, or the impact of precautionary behaviours amongst the most vulnerable and those around them. Analysis from Bristol shows that intended behaviour change over December 2021 has led to lower modelled numbers of infections over recent weeks (compared to no such risk mitigation). Changes in community treatment may also have had a small effect on hospital admission numbers. A combination of these factors is also possible.

6. The medium-term projections produced by SPI-M-O show what might happen if recent trends continue. These do not reflect the impact of potential behavioural or policy changes (e.g., as a result of any reversal of Plan B measures in England or changes to duration of isolation). There is uncertainty about what may happen to hospital admissions over the coming weeks, even in the absence of any such changes.

7. Even if hospitalisations decrease nationally, trends may be different in different places and the health system may be under greater pressure in some areas. It also remains possible that admissions nationally could still increase further or could plateau at high levels for some time.

8. UKHSA continues to monitor variants including the BA.2 variant of Omicron (which is S-gene target positive). There is currently no evidence of BA.2 having a faster growth rate than the now widespread BA.1 variant. Delta is now at low levels, in part because of the effects of the booster vaccination programme. It is not yet clear what protection is conferred against infection and disease from other variants following an Omicron infection; this will be important to establish for longer-term trajectories.

9. Data continue to show relatively increased paediatric hospital admissions with COVID-19, especially for those under 1 year old, though it remains the case that most of these children have very short stays in hospital and are not severely ill. The number of admissions, including to intensive care, remains low compared to the usual level of admissions observed with other respiratory viruses at this time of year. Encouraging vaccination uptake in pregnant women should remain a priority.

10. No impact of Omicron on incidence of the COVID-19 associated multisystem inflammatory syndrome PIMS-TS can yet be observed, but cases typically present several weeks after infection so this cannot be excluded at this point. It is notable that in CO-CIN data, for the most recent month, there were no vaccinated 12–17-year-olds in HDU or ICU compared to 20 unvaccinated in the same age group. Further analysis would be required to fully assess the impact of vaccination on likelihood of ICU admission. The overall risk to children from COVID-19 remains very low (high confidence).

11. Work is underway to understand the increased number of diagnoses of type 1 diabetes in children, and the potential association with SARS-CoV-2 infection.

12. Work is also underway to review emerging evidence on survival of SARS-CoV-2 in aerosols, though there remains strong evidence for the effectiveness of measures such as ventilation.

ACTION: Russell Viner to coordinate assessment of evidence on type 1 diabetes in children and share with CMO when available.

Attendees
Scientific experts (36): *Patrick Vallance (GCSA), Chris Whitty (CMO), Angela McLean (MoD, CSA), Ann John (Swansea), Brooke Rogers (KCL), Calum Semple (Liverpool), Camilla Kingdon (RCPCH), Catherine Noakes (Leeds), Charlotte Watts (FCDO, CSA), Graham Medley (LSHTM), Harry Rutter (Bath), Ian Diamond (ONS), Ian Hall (Manchester), Ian Young (Northern Ireland Executive, Health CSA), Jeanelle de Gruchy (dCMO), Jenny Harries (UKHSA), Jim McManus (ADPH), John Edmunds (LSHTM), Jonathan Van Tam (dCMO), Julie Fitzpatrick (Scottish Government, CSA), Kamlesh Khunti (Leicester), Lucy Chappell (DHSC, CSA), Mark Wilcox (Leeds), Matt Keeling (Warwick), Meera Chand (UKHSA), Michael Parker (Oxford), Nicola Steedman (Scottish Government, dCMO), Peter Davis (University Hospitals Bristol), Rob Orford (Welsh Government, Health CSA), Russell Viner (UCL), Steve Powis (NHS England), Susan Hopkins (UKHSA), Thom Waite (dCMO), Wei Shen Lim (Nottingham), Wendy Barclay (Imperial) and Yvonne Doyle (NHSE).*

Observers and government officials (29): *Alan Penn (DLUHC, CSA), Andrew Curran (HSE, CSA), Andrew Morris (Edinburgh),* ▮▮▮▮▮▮▮▮▮ ▮▮▮▮▮▮▮▮▮

██████████ *Charlette Holt-Taylor (DHSC), Daniel Kleinberg (Scottish Government), David Lamberti (DHSC) , Soheila Amin-Hanjani (BEIS), Edward Wynne-Evans (UKHSA),* ████████ ██████████ ██████████ *Giri Shankar (PHW),* ████████████████ *Jennifer Rubin (HO, CSA), Jim McMenamin (Health Protection Scotland), Laura Bellingham (CO), Liz Lalley (Welsh Government), Louise Tinsley (HMT),* ████████████████ ██████████████████████ *Paul Monks (BEIS, CSA),* ████████████ █████████████████████████████ *Rob Harrison (CO),* ████████████████ *Sarah Sharples (DfT, CSA) and Tom Rodden (DCMS, CSA).*

Secretariat (all GO-Science) (13): ████████████ ████████████ ████████████ ████████████ ████████████ ████████████ ████████████ ████████████████████ ████ ████████ ████████████ *Simon Whitfield, Stuart Wainwright and Zoe Bond.*

Total: 78