

UK COVID-19 Inquiry: Module 2 - Rule 9

Responses to Request to Professor Dame Theresa Marteau - Reference: M2/SAGE/01/TM

1. A brief overview of your qualifications, career history, professional expertise and major publications.

Qualifications: BSc Social Psychology London School of Economics and Political Science, 1975
MSc Abnormal Psychology University of Oxford Wolfson College, 1977
PhD Health Psychology University of London, 1986

Career history: Lecturer, Royal Free Hospital School of Medicine, 1986-1992
Senior Lecturer then Professor, Kings College, London, 1992-2010
Director of Research and Professor (Hon), University of Cambridge, 2010 -

Professional expertise:

Cognitive, emotional and behavioural responses to health risk information
Changing behaviour at scale across populations, equitably
Public acceptability of government intervention to change behaviour

Major salient publications

- *Cognitive, emotional and behavioural responses to health risk information* Marteau TM, Saidi G, Goodburn S, Lawton J, Michie S, Bobrow M. Numbers or words? A randomized controlled trial of presenting screen negative results to pregnant women. [Prenatal Diagnosis 2000 20\(9\), 714-8.](#)

Hollands GJ, French DP, Griffin SJ, Prevost AT, Sutton S, King S, Marteau TM. The impact of communicating genetic risks of disease on risk-reducing health behaviour: systematic review with meta-analysis. [BMJ. 2016 Mar 15;352.](#)
- *Changing behaviour at scale across populations, equitably*
Marteau TM, Hollands GJ, Fletcher PC. Changing human behavior to prevent disease: the importance of targeting automatic processes. [Science. 2012 Sep 21;337\(6101\):1492-5.](#)

Marteau TM, Rutter H, Marmot M. Changing behaviour: an essential component of tackling health inequalities. [BMJ. 2021 Feb 10;372.](#)
- *Public acceptability of government intervention to change behaviour*
Reynolds JP, Stautz K, Pilling M, van der Linden S, Marteau TM. Communicating the effectiveness and ineffectiveness of government policies and their impact on public support: a systematic review with meta-analysis. [Royal Society Open Science. 2020 Jan 15;7\(1\):190522.](#)

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2. A list of the groups (i.e. SAGE and/or any of its sub-groups) in which you have been a participant, and the relevant time periods.

SPI-B (Scientific Pandemic Insights Group on Behaviour): March 2020 – February 2022

EMG (Environmental Modelling Group): April 2020 – February 2022

SAGE (Scientific Advisory Group for Emergencies): April 2020 – April 2021

3. An overview of your involvement with those groups between January 2020 and February 2022, including:

When and how you came to be a participant:

SPI-B: I first participated in SPI-B on 30 March 2020. This followed an email from James Rubin on 25 March 2020, one of the Chairs of SPI-B, inviting me to contribute expertise in cognitive, emotional and behavioural responses to health risk information to anticipate responses to COVID tests, under development at that time. I was then invited to continue to participate in SPI-B contributing expertise beyond responses to COVID tests. I remained a participant until February 2022 when SPI-B was stood down.

EMG: I was nominated by the co-Chairs of SPI-B to participate in EMG when the latter was set up in April 2020 to contribute my expertise in environments and changing behaviour at scale across populations. I remained a participant until EMG was stood down in February 2022.

SAGE: I was invited to participate in SAGE to present papers on which I had taken a lead in preparing through SPI-B, EMG or combinations of groups including SAGE.

The number of meetings you attended, and your contributions to those meetings:

SPI-B & EMG: I attended 22 SPI-B meetings and most of the 39 EMG meetings held during the periods of my participation as noted above (*The secretariat for EMG was provided by the Health and Safety Executive which has yet to issue formal records of attendance*).

My contributions to these meetings included providing expertise relevant to the items under discussion and presenting draft papers for comment.

SAGE: I attended seven SAGE meetings to present and discuss papers on which I had taken a lead in preparing, the first being SAGE 22 (April 2020), the last being SAGE 86 (April 2021).

