



The Government's Response to the Science and Technology Committee report: The UK Response to Covid-19: Use of Scientific Advice

Presented to Parliament

by the Secretary of State for Health and Social Care

by Command of Her Majesty

May 2021



The Government's Response to the Science and Technology Committee report: The UK Response to Covid-19: Use of Scientific Advice

Presented to Parliament

by the Secretary of State for Health and Social Care

by Command of Her Majesty

May 2021



© Crown copyright 2021

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at www.gov.uk/official-documents.

Any enquiries regarding this publication should be sent to us at COVID-19Parly@dhsc.gov.uk.

ISBN 978-1-5286-2505-0

CCS CCS0321245842 05/21

Printed on paper containing 75% recycled fibre content minimum

Printed in the UK by the APS Group on behalf of the Controller of Her Majesty's Stationery Office

The Government's Response to the Science and Technology Committee report: The UK Response to Covid-19: Use of Scientific Advice

Contents

Introduction	6
Summary of Committee Recommendations	9
Responses to the Committee's Recommendations	12
Expert advice and Government decision-making structures	12
Activation and operation of SAGE	15
Transparency and communication	17
Nature of the scientific advice to Government	25
Application of science expertise	29

Introduction

The Government welcomes the opportunity to respond to the recommendations made by the House of Commons Science and Technology Committee in its report 'The UK response to Covid-19: use of scientific advice', published on 8 January 2021.

Through its inquiry the Committee has sought to identify lessons that can be learnt and applied in making future decisions relating to Covid-19 and beyond, as well as to obtain contemporary evidence relating to the pandemic. The Committee's report considers, specifically, the ways in which the Government has secured and made use of scientific advice during the pandemic to date. It also considers, amongst other things: the transparency and timeliness of scientific advice; how quickly scientific analysis is translated into Government decisions; the use of scientific advice to inform consideration of operational constraints; and the use of international comparisons.

As the report points out, the Covid-19 pandemic has marked the most significant test of the way that the UK Government takes and acts on scientific advice in living memory.

The Government is committed to working in a way that is open and transparent, whenever possible, about how data and scientific advice informs decisions in response to the pandemic. It fully recognises the necessity to be transparent: it is vital to promote public understanding of the pandemic and allows the public and Parliament to hold Government to account. The provision of up to date and relevant public information facilitates greater public awareness of the Government's response to the pandemic and encourages the public to comply with necessary legislative restrictions to help fight the virus, to feel as safe as possible, and achieve the central aim of the Government's response - to protect lives. However, it also recognises that bringing scientific advice into the public domain has to be balanced with the need to maintain the trust of scientists and other experts who provide advice, to protect personal and national security information, and to allow time for due consideration of all the advice by officials and Ministers as part of the decision-making process.

The Coronavirus pandemic has had an unprecedented global impact that has severely affected public health, economies and society. The past fourteen months have been difficult for everyone in the UK. The spread of the virus has caused hardship for many people over a sustained period. This time has been particularly difficult for those areas of the country subject to additional restrictions since the summer of 2020 due to a continued, localised, high prevalence of the disease. Balancing consideration of the economic and social implications of restrictions with the need to protect public health and make sure the National Health Service (NHS) does not become overwhelmed is challenging, but the Government has been committed to a proportionate and flexible response, and to obtaining the best possible scientific advice to inform decision-making.

The Government's commitment to transparency through the pandemic has been reflected in the volume of scientific advice and data that has been released into the public domain. As at 30 April 2021, 684 papers and minutes from the Scientific and Advisory Group for Emergencies (SAGE) have been published. This contrasts with previous practice when these papers would only be put into the public domain after an incident had concluded. The first iteration of the Public Health England (PHE) dashboard was published in March 2020, and this has continued to be improved to include further data. In addition, PHE has published weekly Covid-19 surveillance reports since April 2020. The Government has also responded quickly to the need for vaccine information to be put into the public domain: since mid-December 2020, weekly UK-wide data on the total number of vaccinations, and the breakdown between under and over 80s for England, has been published. In addition, the vast majority of data used by the Joint Biosecurity Centre (JBC) to provide advice to Ministers is already publicly available, including for example: testing data; the information that PHE publishes; and data from the Office for National Statistics (ONS).

During the pandemic, SAGE has drawn on a diverse range of leading scientific and medical experts from within government, academia, and industry. This includes expertise from, but not limited to; environmental scientists; public health experts; behavioural and social scientists; epidemiologists; virologists; data scientist immunologists; infectious disease clinicians; epidemiological modellers; doctors; genomic experts; anthropologists; psychologists; and therapeutics and vaccine experts.

The Government understands the importance of considering a range of relevant evidence and factors in all its decision-making in relation to the pandemic. This has been its approach throughout. Alongside the views of the scientific community, the information from the New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG), the Joint Committee on Vaccination and Immunisation (JCVI), SAGE and its sub-groups, the Government has also undertaken significant wider analysis and evaluation to inform decisions.

The Government is also keen to better understand the wider health impacts of the Covid-19 pandemic. Research papers related to this subject have already been released following discussion at SAGE. The National Core Studies (NCS) Programme was set up to accelerate research to respond to near term Covid-19 strategic, policy and operational needs focussing on: Epidemiology and Surveillance; Clinical Trials Infrastructure; Transmission and Environment; Immunity Longitudinal Health; as well as Data and Connectivity. The ONS has also announced plans to undertake research into the prevalence of and risk factors for Long Covid.

The Government recognises that, for many people, the pandemic and the measures taken to control the spread of Covid-19 have impacted negatively on their mental health and wellbeing. Measuring and monitoring this has been a key part of the Government's overall response to the pandemic.

Acquiring, analysing and sharing data and information is key to inform scientific advice as well as manage the spread of the virus as effectively as possible. NHS Test and Trace was established on 28 May 2020, and from 11 June 2020, NHS Digital (with the support of the Department) made available an operational data dashboard – including counts of total tests, total positives and total voids per local authority to Directors of Public Health. NHS Test and Trace, JBC and PHE have also established good links and data flows to local authorities to provide insights and these will continue to be monitored and adapted.

Throughout the pandemic, the Government has listened carefully to the views of the scientific community and the information and advice from SAGE and its sub-groups when taking decisions on the best way to tackle the pandemic and has considered the approaches taken by other countries when appropriate.

The Government recognises the need for appropriate parliamentary scrutiny of the actions it has taken during the pandemic. It recognises and values the vital role of Parliament in ensuring that there is proper accountability and will continue to respond positively and constructively to its scrutiny of the ongoing response to the pandemic.