Your role in providing research, information and advice:

I took the lead or joint lead on papers or sections of papers listed in response to Question 4 below. This involved conducting or overseeing others conducting reviews of the literature as well as primary paper drafting.

I occasionally took the lead or joined others on designing and conducting studies to generate evidence to inform advice or policy responses to advice (see peer reviewed articles *a,b,c* listed in response to Question 5 below).

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4. A summary of any documents to which you contributed for the purpose of advising SAGE and/or its related subgroups on the Covid-19 pandemic. Please include links to those documents where possible.

I commented on many documents prepared by SPI-B and EMG from April 2020 onwards. The list below is of those documents for which my contribution was more substantive *i.e.* involved taking a lead or co-lead in preparing the paper or contributing to the drafting of one or more sections.

Papers discussed at SAGE

- a. [SPI-B: Antibody tests: realise benefits and minimize harms - note, 1 April 2020](#) (SAGE 22, 2 April 2020)
- b. [SPI-B: Pre-empting possible negative behavioural responses to COVID-19 antibody testing, 13 April 2020](#) (SAGE 26, 16 April 2020)
- c. [SPI-B: How behaviour may change following testing - initial response, 22 April 2020](#) (SAGE 28, 23 April 2020)
- d. [SPI-B: Symptom-based contact tracing in comparison to test-based approaches - note, 29 April 2020](#) (SAGE 30, 28 April 2020)
- e. [SPI-B: Key behavioural issues relevant to test, trace, track and isolate - summary, 6 May 2020](#) (SAGE 34, 7 May 2020)
- f. [SPI-B: Consensus statement on the reopening of large events and venues, 19 August 2020](#) (SAGE 52, 20 August 2020)
- g. [TFMS: Consensus statement on mass testing, 27 August 2020](#) (SAGE 53, 27 August 2020)
- h. [SPI-B: Impact of financial and other targeted support on rates of self-isolation or quarantine, 16 September 2020](#) (SAGE 57, 17 September 2020)
- i. [SPI-B: Behavioural considerations of health certificates in population mass testing, 26 November 2020](#) (SAGE 70, 26 November 2020)
- j. [SPI-B: Health status certification in relation to COVID-19, behavioural and social considerations, 9 December 2020](#) (SAGE 72, 10 December 2020)
- k. [SPI-B: Behavioural considerations for vaccine uptake in Phase 2 and beyond, 9 March 2021](#) (SAGE 83, 11 March 2021)
- l. [EMG and DCMS: Science framework for opening up group events, 16 March 2021](#) (SAGE 86, 8 April 2021)

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- m. [EMG Transmission Group: Insights on transmission of COVID-19 with a focus on the hospitality, retail and leisure sector, 8 April 2021](#) (SAGE 86, 8 April 2021)
- n. [EMG, SPI-M and SPI-B: Considerations in implementing long-term 'baseline' NPIs, 22 April 2021](#) (SAGE 87, 22 April 2021)
- o. [SPI-B, SPI-M and EMG: Considerations for potential impact of Plan B measures, 13 October 2021](#) (SAGE 96, 14 October 2021)
- p. [SPI-B: Behavioural considerations for maintaining or reintroducing behavioural interventions and introducing new measures in autumn 2021, 14 October 2021](#) (SAGE 96, 14 October 2021)
- q. [EMG Transmission Subgroup: Consensus statement on SARS-CoV-2 transmission risk at festivals, 23 December 2021](#) (SAGE 101, 23 December 2021)

Background papers

- a. [SPI-B: Extended paper on behavioural evidence on the reopening of large events and venues, 21 August 2020](#)
- b. [TFMS: Behavioural paper supporting the consensus statement on mass testing, 27 August 2020](#)

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5. A summary of any articles you have written, interviews and/or evidence you have given regarding the work of the above-mentioned groups and/or the UK's response to the Covid-19 pandemic. Please include links to those documents where possible.