The following response outlines the Government's consideration of the recommendations made within the report. This response was collated by officials within the Department for Health and Social Care (DHSC) with input from relevant Government departments and agencies where necessary. The response has been structured in such a way as to reflect the subheadings in the Committee's list of recommendations.

Summary of Committee Recommendations

Number	Recommendation
Expert advice and Government decision-making structures	
1	The Government, whatever organisational structures it decides upon, should commit to publishing the scientific advice it receives unless there are matters of national security (see paragraphs 59 to 64). The Government should outline in response to this Report how it intends for science advice on the novel coronavirus to operate in the longer-term management of the pandemic and what roles will be played by new bodies including the National Institute for Health Protection and the Joint Biosecurity Centre, alongside SAGE. (Paragraph 33)
2	The Cabinet Office and Government Office for Science should update SAGE guidance to set out the role that SAGE will play in advising the Government's long-term management of emergency scenarios. (Paragraph 34)
Activation and operation of SAGE	
3	The Government Office for Science should confirm, as soon as possible, whether any papers were considered at the first two SAGE meetings and, if so, it should place them in the public domain. (Paragraph 44)
4	The Government should set out in response to this Report how in future emergencies it will engage formally and informally with the community. (Paragraph 45)
5	The Cabinet Office and the Government Office for Science should commit to update SAGE guidance to consider what support might be required for independent advisers in long-term emergency scenarios, within six months of SAGE being deactivated. The Government should identify a way to formally recognise and celebrate all those who have contributed to the UK scientific response to the pandemic. (Paragraph 51)
Transparency and communication	
6	Within three months of this Report, the Cabinet Office should update SAGE guidance to stipulate the timeframes in which SAGE should receive advice from the Centre for the Protection of National Infrastructure, and other relevant bodies, regarding the public disclosure of expert SAGE participants. (Paragraph 56)
7	In response to this Report, the Government should commit to the full disclosure of the following information on SAGE attendees and observers throughout the pandemic: (1) Civil servants at Senior Civil Service grade; (2) political and special advisers; and (3) the representative Government departments and job title of junior officials, in lieu of their names. Further, the Government should commit to the full disclosure of all individuals who attended SAGE meetings—and their affiliations—within three months of

Number	Recommendation
	the current SAGE being stood down, or by the end of 2021, whichever is the earlier. (Paragraph 57)
8	Department of Health and Social Care should commit, within a month of this Report, to publish the relevant outputs—including terms of reference, meeting papers and meeting minutes—of the steering and advisory boards supporting the JBC. DHSC should also set out how regularly these boards will meet and when relevant papers can be expected to be in the public domain—preferably within a fortnight of each meeting. (Paragraph 64)
9	The Government should publish the science advice given by the Government Chief Scientific Adviser and Chief Medical Officer for England to COBR and the Prime Minister to date, and commit to the disclosure of future SAGE advice within two months of it being given, or the policy being decided, whichever is the later. (Paragraph 69)
10	The Government should, as a matter of urgency, publish the advice it has received on the potential indirect Covid-19 impacts (e.g. economic, social and other health impacts) of the interventions it has undertaken, alongside the evidence base for that advice and should continue to commission such research. (Paragraph 87)
11	The public has shown a strong appetite for more information. The Government should attempt to quantify the four forms of health impacts identified by Professor Whitty. Further, it should consider whether it is possible to provide an analysis of—either consistently or on a sample basis—those who died with Covid-19 as distinct from those who died from Covid-19. (Paragraph 88)
12	The Cabinet Office should work alongside the Government Office for Science to update SAGE guidance to incorporate the lessons learned for managing transparency during emergencies, taking account of: a) the potential volume of information; b) the publication and communication of non-peer-reviewed research informing SAGE; c) the potential length of time over which SAGE is activated; and d) the potential impacts on public trust. (Paragraph 89)
13	The Government Office for Science should work with Government departments and public bodies, such as UK Research and Innovation, to identify the lessons to be learned from the Government’s communication of science—drawing also upon the experiences of researchers and their respective institutions. These lessons should be reflected within updated SAGE guidance, including a consideration of the support that SAGE participants may require for effective public communication and engagement during emergencies. (Paragraph 90)
Nature of the scientific advice to Government	
14	The Government must, in response to this Report, set out how advice to central Government on the indirect effects (for instance impacts on mental

Number	Recommendation
	health and social wellbeing, education and the economy) of Covid-19, and the Government's policy response to it, has been structured throughout the pandemic, and commit to the public disclosure of the individuals and institutions from which it has sought such advice and publication of relevant papers. (Paragraph 100)
15	<p>In response to this Report, the Department of Health and Social Care (DHSC) should set out an action plan that describes what efforts have been made, and will be made during the pandemic, to address the poor data access issues raised by the scientific community and SAGE and its sub-groups, including a consideration of:</p> <ul style="list-style-type: none"> i) agreements and incentives for data sharing; ii) integration of data flows across the health and social care sectors, including public health bodies at the national and local levels; and iii) integration of data flows across the health and social care systems of the four UK nations. <p>DHSC should also describe what role the Joint Biosecurity Centre will be given to make best use of such data flows and outline what support it will receive to achieve this. (Paragraph 109)</p>
Application of science expertise	
16	<p>The Government should: explain clearly the justification for taking a relatively centralised approach to test, trace and isolate; set out its assessment of the impact of the system on the spread of the virus since the outset, including on health outcomes; and review the balance between the local and national components of the system, including its value for money and effectiveness. The Government should set out the rationale and justification for, as the National Audit Office put it, the “unusual organisational relationship” that NHS Test and Trace has with the Department of Health and Social Care. (Paragraph 141)</p>
17	<p>The Government should commit to review—before the end of 2021—the relationship between SAGE and expert advisory structures in other countries and the World Health Organisation, to understand where knowledge sharing may be improved during future emergencies. (Paragraph 149)</p>
18	<p>The Government should employ a more adaptive approach to non-pharmaceutical interventions such as social distancing rules and commit to a review of the approach employed in the UK as compared with countries that dealt with the SARS and MERS outbreaks (such as the Republic of Korea), setting out the reasoning for differences in policy decisions. The outcome of this review should be published by the end of 2021. (Paragraph 150)</p>

Responses to the Committee's Recommendations

Expert advice and Government decision-making structures

- 1. The Government, whatever organisational structures it decides upon, should commit to publishing the scientific advice it receives unless there are matters of national security (see paragraphs 59 to 64). The Government should outline in response to this Report how it intends for science advice on the novel coronavirus to operate in the longer-term management of the pandemic and what roles will be played by new bodies including the National Institute for Health Protection and the Joint Biosecurity Centre, alongside SAGE. (Paragraph 33)**

The Government is committed to working in a way that is open and transparent about the relevant data and scientific advice used to inform the response to the pandemic. The Government will publish scientific advice in a timely fashion subject, always, to the well-established principles of protecting national security, respecting commercial confidentiality when necessary, allowing space for policy development, and the need to protect the rights of individuals. Therefore, decisions around the release of scientific advice will continue to be made as circumstances dictate but with the default position being that data and advice should be released.

The Joint Biosecurity Centre (JBC), as a Directorate of NHS Test and Trace within the Department of Health and Social Care (DHSC), gathers, interprets and analyses a range of data. The Government has always sought to be as clear and transparent as possible during the pandemic about how data has been used to inform decisions regarding national and local restrictions designed to limit the spread of the virus. The vast majority of the data used by the JBC to advise Ministers is already publicly available, including testing data, the information that Public Health England (PHE) publishes, and data from the Office for National Statistics (ONS).

The Government Office for Science (GO-Science) is committed to being as transparent as possible with regards to the science advice that informs decisions. Due to the nature of the Covid-19 emergency, its duration, and the intensity of the public's interest GO-Science has, while the pandemic has been in progress, released 684 papers and minutes (as at 30.04.2021) tabled to Scientific Advisory Group for Emergencies (SAGE). However, the right balance must continue to be achieved between the requirement and ambition for transparency, the need to maintain the trust of scientists who provide advice, protecting personal information and national security information. Space also needs to be protected, as part of the policy-making process, for the due consideration of the advice by Ministers and officials.

On 18 August 2020, the Secretary of State for Health and Social Care announced the Government's intention to create a new body bringing together NHS Test and Trace (including the JBC) and PHE's health protection functions into a single organisation focused wholly on protecting people from external threats to health. The UK Health Security Agency, previously named the National Institute for Health Protection, will

boost the UK's ability to deal with and recover from Covid-19 and any future pandemics, and will provide permanent, standing capacity to prepare for, prevent and respond to threats to health.

The name UK Health Security Agency (UKHSA) reflects the importance of meeting health hazards actively and determinedly, in bad times and in good. It captures how critical this unified and strengthened capability will be in securing our future health in the context of a growing panoply of global infectious disease and other health hazards, and in forming a permanent part of our national defences.

The UK element of the name reflects the reserved functions the Agency will hold for example the UK Rapid Support Team as well as respecting the existing collaborative arrangements with the Devolved Administrations. The UKHSA will continue to work across the United Kingdom, and with the public health agencies of Scotland, Wales and Northern Ireland, to build collaborative capability and ways of working that benefit the whole of the UK.

2. The Cabinet Office and Government Office for Science should update SAGE guidance to set out the role that SAGE will play in advising the Government's long-term management of emergency scenarios. (Paragraph 34)

The responsibility for long-term management of emergencies (including prevention, contingency planning, response and recovery) sits with the accountable, policy-owning Government Departments and their respective Ministers in accordance with the principle of lead government department.

The Government will continue to call on the best scientific advice available to inform decision-making in emergencies as required. The process for providing such advice is flexible, to cope with the differing circumstances and characteristics of each emergency. Many departments and agencies have access to specialist scientific and technical advice to support the delivery of their core business and duties. Where a cross-government emergency response is activated and multiple sources of science advice are needed, the advice may be coordinated by committees such as SAGE, and this will be done on a case-by-case basis. SAGE, should only be used for the most serious emergencies that have significant uncertainty, cutting across multiple departments where cross-department working adds value and clarity to the consensus decisions that will need to be taken. SAGE does not have a role in all emergencies (examples may include emergencies where the science is not cross-discipline or where other long-standing crisis response mechanisms exist).

The Government keeps all its crisis management doctrines under review, and its lessons learned processes, following any major civil emergency and response arrangements, evolve in response to these. This work will be taken forward by the Cabinet Office (CO) in conjunction with GO-Science to learn from the response to Covid-19 including how scientific advice can inform the long-term management of emergencies, whilst considering the unique circumstances of Covid-19.

Activation and operation of SAGE

- 3. The Government Office for Science should confirm, as soon as possible, whether any papers were considered at the first two SAGE meetings and, if so, it should place them in the public domain. (Paragraph 44)**

No other papers were commissioned or tabled at those meetings. Minutes for the first two SAGE meetings about the response to Coronavirus (Covid 19), held on 22 and 28 January 2020, can be found on GOV.UK.¹

- 4. The Government should set out in response to this Report how in future emergencies it will engage formally and informally with the community. (Paragraph 45)**

Through SAGE and its sub-committees, the Government has drawn on advice from a wide and diverse pool of advisers from across the scientific community. This has included securing input from; environmental scientists; public health experts; behavioural and social scientists; epidemiologists; virologists; data scientists; immunologists; infectious disease clinicians; epidemiological modellers; doctors; genomic experts; anthropologists; psychologists; and therapeutics and vaccine experts. SAGE is also supported by a number of expert sub-groups and task and finish groups which bring to bear even wider relevant expertise on specific issues.

Diversity of thought and expertise is important, and GO-Science has invested in establishing and developing links with a range of different sectors, and with the learned societies. These positive and constructive relationships and ways of working will be maintained and developed contributing to the future operations of SAGE as appropriate.

- 5. The Cabinet Office and the Government Office for Science should commit to update SAGE guidance to consider what support might be required for independent advisers in long-term emergency scenarios, within six months of SAGE being deactivated. The Government should identify a way to formally recognise and celebrate all those who have contributed to the UK scientific response to the pandemic. (Paragraph 51)**

The Government and the Government Chief Scientific Adviser (GCSA) are deeply appreciative of the significant contributions made, and hard work undertaken by the many independent scientists and experts working in support of the country's response to the pandemic.

The continuing demand for Covid-19 science advice from the Government has placed an exceptional burden on many experts participating in SAGE and its subgroups. In response, GO-Science has offered a range of support to these experts, including on

¹ [SAGE meetings, January 2020 - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

matters such as personal security and wellbeing, as well as sending personalised letters of thanks to a number of University Vice Chancellors to recognise the contribution to SAGE of named academics linked to their respective institutions.

In addition, the Government recognises that a burden has also been placed on universities – the employers of many SAGE participants – particularly during the academic year. To ease this, the Government has identified funding in support of those universities most affected which will be used to provide cover for the academic's duties such as teaching.