Peer reviewed articles

- a. Mantzari E, Rubin GJ, Marteau TM. Is risk compensation threatening public health in the covid-19 pandemic? [BMJ. 2020 Jul 26;370](#)

Unfounded concerns about risk compensation threaten public health when they delay the introduction of protective measures such as wearing of face coverings.

- b. Waller J, Rubin GJ, Potts HW, Mottershaw AL, Marteau TM. 'Immunity Passports' for SARS-CoV-2: an online experimental study of the impact of antibody test terminology on perceived risk and behaviour. [BMJ Open. 2020 Aug 1;10\(8\):e040448.](#)

Objective To assess the impact of describing an antibody-positive test result using the terms Immunity and Passport or Certificate, alone or in combination, on perceived risk of becoming infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and protective behaviours. **Design** 2x3 experimental design. **Setting** Online. **Participants** 1204 adults from a UK research panel. **Intervention** Participants were randomised to receive one of six descriptions of an antibody test and results showing SARS-CoV-2 antibodies, differing in the terms describing the type of test (Immunity vs Antibody) and the test result (Passport vs Certificate vs Test). **Main outcome measures** Primary outcome: proportion of participants perceiving no risk of infection with SARS-CoV-2 given an antibody positive test result. Other outcomes include: intended changes to frequency of hand washing and physical distancing. **Results** When using the term Immunity (vs Antibody), 19.1% of participants (95% CI 16.1% to 22.5%) (vs 9.8% (95% CI 7.5% to 12.4%)) perceived no risk of catching coronavirus given an antibody-positive test result (adjusted OR (AOR): 2.91 (95% CI 1.52 to 5.55)). Using the terms Passport or Certificate—as opposed to Test—had no significant effect (AOR: 1.24 (95% CI 0.62 to 2.48) and AOR: 0.96 (95% CI 0.47 to 1.99) respectively). There was no significant interaction between the effects of the test and result terminology. Across groups, perceiving no risk of infection was associated with an intention to wash hands less frequently (AOR: 2.32 (95% CI 1.25 to 4.28)); there was no significant association with intended avoidance of physical contact (AOR: 1.37 (95% CI 0.93 to 2.03)). **Conclusions** Using the term Immunity (vs Antibody) to describe antibody tests for SARS-CoV-2 increases the proportion of people believing that an antibody-positive result means they have no risk of catching coronavirus in the future, a perception that may be associated with less frequent hand washing.

- c. Smith LE, Mottershaw AL, Egan M, Waller J, Marteau TM, Rubin GJ. The impact of believing you have had COVID-19 on behaviour: Cross-sectional survey. [PLOS ONE 2020 Nov 4 16\(2\): e0248076](#)

Objectives To investigate whether people who think they have had COVID-19 are less likely to report engaging with lockdown measures compared with those who think they have not had COVID-19. **Design** On-line cross-sectional survey. **Setting** Data were collected between 20th and 22nd April 2020. **Participants** 6149 participants living in the UK aged 18 years or over. **Main outcome measures** Perceived immunity to COVID-19, self-reported adherence to social distancing measures (going out for essential shopping, nonessential shopping, and meeting up with friends/family; total out-of-home activity), worry about COVID-19 and perceived risk of COVID-19 to oneself and people in the UK. Knowledge that cough and high temperature / fever are the main symptoms of COVID-19. We used logistic regression analyses and one-way ANOVAs to investigate associations between believing you had had COVID-19 and binary and continuous outcomes respectively. **Results** In this sample, 1493 people (24.3%) thought they had had COVID-19 but only 245 (4.0%) reported having received a positive test result. Reported test results were often incongruent with participants' belief that they had had COVID-19. People who believed that they had had COVID-19 were: more likely to agree that they had some immunity to COVID-19; less likely to report adhering to lockdown measures; less worried

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about COVID-19; and less likely to know that cough and high temperature / fever are two of the most common symptoms of COVID-19. **Conclusions** At the time of data collection, the percentage of people in the UK who thought they had already had COVID-19 was about twice the estimated infection rate. Those who believed they had had COVID-19 were more likely to report leaving home. This may contribute to transmission of the virus. Clear communications to this growing group are needed to explain why protective measures continue to be important and to encourage sustained adherence.