Furthermore, activities in support of SAGE are covered by the Research Excellence Framework, the UK system for assessing the quality of research in higher education institutions.² Papers submitted to support and inform SAGE meetings provide excellent examples of work that may be used as a submission to the Research Excellence Framework.

The Government agrees that we should come together to celebrate and recognise the work of all those involved in the unprecedented response to the pandemic. The Government will set out details of how it will take this forward in due course.

² (<https://www.ref.ac.uk>).

Transparency and communication

- 6. Within three months of this Report, the Cabinet Office should update SAGE guidance to stipulate the timeframes in which SAGE should receive advice from the Centre for the Protection of National Infrastructure, and other relevant bodies, regarding the public disclosure of expert SAGE participants. (Paragraph 56)**

Given the extraordinary and extended nature of the Covid-19 outbreak, an exception has been made to the usual SAGE process meaning that the identities of SAGE participants were published online from early May 2020.³

Furthermore, the register of interests for SAGE participants is also available and is kept under continuing review.⁴

These disclosures are in line with current government policy and best practice that the publication of participants' names should be considered carefully due to the risk of physical and/or online threat of intimidation or harm to any named individuals. In this instance, bespoke protective security advice on both physical and online security has been provided to SAGE participants.

The CO and GO-Science will consider where necessary, as part of the wider review of SAGE guidance in the future, revisions to this broad approach.

- 7. In response to this Report, the Government should commit to the full disclosure of the following information on SAGE attendees and observers throughout the pandemic:**

- (1) Civil servants at Senior Civil Service grade;**

- (2) political and special advisers; and**

- (3) the representative Government departments and job title of junior officials, in lieu of their names.**

Further, the Government should commit to the full disclosure of all individuals who attended SAGE meetings—and their affiliations—within three months of the current SAGE being stood down, or by the end of 2021, whichever is the earlier. (Paragraph 57)

SAGE minutes published online already contain details of the Senior Civil Servants as well as special advisers present at meetings. Names of more junior observer government officials who attend the meetings are redacted. This is in line with long-

³ See <https://www.gov.uk/government/publications/scientific-advisory-group-for-emergencies-sage-coronavirus-covid-19-response-membership/list-of-participants-of-sage-and-related-sub-groups>

⁴ See <https://www.gov.uk/government/publications/covid-19-sage-register-of-participants-interests>

standing data protection principles. The safety of civil servants and SAGE attendees will continue to be a priority.

As stated above, the CO and GO-Science will, as part of the wider review of SAGE guidance in the future, consider where necessary the need for any revisions to this broad approach.

8. Department of Health and Social Care should commit, within a month of this Report, to publish the relevant outputs—including terms of reference, meeting papers and meeting minutes—of the steering and advisory boards supporting the JBC. DHSC should also set out how regularly these boards will meet and when relevant papers can be expected to be in the public domain—preferably within a fortnight of each meeting. (Paragraph 64)

DHSC recognises the need for transparency and is committed to openness. Since July 2020, the JBC has published a range of publications including:

- the Watchlist, published weekly, which gives epidemiological data on Covid-19 for each lower-tier local authority in England
- data used to inform the Local Action Committee (through which recommendations on Local Tiers have been developed), which includes epidemiological data and hospitalisation metrics
- a joint publication with the ONS and PHE which brings together a range of indicators used to understand the Covid-19 epidemic in England.

The JBC has also published the methodology behind its risk assessments used to support the UK COVID-19 Alert Level⁵ and Department for Transport’s international travel corridors⁶ policy; a range of research on wastewater; practical outbreak guidance through Action Cards,⁷ and will soon publish code and scientific research through its partnerships with the Alan Turing Institute and the Royal Statistical Society.

Whilst the JBC is not a producer of official statistics, it works closely with the ONS, PHE, and NHS Test and Trace in the development of timely statistical outputs/releases on Covid-19. The JBC also engages with the Office for Statistical Regulation on a weekly basis alongside colleagues at DHSC, PHE and NHS Test and Trace respectively.

The scope and membership of the JBC’s governance boards are currently published. More detailed terms of reference for these groups will be updated and published on the JBC’s website imminently. The Government is working with the Devolved Administrations to co-ordinate publication of minutes of the meetings of the tri-annual Ministerial Board, the quarterly JBC Steering Board and the quarterly Technical Board.

⁵ [UK COVID-19 alert level methodology: an overview - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/uk-covid-19-alert-level-methodology-an-overview)

⁶ [COVID-19 risk assessment methodology for inbound international travel - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/covid-19-risk-assessment-methodology-for-inbound-international-travel)

⁷ [COVID-19 risk assessment methodology for inbound international travel - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/covid-19-risk-assessment-methodology-for-inbound-international-travel)

In doing so, all nations will give due consideration to the provisions of relevant information access legislation.

The JBC will continue to publish the minutes from its monthly Data Science Advisory Board.

9. The Government should publish the science advice given by the Government Chief Scientific Adviser and Chief Medical Officer for England to COBR and the Prime Minister to date, and commit to the disclosure of future SAGE advice within two months of it being given, or the policy being decided, whichever is the later. (Paragraph 69)

GO-Science has released 684 papers (as at 30.04.2021) and the minutes from COVID-SAGE which forms the advice provided to Ministers. The current aim is to release papers about two weeks after the SAGE meeting at which the advice was considered, unless for reasons of national security, commercial sensitivity or the need to protect space for policy development. In practice, papers are often released much sooner than this, for example the minutes of the SAGE meeting held on Thursday 18 February 2021 and 19 related papers were released on Monday 22 February alongside publication of the Government's Roadmap.

Each emergency is unique and therefore the timing of release of advice from SAGE will need to be agreed with CO and No. 10 in accordance with the circumstances of future incidents.

Where appropriate, and in keeping with the strong public interest in maintaining the safe space for the process of policy formulation the principle of Cabinet Collective Responsibility, advice to the Prime Minister and COBR may need to be kept confidential to ensure advisers can express their views frankly in the expectation that they can provide the fullest possible advice to Ministers and the Prime Minister. COBR is formally a Committee of the Cabinet, and it is a long-established precedent that information about the discussions that have taken place in Cabinet and its Committees, and how often they have met, is not normally shared publicly.

10. The Government should, as a matter of urgency, publish the advice it has received on the potential indirect covid-19 impacts (e.g. economic, social and other health impacts) of the interventions it has undertaken, alongside the evidence base for that advice and should continue to commission such research. (Paragraph 87)

The Government agrees that it is important that it considers a wide range of factors in all its decision-making in relation to the pandemic. This has been its approach throughout as it has sought to slow the virus, protect the NHS, save lives, and protect the livelihoods of those affected by the pandemic.

The Government remains committed to publishing data that has informed its decision making, for example in making decisions about the tiers framework and allocations of local areas.⁸ Evidence on the most effective steps that can be taken to limit the transmission of the virus continues to be reviewed regularly, and guidance and policies are kept under constant review and in the light of new evidence.

On 30 November 2020, the Government published an analysis of the health, economic and social effects of Covid-19 and the approach to tiering. The Government also published the supporting data and rationale to inform individual tiering allocations. In the coronavirus (Covid-19) section of the GOV.UK website the Government also publishes an extensive range of data that has been used to inform its decision making. This includes PHE analytical reports on health, including mental health and wellbeing.

The Government has utilised a number of evidence sources regarding the economic impacts of the pandemic, including economic data published by the ONS, forecasts and projections prepared by the Office for Budget Responsibility, the Bank of England and others, academic literature and real-time information such as mobility data.

The Government will continue to work closely with a range of stakeholders to inform and enhance its response to the pandemic. It continues to build the evidence base, including active consideration of research and evidence needs in response to increasing scientific understanding.

11. The public has shown a strong appetite for more information. The Government should attempt to quantify the four forms of health impacts identified by Professor Whitty. Further, it should consider whether it is possible to provide an analysis of—either consistently or on a sample basis—those who died with covid-19 as distinct from those who died from covid-19. (Paragraph 88)

The Government is keen to better understand the wider health impacts⁹ of the Covid-19 pandemic as identified by the Chief Medical Officer. These health impacts may relate to mortality, in terms of excess deaths, or morbidity, in terms of effects on health more generally. Relevant papers have been published by both SAGE and ONS on this matter, produced by DHSC, the Home Office, and the Government Actuary's Department.

The first SAGE paper on this matter, published in June 2020, presented initial estimates of excess deaths from the Covid-19 pandemic.¹⁰ The second, published in

⁸ [The health, economic and social effects of COVID-19 and the tiered approach - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/the-health-economic-and-social-effects-of-covid-19-and-the-tiered-approach)

⁹ *There are four forms of health impacts⁹ identified by the CMO that might occur as a result of the Covid-19 pandemic: Health impacts from contracting Covid-19, Health outcomes for Covid-19 worsened because of lack of NHS critical care capacity, Health impacts from changes to health and social care made in order to respond to Covid-19, and Health impacts from factors affecting the wider population, both from living through the pandemic and the economic impacts increasing deprivation.*

¹⁰ <https://www.gov.uk/government/publications/initial-estimates-of-excess-deaths-from-covid-19-8-april-2020>

August 2020, captured both mortality and morbidity impacts.¹¹ The papers have also been used to inform analysis of the health effects of Covid-19 related to the introduction of tiers.¹² A third, updated paper, was published in January 2021 and seeks to provide an update with more recent evidence.¹³

These analyses aim to discuss and quantify, as far as possible, the impacts of the Covid-19 pandemic on health, using the four forms of health impacts. However, in some cases it is not possible to quantify the health impacts that may occur, and instead, where necessary, qualitative discussion is provided. It is important to note that the analyses use scenarios to consider potential future impacts and are neither projections nor forecasts.

On 17 July 2020, the ONS published a report looking at all deaths between 1 March and 30 June 2020 where Covid-19 is mentioned on the death certificate.¹⁴ The doctor certifying a death can list all causes in the chain of events that led to the death and pre-existing conditions that may have contributed to the death. Using this information, an underlying cause of death is determined. More information on this process can be found in the supporting user guide.¹⁵ In the majority of cases (46,736 deaths, 92.8%) where Covid-19 was mentioned on the death certificate, it was found to be the underlying cause of death.

12. The Cabinet Office should work alongside the Government Office for Science to update SAGE guidance to incorporate the lessons learned for managing transparency during emergencies, taking account of:

- a) the potential volume of information;**
- b) the publication and communication of non-peer-reviewed research informing SAGE;**
- c) the potential length of time over which SAGE is activated; and**
- d) the potential impacts on public trust. (Paragraph 89)**

The CO will work with GO-Science to evolve SAGE guidance, in order to learn from and build on the lessons and positive developments regarding transparency over the past 12 months, in light of the response to the pandemic.

In the past, advice produced by SAGE would not have been made publicly available until the end of the incident it had been stood up to advise on. Given the protracted

¹¹ <https://www.gov.uk/government/publications/dhsconsgadho-direct-and-indirect-impacts-of-covid-19-on-excess-deaths-and-morbidity-15-july-2020>

¹² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/944823/Analysis_of_the_health_economic_and_social_effects_of_COVID-19_and_the_approach_to_tiering_FINAL_-_accessible_v2.pdf

¹³ <https://www.gov.uk/government/publications/dhsconsgadho-direct-and-indirect-impacts-of-covid-19-on-excess-deaths-and-morbidity-december-2020-update-17-december-2020>

¹⁴ [Deaths involving COVID-19, England and Wales - Office for National Statistics \(ons.gov.uk\)](https://www.gov.uk/government/publications/deaths-involving-covid-19-england-and-wales-office-for-national-statistics)

¹⁵ [User guide to mortality statistics \(ons.gov.uk\)](https://www.gov.uk/government/publications/user-guide-to-mortality-statistics)

and unprecedented nature of the current situation, the GCSA recognised the need to be as transparent as possible, as early as possible.

In response to the long running nature of the Covid-19 pandemic, SAGE has now been activated for the longest continual period since its inception. Previously, the role of SAGE was to respond to short lived emergencies. SAGE has, as of 23 April 2021, met 87 times since early January 2020, at least once a week, to provide scientific advice on Covid-19. As at 30 April 2021, 684 papers and minutes from SAGE discussions have been released to ensure transparency.

More widely than SAGE, the Government is committed to learning from this process to ensure that there are robust procedures in place that are able to provide the best possible scientific advice, both to address short term issues and for the longer term, whilst also maintaining public confidence in that advice.

The Government has ensured that a significant amount of data on the state of the pandemic is available publicly. For example, the coronavirus public dashboard is updated daily, with the latest available data on cases, deaths, vaccinations, testing, healthcare and the virus reproduction number 'R'.¹⁶ This includes a postcode tracker so individuals can check the situation in their area. Slides and data from press conferences can be found at GOV.UK and are normally published at the time of the press conference. The data, statistics, and modelling outputs used in public briefings, including any revisions, are published as part of this process.