- d. Drury J, Rogers MB, Marteau TM, Yardley L, Reicher S, Stott C. Re-opening live events and large venues after Covid-19 'lockdown': Behavioural risks and their mitigations. [Safety Science. 2021 Jul 1;139:105243](#)

Background: Covid-status certification – certificates for those who test negative for the SARS-CoV-2 virus, test positive for antibodies, or who have been vaccinated against SARS-CoV-2 – has been proposed to enable safer access to a range of activities. Realising these benefits will depend in part upon the behavioural and social impacts of certification. The aim of this rapid review was to describe public attitudes towards certification, and its possible impact on uptake of testing and vaccination, protective behaviours, and crime. **Method:** A search was undertaken in peer-reviewed databases, pre print databases, and the grey literature, from 2000 to December 2020. Studies were included if they measured attitudes towards or behavioural consequences of health certificates based on one of three indices of Covid-19 status: test-negative result for current infectiousness, test-positive for antibodies conferring natural immunity, or vaccination(s) conferring immunity. **Results:** Thirty-three papers met the inclusion criteria, only three of which were rated as low risk of bias. Public attitudes were generally favourable towards the use of immunity certificates for international travel, but unfavourable towards their use for access to work and other activities. A significant minority was strongly opposed to the use of certificates of immunity for any purpose. The limited evidence suggested that intention to get vaccinated varied with the activity enabled by certification or vaccination (e.g., international travel). Where vaccination is seen as compulsory this could lead to unwillingness to accept a subsequent vaccination. There was some evidence that restricting access to settings and activities to those with antibody test certificates may lead to deliberate exposure to infection in a minority. Behaviours that reduce transmission may decrease upon health certificates based on any of the three indices of Covid 19 status, including physical distancing and handwashing. **Conclusions:** The limited evidence suggests that health certification in relation to COVID-19 – outside of the context of international travel – has the potential for harm as well as benefit. Realising the benefits while minimising the harms will require real-time evaluations allowing modifications to maximise the potential contribution of certification to enable safer access to a range of activities.

- e. Drury J, Mao G, John A, Kamal A, Rubin GJ, Stott C, Vandrevalla T, Marteau TM. Behavioural responses to Covid-19 health certification: a rapid review. [BMC Public Health. 2021 Dec;21\(1\):1-6.](#)

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- f. Marteau TM, Parker MJ, Edmunds WJ. Science in the time of COVID-19: Reflections on the UK Events Research Programme. [Nature Communications. 2022 Aug 10;13\(1\):1-5.](#)

We reflect on the extent to which the UK Events Research Programme adhered to four principles of design and evaluation in assessing risk of transmission from attending such mass events as football matches and festivals, and lessons learned.

- g. Marteau TM. Evidence-neglect: a major barrier to government health and climate ambitions. [Journal of Public Policy \(under review\).](#)

Recent UK governments have set some audacious ambitions to improve the nation's health and tackle climate change. These include halving childhood obesity and eradicating smoking by 2030 and achieving net zero carbon emissions by 2050. None of these ambitions is on course to be met. Chief amongst the possible reasons is the neglect of evidence in the policies implemented to achieve these ambitions. Three sets of factors likely contribute to this neglect: an incentive structure for politicians that favours setting ambitious policy goals while disfavouring the effective policies needed to achieve them; ideologies and interests that conflict with effective policies; and, a failed "safety net" of policy evaluation. There are no simple fixes. Two changes – engaging citizens more in policy-making and requiring published evaluations at all three stages of policy-making – have the potential to shift existing systems to accord evidence the more central role in policy-making needed for policy success.