The publication of the Covid-19 Winter Plan (on 23 November 2020) set out the five indicators on which tiering decisions were to be based: case rates; case rates in over 60s; the change in case rates; the positivity rate; and, NHS metrics.¹⁷ Metrics on case numbers, cases by age demographics, case positivity and NHS Covid-19 occupancy can all be downloaded on GOV.UK.¹⁸

Over time, government investment in foundational skills and capabilities for data and analytics will deliver significant improvements in horizon-scanning and preparedness activities to strengthen resilience to a range of major disruptive events. In addition to this, the creation of a central picture of where there are weaknesses in data holdings will help to identify and prioritise areas for future investment.

¹⁶ [Daily summary | Coronavirus in the UK \(data.gov.uk\)](https://data.gov.uk/coronavirus-daily-summary)

¹⁷ [COVID-19 Winter Plan - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/covid-19-winter-plan)

¹⁸ <https://coronavirus.data.gov.uk/details/cases>.

13. The Government Office for Science should work with Government departments and public bodies, such as UK Research and Innovation, to identify the lessons to be learned from the Government’s communication of science—drawing also upon the experiences of researchers and their respective institutions. These lessons should be reflected within updated SAGE guidance, including a consideration of the support that SAGE participants may require for effective public communication and engagement during emergencies. (Paragraph 90)

GO-Science and the GCSA are committed to ensuring science advice provided to Ministers and officials is relevant and fit-for-purpose. The nature and demands of the pandemic, including the spotlight on SAGE, has required action to be undertaken to refine and improve the way the science advice is communicated. During the Covid-19 pandemic GO-Science has, with the support of SAGE participants:

- Worked with the Science Media Centre to host on-the-record briefings on key topics for science and health correspondents, to explain current scientific evidence on Covid-19.
- Facilitated regular background briefings on a weekly or fortnightly basis for science journalists to explain data and the technical content of SAGE papers, and to inform reporting on other key areas of evidence and long-term thinking relating to Covid-19.
- Facilitated work with the learned society to deliver ‘ask the expert’ sessions on Covid-19 science topics to Parliament and the Devolved Administrations.
- Arranged teach-ins to ensure government officials remain fully briefed on the current science surrounding Covid-19.

Additionally, the GCSA has authored op-eds in the mainstream press to inform the public on the science behind issues such as vaccines development, and he has also responded directly to questions on Covid-19 from viewers during ITV and Sky News appearances.

GO-Science will work with the Civil Contingencies Secretariat (CCS) and Cabinet Office on the evolution of SAGE guidance and government communications more generally to build on the lessons learned from the pandemic to further develop their approach to science communications.

The Government will also work with UK Research and Innovation (UKRI) to evaluate the communication of science during the pandemic. Recognising the risks of misinformation and conflicting advice on public health and safety, it was an early objective of UKRI to ensure that scientific evidence around Covid-19 was communicated effectively to the public, complementing other channels such as via guidance produced by PHE. In support of this and at the request of the GCSA, UKRI launched the Coronavirus Explained website¹⁹ in March 2020 to provide authoritative

¹⁹ <https://coronavirusexplained.ukri.org/en/>

and up-to-date explanations of the scientific evidence related to the Covid-19 pandemic to the public. UKRI and NIHR also contribute, on behalf of the Government, to the funding of the Science Media Centre which is an independent organisation dedicated to providing accurate and evidence-based information about science and engineering to the public through the news media.

Nature of the scientific advice to Government

14. The Government must, in response to this Report, set out how advice to central Government on the indirect effects (for instance impacts on mental health and social wellbeing, education and the economy) of covid-19, and the Government's policy response to it, has been structured throughout the pandemic, and commit to the public disclosure of the individuals and institutions from which it has sought such advice and publication of relevant papers. (Paragraph 100)

The Government considers the understanding and mitigation of negative indirect impacts to be imperative to the recovery from Covid-19 and this is part of the CO's remit. The CO works in partnership with other Departments, local government, Arms-length bodies, SAGE and other stakeholders, to ensure that a wide range of evidence and insights on these issues are considered and that these impacts are mitigated against effectively through policy design and implementation.

On 29 June 2020, the Prime Minister announced an updated list of Cabinet Committees.²⁰

Principal structures for the Government's decision-making include the Covid-19 Strategy and Covid-19 Operations Committees, which meet as required to take operational and policy decisions. As noted elsewhere in this response, advice to these Cabinet Committees may need to be kept confidential to ensure advisors can express their views frankly.

Individual Departments represented at these Cabinet Committees, together with JBC and PHE, draw upon their own analysis and stakeholder groups in order to assess the direct and indirect effects of Covid-19 on their areas of responsibility.

In regard to tiering decisions and the allocation of local areas into different tiers, the CO Covid-19 Taskforce has supported collective decision making, ensuring Ministers have the best set of analyses possible, including analysis of potential social, economic and equalities impacts.

More generally, as part of decision-making, a range of Covid-19 and non-Covid-19 health, economic, and social and wellbeing metrics have been utilised to inform the design of measures that take account of indirect impacts, including:

- Levels, rate and location of Covid-19 infections
- Healthcare metrics, such as hospital admissions
- Outbreaks in care homes
- Mental health impacts, including survey data on wellbeing, such as self-reported levels of frustration, boredom, and loneliness
- Rates of crime
- School attendance (including eligible vulnerable children)

²⁰ [List of Cabinet Committees - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/collections/cabinet-committees)

- Mobility data
- Distributional indicators
- Self-reported survey data to help assess compliance
- Excess deaths not attributed to Covid-19 (compared to previous averages)
- Labour market indicators, including ONS labour market statistics and HMRC CJRS data
- GDP and sectoral GVA
- External estimates of economic impacts, such as OBR/IMF/BoE scenario estimates
- Business survey data, including on business closures and financial performance
- Consumer confidence and measures of consumer spending (such as financial transactions data).

15. In response to this Report, the Department of Health and Social Care (DHSC) should set out an action plan that describes what efforts have been made, and will be made during the pandemic, to address the poor data access issues raised by the scientific community and SAGE and its sub-groups, including a consideration of:

- i) agreements and incentives for data sharing;**
- ii) integration of data flows across the health and social care sectors, including public health bodies at the national and local levels; and**
- iii) integration of data flows across the health and social care systems of the four UK nations.**

DHSC should also describe what role the Joint Biosecurity Centre will be given to make best use of such data flows and outline what support it will receive to achieve this. (Paragraph 109)

Agreements and incentives for data sharing

DHSC recognises that cross-organisational working is more important than ever given the nature and impact of the Covid-19 pandemic. As a result, various channels of data access and sharing have been strengthened or established, and both internal and public-facing central dashboards have been set up to show joined-up, UK-wide data related to a number of Covid-19 related indicators, ensuring analysts from within and outside government have access to the same key metrics. In addition, attendance at both new and existing cross-government working groups and calls has facilitated information-sharing and collaboration.

The NHS Test and Trace operation, launched in England on the 28 May 2020, was put together at pace and scale to support the urgent response needed to test the public. All councils in England have the ability to access testing data, right down to individual and postcode level. PHE share this as soon as it has been quality assured

and data dashboards have been shared with local authorities since 11 June 2020. Data has been enhanced and expanded over time as the operation has matured.

As JBC has become established, its data sharing functionality has increased substantially, in particular across government with PHE, the CO, ONS and the NHS, and with local partners and the devolved administrations. To deliver this the JBC has invested significant resource to ensure all regulatory requirements and ethical considerations have been covered in establishing and designing processes and agreements for onward data sharing. It now has a wide range of Data Sharing Agreements, Memorandums of Understanding and Data Protection Impact Assessments in place to facilitate the sharing of data externally in a timely fashion.

Integration of data flows across the health and social care sectors, including public health bodies at the national and local levels

The response to Covid-19 created a large volume of new data feeds into central organisations, particularly NHS England. Those processes were supported by short term changes in regulations, including use of the Control of Patient Information regulations to enable data sharing and use. This has given the system the confidence needed to effectively share data relating to Covid-19. It has also helped to ensure data is passed effectively across the health and care system to support the Covid-19 response and has been important in the development of data platforms and tools to support data analysis, sharing and re-use.

The Health Data Research Innovation Gateway provides a common entry point to discover and enquire about access to UK health datasets for research and innovation. It provides detailed information about the datasets which are held by members of the UK Health Data Research Alliance, which include NHS, research and charitable organisations.

Experts in public health and epidemiology in the JBC are working in close partnership with PHE to develop a detailed picture of Covid-19 at a national, regional and local level, and to understand the risk factors associated with transmission. This analysis complements the wealth of surveillance and testing data already being provided to decision makers at a local and national level.

The JBC is also piloting an initiative, known as Local Data Spaces, that is aimed at giving local authorities across England secure access to key national Covid-19 datasets on the ONS Secure Research Service (SRS), and is working with partners to consider how that could scale in the future.

JBC has also facilitated the flow of NHS Test and Trace, PHE and NHS data into ONS' SRS for use by accredited academics, integrating data flows for scientific use.

The JBC's use of data within the ONS SRS, including in collaboration with members of the wider scientific research community, is overseen by the UK

Statistics Authority's Research Accreditation Panel and the National Statistician's Data Ethics Advisory Committee.

Integration of data flows across the health and social care systems of the four UK nations

There is close working with Devolved Administrations across a number of areas which has ensured UK alignment on a number of metrics, as reflected in the UK-wide coronavirus GOV.UK dashboard.²¹ The Health Data Research Innovation Gateway is revolutionising discovery of and access to data through streamlined and harmonised access management for the first time, across the United Kingdom.

Through its work with the Devolved Administrations, the JBC is building a true four nations organisation, formally embodied in a Political Agreement and an Agency Agreement, both of which have been endorsed by the Secretary of State for Health and Social Care and his counterparts across the UK. The implementation of these agreements at a working level is well underway with the foundations laid for the Devolved Administrations to be ingrained in the fabric of the JBC, through participation in the prioritisation of analytical work, increased collaboration on the discharge of that work, and the formal embedding of staff from the Devolved Administrations in the JBC. This work will have significant long-term impacts in health: laying a roadmap for joint working between respective governments and administrations in the fields of health protection and pandemic response.

NHSX is to launch a Data Strategy for Health and Social Care which will set out how the lessons of Covid-19 can be built on as well as measures, including legislation, to enable timely access to data for legitimate purposes and with appropriate protections beyond the pandemic response. This commitment to a system-wide approach to data and analysis also aligns with the overall ambitions for better use of data in the UK as set out in the National Data Strategy²².

²¹ [Daily summary | Coronavirus in the UK \(data.gov.uk\)](https://data.gov.uk/publications/daily-summary-coronavirus-uk)

²² <https://www.gov.uk/government/publications/uk-national-data-strategy/national-data-strategy>

Application of science expertise

16. The Government should: explain clearly the justification for taking a relatively centralised approach to test, trace and isolate; set out its assessment of the impact of the system on the spread of the virus since the outset, including on health outcomes; and review the balance between the local and national components of the system, including its value for money and effectiveness. The Government should set out the rationale and justification for, as the National Audit Office put it, the “unusual organisational relationship” that NHS Test and Trace has with the Department of Health and Social Care. (Paragraph 141)

Approach to test, trace and isolate

The Government does not believe that its approach to test, trace and isolate should come down to a simple either/or between a national or local approach, but rather that a combined approach is best suited to delivering results. The NHS Test and Trace service was designed to build on existing arrangements and to provide the additional operational capacity required to support PHE's scientific and specialist contact tracing expertise.

It was recognised early in the pandemic that local engagement was key to the success of Test and Trace activities. Between April and May 2020, Regional Engagement Teams comprised of senior staff from Government Departments were created to liaise and build relationships with local government colleagues. These teams worked with local stakeholders on the placement of test sites, delivering testing to marginalised and digitally excluded groups, and the instigation of local test sites.

From the start, NHS Test and Trace has sought to develop a collaborative and integrated approach, for instance through supporting local authorities in developing Local Outbreak Plans and through a contact tracing system that triages more complex cases to local public health teams in some areas. The Government understands that countries that have adopted a solely local model have struggled to cope with the scale of the pandemic. Equally, it is understood that an entirely national model is not an effective approach to managing the pandemic response.

The DHSC has always been clear that NHS Test and Trace will not succeed on its own which is why it works hand-in-hand with trusted partners: academics, local public health experts, local authorities and the NHS, as well as employers and local businesses, and communities across the country. Together, testing and contact tracing is delivered, as well as providing tailored support, advice and guidance to keep the virus under control through a ‘team of teams’ approach.

Local authorities play a hugely important role in delivering test and trace services and supporting their communities through outbreaks. Across the UK, there is close working to ensure effective and timely local delivery of testing and contact tracing, alongside a robust national network.

The Government's intention has always been to build an integrated national and local service from the outset. This includes, for example, the local coordination and deployment of mobile and local test sites as well as the launch and development of local testing partnerships.