Seminars

I participated in two seminars on COVID-19 that included discussion of SAGE and government responses:

- i. Bennett Institute of Public Policy, University of Cambridge
[Science, Evidence and Government: Reflections on the COVID-19 Experience 10 November 2020](#)
- ii. Department of Political Science, UCL
[Three Sages on Improving Scientific Advice to Government](#)
24 February 2022
<https://podcasts.apple.com/gb/podcast/policy-and-practice-three-sages-on-improving/id1500411454?i=1000552199804>

Interviews

I declined all requests for media interviews, a decision I made upon becoming a participant in SAGE and subgroups¹.

¹ https://issuu.com/christsalumni/docs/pieces_40-lent_2021, page 14

6. Your views as to whether the work of the above-mentioned groups in responding to the Covid-19 pandemic (or the UK's response more generally) succeeded in its aims. This may include, but is not limited to, your views on:

a. The composition of the groups and/or their diversity of expertise

SPI-B and EMG brought in expertise when needed as recognised by their Chairs or other participants. These sub-groups therefore had the diversity of expertise needed to carry out their work as perceived by existing participants.

b. The way in which the groups were commissioned to work on the relevant issues

In my experience the commissioning process worked best when there was dialogue between the Government Office for Science secretariat (GO-Science secretariat) and policy-makers. This allowed the questions of interest to policy-makers to be refined to achieve questions framed in ways that could be answered using evidence and were manageable in scope. For example, having been asked to work on advice regarding the use of health certificates in the context of mass testing² I worked with the GO-Science secretariat – who liaised directly with policy-makers - to help refine the commissioning brief to ensure that the policy-makers questions were framed to enable an evidence based response in a timely fashion.

c. The resources and support that were available

The GO-Science secretariat provided excellent technical and administrative support to SPI-B and SAGE meetings as well as to participants leading on papers. This included convening meetings (both formal and informal meetings of smaller groups working on papers), generating technical action oriented minutes extremely rapidly, sharing requested information from across government departments and SAGE sub-groups, and editing draft papers.

Had it been available, I would have welcomed additional support in the form of expertise in rapid reviews of salient evidence. While some academies including the Royal Society did provide expert reviews on selected topics, the secretariat supporting SAGE and sub-groups might consider extending their expertise to include this. Methods being developed to assist such rapid reviews for use in and outside of emergencies include the use of automation, crowdsourcing and the use of single databases such as *OpenAlex*³.

² [SPI-B: Behavioural considerations of health certificates in population mass testing, 26 November 2020](#) (SAGE 70, 26 November 2020)

³ Evidence Surveillance During the Pandemic: using automation and crowdsourcing James Thomas (Ed) *Journal of the European Association for Health Information and Libraries (EAHIL)*, 17(2), 11–15 June 2021

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d. The advice given and/or recommendations that were made

The content of advice given, in my view, achieved the broad aims of the groups namely to provide scientific advice to support decision-makers during an emergency.

Regarding the form in which the advice was given, this improved over time, becoming more succinct and more structured. I am unaware, though, of any attempt to evaluate how effective the written documents containing SAGE advice were at communicating this advice to policy-makers.

There would be merit, in my view, in the commissioning of a programme of research, perhaps via UK Research and Innovation, to evaluate the effectiveness of different formats and framings for communicating science advice to policy-makers both in and outside of emergencies.

e. The extent to which the groups worked effectively together

In my experience the groups worked together extremely well particularly given the scale and speed with which we were working, often meeting for the first time on-line. This was enabled by a strong sense of common purpose as well as privilege in being able to contribute expertise to the UK response to an unprecedented crisis affecting SAGE participants along with the rest of the population. In 2020 it was not uncommon for many of us to be working long hours, seven days a week. This was enabled by the GO-Science secretariat which was similarly imbued with a strong sense of collective purpose, working within a shift system to provide support at night and at weekends.

f. The extent to which applicable structures and policies were utilised and/or complied with and their effectiveness.

To the extent that I was aware of the governance structures and policies governing the work of SAGE and sub-groups I believe these were complied with both by the GO-Science secretariat and by participants in SAGE and sub-groups.

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7. Your views as to any lessons that can be learned from the UK's response to the Covid-19 pandemic, in particular relating to the work of the above-mentioned groups. Please describe any changes that have already been made, and set out any recommendations for further changes that you think the Inquiry should consider making.