Assessment of impact

NHS Test and Trace contributes to the wider government strategy to keep the reproduction rate (R) below 1, through breaking chains of transmission by using testing to identify people who are infected, tracing their contacts (who are at heightened risk of being infected), and promoting successful self-isolation both for confirmed positive cases and their contacts. It also uses the data and intelligence gained from testing and contact tracing to provide crucial insights into where and how the virus is spreading and to help local authorities prevent and manage local outbreaks.

Since NHS Test and Trace was launched in May 2020 NHS Test and Trace has conducted more than 156 million PCR and LFD tests have been processed. It has also traced 6.7 million contacts and asked them to self-isolate to help stop the onward spread of the virus. So far, NHS Test and Trace has successfully reached 86.6% of the people who received a positive test result, and 82.3% of their contacts, making a real impact in breaking the chains of transmission to reduce the R number.

NHS Test and Trace impact modelling has estimated that the combination of testing, tracing and self-isolation reduced the R number in October 2020 by around 0.3–0.6, compared to a scenario with only social distancing, restrictions and no self-isolation. Feedback on this model was provided in November by expert academics. A technical annex which provides a detailed mathematical description of the impact modelling approach was published on the 11 February 2021.²³ Modelling in place can also assess the impact of changes in the Test and Trace programme on R.

In addition, the JBC provides actionable information to local and national decision-makers help understand the spread of Covid-19, including how and why it is spreading, what the consequences might be, and how action might best be prioritised to prevent spread.

The JBC also provides advice on border controls, contributes to genomic surveillance of the virus to find new strains and will monitor the effect of the vaccine on transmission.

Value for money

The Government is funding local authorities in England in order to support the ongoing public health and outbreak management costs of tackling Covid-19. The Contain Outbreak Management Fund (COMF) will continue at a rate of £4/head/month until 31 March, taking the total in 2020-21 to £1.7 billion.

²³ [The Rùm Model technical annex - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/94424/20210211-Annex-Model-Technical-Annex.pdf)

While the Government is now in a position to look towards an easing of restrictions, it is important to continue to support local authorities to keep doing their most important public health work in responding to the virus over the coming months. The Government has therefore announced a further £400m funding for COMF from 1 April to cover further public health activities in 2021-22, taking total COMF support across 2020-21 and 2021-22 to £2.1bn.

Local authorities have COMF funding for testing for hard-to-reach groups, compliance and enforcement measures and public health messaging to diverse communities. This is to help local authorities across England to contain local outbreaks, reduce transmission and protect the vulnerable.

NHS Test and Trace has examined and strengthened its commercial arrangements to make sure it is scaled and resourced to understand and manage commercial process and delivery risk.

At the macro level, it has been and continues to be the Government's strategy to manage and contain the course of Covid-19 until an effective vaccine can be deployed at scale across the population. Although that vaccine programme is now well underway, it will remain a continuous effort until the entire population is vaccinated. Looking at disease prevalence, including new variants of concern, and the repercussions of the current lockdown, spending public money to identify Covid-19 cases and break transmission chains, is good value for money when considering the overall impact of inaction on public health, economic performance and social wellbeing. Any transmission chains that are broken is a positive outcome.

At a more granular level, it is recognised that the value for money of a specific intervention is linked to the way in which it is delivered. For example, by assessing the unit costs of a test or contact traced; the reasonableness of workforce size; and the utilisation of central DHSC contracts to supply personal protective equipment, and asymptomatic test site equipment. The programme has evolved significantly from its reliance on direct awards to tendering and competing its contracts thereby delivering value for money on an intervention-by-intervention basis.

Relationship between NHS Test and Trace and DHSC

At the time of the National Audit Office report referenced, Baroness Harding was reporting to the Prime Minister and Cabinet Secretary. This arrangement has, however, been altered recently so that NHS Test and Trace operates under DHSC's umbrella and Baroness Harding now reports directly to the Secretary of State for Health and Social Care.

17. The Government should commit to review—before the end of 2021—the relationship between SAGE and expert advisory structures in other countries and the World Health Organisation, to understand where knowledge sharing may be improved during future emergencies. (Paragraph 149)

GCSA and CMO have, since the start of the pandemic, engaged with international counterparts on a regular basis in order to share information during what has been a rapidly evolving situation. The UK is currently on the Executive Board of the World Health Organisation (WHO) and the Government regularly engages with the WHO and shares information.

SAGE participants have also engaged with international counterparts to share and discuss the latest understanding of the pandemic. The SAGE model is well-regarded internationally and GO-Science engages with other nations who are interested in the UK approach to emergency science advice.

GO-Science continuously explores ways to feed into international lessons learnt fora. For example, it recently contributed to the Government's response to the Independent Panel for Pandemic Preparedness and Response following a request from WHO Member States in July 2020 to look at the C-19 pandemic and how the WHO responded. GO-Science also has links to various international organisations with an interest in science for emergencies, such as the Organisation for Economic Co-operation and Development and the International Network for Government Science Advice. It will consider the Committee's recommendation as it takes this work forward.

18. The Government should employ a more adaptive approach to non-pharmaceutical interventions such as social distancing rules and commit to a review of the approach employed in the UK as compared with countries that dealt with the SARS and MERS outbreaks (such as the Republic of Korea), setting out the reasoning for differences in policy decisions. The outcome of this review should be published by the end of 2021. (Paragraph 150)

The Government keeps all non-pharmaceutical interventions and social distancing rules under constant review to ensure the measures remain necessary and proportionate. For example, the Government is legally required to review the Steps regulations at least every 35 days. As set out in the Roadmap, we are also conducting a review of social distancing and other measures to determine when and under what circumstances social distancing guidance can be lifted or amended, and the implications for other measures, including face coverings and working from home guidance. These reviews examine the latest epidemiological data available at the time.

The Government always takes any decision in collaboration with medical and scientific advisers. Throughout the pandemic, the Government has listened carefully to the views of the scientific community, the information from SAGE and its sub-groups when taking decisions on the best way to tackle the pandemic.

There is ongoing, regular, dialogue with other countries and with the Devolved Administrations to discuss different approaches. For example, when considering the use of face coverings, the Government noted approaches taken in Europe and Asia, with some European countries having mandated the use of face coverings in indoor settings such as shops and supermarkets. Building upon advice from the WHO on 5 June 2020 that fabric face coverings should be used in public where social distancing is not possible, measures were brought into force to require mandatory use of face coverings in indoor public settings and transport settings. It is worth noting though that in many cases, responses by international partners to the pandemic varied and may not always have been applicable to the situation in the UK at the time.

Going forward, in taking decisions during reviews on restrictions and policies applying in England, consideration will continue to be given to approaches taken in other countries and the rest of the UK where appropriate.

978-1-5286-2505-0

CCS0321245842