In my view one important lesson that can be learned from the UK's response to the Covid-19 pandemic is the need for strengthened systems across government to achieve robust evaluations of policy responses both in and outside of an emergency.

Some of the work of the groups in which I participated would likely have been improved by policy responses to SAGE advice being evaluated robustly, whether the policy response was to act on SAGE advice or not to act on it.

SAGE sometimes advised the need for such robust evaluations, but this advice often went unheeded.

Such evaluations would have generated evidence with three potential benefits: (a)

Real-world evidence with which to refine subsequent SAGE advice

(b) Refinement of policies based on real time monitoring thereby maximising their effectiveness, for example, at reducing transmission of Covid-19

(c) Value for money and other outcomes to evaluate major policy decisions

Some of these points are illustrated in policy responses to two sets of SAGE advice:

i. financial support for self-isolation in lowest income households

SAGE advised urgent provision and evaluation of financial support to avoid loss of income in the poorest households, to realise the considerable investment in *NHS Test and Trace* intended to prevent transmission and contribute to economic recovery⁴. The policy announced a few days after this advice in September 2020 included the provision of a fixed sum for those required to isolate - £500 – for which those eligible for state benefits could apply⁵. While a fixed sum was not what had been advised, this did represent an increase in financial support available for some low-income households. Fines were also included to enforce the requirement for self-isolation, starting at £1,000 and rising to £10,000. The impact of enforcement was not considered in the SAGE advice⁴, but a potentially problematic trade-off was noted in this advice between enforcement of self-isolation and willingness of people to report symptoms. The impact of the new policy on rates of self-isolation or testing rates was not evaluated. While additional financial support of £500 would likely have increased the number of people self-isolating, the size of this possible effect is unknown. It is also possible that the prospect of being fined for not self-isolating, coupled with £500 being insufficient financial provision to do so, deterred some from undergoing testing and in turn self-isolation. The size of this possible effect is also unknown. This latter effect is of particular concern given the higher rates of transmission and death amongst those living in the poorest households.

⁴ [SPI-B: Impact of financial and other targeted support on rates of self-isolation or quarantine, 16 September 2020](#) (SAGE 57, 17 September 2020)

⁵ Prime Minister's Office. New package to support and enforce self-isolation. 20 September 2020. <https://www.gov.uk/government/news/new-package-to-support-and-enforce-self-isolation>.

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Had a robust evaluation been designed as part of the rollout of this new policy it could have generated evidence with the potential to achieve the three benefits of robust evaluation of policy responses to SAGE advice listed above.

ii. vaccination rollout to maximise uptake across social groups

Uptake of national vaccination programmes in the UK that pre-date COVID-19 are lower in areas with a higher proportion of minority ethnic groups⁶. Rates of COVID-19 were also highest in these areas, and death rates from COVID-19 amongst those in minority ethnic groups disproportionately higher⁷. Government was advised by SAGE in December 2020 to anticipate lower COVID-19 vaccination uptake amongst these groups:

There is a significant risk that vaccine uptake for COVID-19 will be lower among minority ethnic groups. Barriers to uptake must be understood and addressed within the COVID19 vaccination programme (high confidence)⁶.

Robust evaluation was necessary – although not sufficient - to understand and address the predicted lower uptake among minority ethnic groups. Such an evaluation did not happen. Many local initiatives were reported through the media including walk-in and pop-up clinics, vaccine vans and free festivals. But none were part of formal evaluations allowing their effectiveness to be assessed and the rollout adapted based on robust evidence to optimise vaccination rates in all social groups. As of April 2022, around 74% of the population in England had received three vaccinations, a figure masking large variations across social groups, ranging from 59% of those in the most deprived quintile of the population to 84% of those in the least, and from 38% of those self-described as Pakistani to 79% of those self-described as White British⁸. In July 2022 the Public Accounts Committee called on NHS England and the UK Health Security Agency to urgently evaluate which approaches are most effective for increasing uptake and tackling the persistently low uptake in some ethnic groups⁹.

Had a robust evaluation been designed as part of the rollout of the vaccination programme, alongside initiatives to mitigate the predicted lower uptake among minority ethnic groups, it could have generated evidence with the potential to achieve the three benefits of robust evaluation of policy responses to SAGE advice listed above and avoided the call for an urgent evaluation 18 months later.

⁶ [Scientific Advisory Group for Emergencies. 2020. SAGE 73 Minutes: Coronavirus \(COVID-19\) Response, 17 December 2020.](#)

⁷ Raleigh, VS. 2022. Ethnic Differences in Covid-19 Death Rates *BMJ*. 23 February 2022. <https://www.bmj.com/content/376/bmj.o427>.

⁸ Office for National Statistics. Coronavirus and Vaccination Rates in People Aged 18 Years and over by Socio-Demographic Characteristic and Region, England. 10 June 2022. <https://www.ons.gov.uk/releases/coronavirusandvaccinationratesinpeopleaged18yearsandoverbysocio-demographiccharacteristicandregionengland>.

⁹ House of Commons Public Accounts Committee. The rollout of the COVID-19 vaccine programme in England. Eleventh Report of Session 2022-23. 4 July 2022 <https://committees.parliament.uk/publications/23019/documents/168825/default/>

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By contrast, the Events Research Programme provides an example of a robust evaluation of a major policy response to Covid-19. This was enabled by a Science Framework developed by a group that I co-chaired comprising participants in EMG, SPI-B and SAGE¹⁰. Three of us involved in the Science Framework and the independent Science Board set up by three government departments - DCMS, BEIS and DHSC – to oversee the Events Research Programme have documented our assessment of the strengths and weakness of the programme¹¹.

The more general failure to robustly evaluate policy responses to SAGE advice arguably reflects the weak system of policy evaluation across government evident before Covid-19. There is good government guidance on policy evaluation in The Magenta Book and The Green Book¹². But this guidance seems most often not to be followed. In its more recent review of evaluation of policy, the National Audit Office reported that just 8% of major spending projects in 2019 had robust evaluation plans¹³. Lack of political engagement in evaluation and low capacity across government have been suggested by the National Audit Office as enduring barriers to evaluation^{11 14}.

Addressing these and other systemic barriers to evaluation of policy decisions could benefit policy making both in and outside of emergencies.

I provide more detail and discussion of some of the points raised above in a paper undergoing peer review¹⁵.

¹⁰ [EMG and DCMS: Science framework for opening up group events 16 March 2021](#) (SAGE 86, 8 April 2021)

¹¹ Marteau TM, Parker MJ, Edmunds WJ. Science in the time of COVID-19: Reflections on the UK Events Research Programme. *Nature Communications*. 2022 Aug 10;13(1):1-5. <https://www.nature.com/articles/s41467-022-32366-1>

¹² HM Treasury. The Magenta Book: HM Treasury guidance on what to consider when designing an evaluation. Last updated: 1 April 2020. <https://www.gov.uk/government/publications/the-magenta-book>

HM Treasury. The Green Book: HM Treasury guidance on how to appraise and evaluate policies, projects and programmes. Last updated 30 March 2022. <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government>

¹³ National Audit Office Evaluating government spending. 2 December 2021. <https://www.nao.org.uk/report/evaluating-government-spending/>

¹⁴ National Audit Office. Evaluation in Government. December 2013. <https://www.nao.org.uk/report/evaluation-government/>

¹⁵ Marteau TM. Evidence-neglect: a major barrier to government health and climate ambitions. *Journal of Public Policy* (under review). <https://psyarxiv.com/cndbp>

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8. A brief description of documentation relating to these matters that you hold (including soft copy material held electronically). Please retain all such material. I am not asking for you to provide us with this material at this stage, but I may request that you do so in due course.

I am not aware that I hold any documentation relating to my comments not already in the public domain that would be useful to the Covid-19 inquiry. However, if any relevant documentation is located in due course, I will ensure that it is retained.

