

Witness Name: Professor Michael
Parker
Statement No.: 1
Exhibits: MP-7/01 – MP-7/26
Dated: 15 May 2025
Ref: M7/Parker/01

COVID-19 INQUIRY – MODULE 7

WITNESS STATEMENT OF PROFESSOR MICHAEL PARKER

Section 1: Introduction	3
<i>Qualifications and Career History</i>	3
<i>Professional expertise</i>	4
<i>Genomics and genetics</i>	4
<i>Global Health and Infectious Disease Ethics</i>	5
<i>Major publications relevant to TTI</i>	6
List of groups (i.e. SAGE and/or any of its sub-groups or other groups/committees) of which I have been a participant, during the relevant time period	7
Section 2: Overview of relevant involvement in respect of TTI with those groups during the relevant period	8
<i>My role in providing research, information and advice in respect of TTI</i>	9
Section 3: Summary of documents to which I contributed, articles I have written, interviews and/or other evidence given for the purposes of advising SAGE and/or its related subgroups in respect of Test, Trace and Isolate.	10
<i>Documents</i>	11
<i>Articles</i>	11
<i>Podcasts, interviews and/or other evidence</i>	12
Section 4: Testing Technologies	12
<i>Testing systems and strategies in future pandemics</i>	13
<i>Role of scientific modelling in the development, implementation and evaluation of TTI systems</i>	15
Section 5: Views on lessons that can be learned and recommendations for further changes	15
<i>Lessons that can be learned of relevance to Test Trace and Isolate and Module 7's outline for scope.</i>	15
<i>Any recommendations for further changes that I think the Inquiry should consider making relative to Test, Trace and Isolate</i>	17
Section 6: Unequal Impacts	18
Statement of Truth	20
Annex A: Major Publications	21
Annex B: Exhibit Schedule	23

I, **PROFESSOR MICHAEL PARKER**, of The Ethox Centre, Nuffield Department of Population Health at the University of Oxford, Old Road Campus, OX3 7LF, will say as follows:

Section 1: Introduction

- 1.1. I make this statement pursuant to the UK Covid-19 Inquiry's Rule 9 request of 1 November 2024 ('**The Rule 9**').
- 1.2. I have previously submitted a response to an Inquiry Rule 9 Questionnaire on 13 October 2022 ('**The Rule 9 Questionnaire Response**') [INQ000056579].
- 1.3. Matters I set out within this statement are within my own knowledge save for where I state otherwise. Where I refer to facts not within my own knowledge, I will provide the source for those facts. The contents of this statement are, to the best of my knowledge and belief, both true and correct.
- 1.4. This statement addresses my role and involvement in the approach to testing, tracing and isolation ('**TTI**') adopted during the Pandemic in England, Wales, Scotland and Northern Ireland from 1 January 2020 until 28 June 2022. This statement has been prepared based on my personal recollections, and the views expressed are my own.

Qualifications and Career History

- 1.5. I hold the following professional qualifications:
 - a) Bachelor of Education (B.Ed Hons) from the University of West England (1984);
 - b) PhD in Philosophy from Hull University (1992); and
 - c) Master of Arts (MA) from Oxford University (2003).
- 1.6. I am currently a Professor of Bioethics and Director of the Ethox Centre ('**Ethox**') in the Nuffield Department of Population Health at the University of Oxford. I have held these positions since 2004.
- 1.7. The positions I held prior to this were as follows:
 - a) Team Leader and Project Worker at short and long-term high-support hostels for homeless young people in Central London, primarily with Centrepoint Soho from 1985 to 1995;
 - b) Researcher in Applied Ethics at the Centre for Professional Ethics at the University of Central Lancashire from 1995 to 1996;

- c) Lecturer in Medical Ethics at the School of Health and Social Welfare at the Open University from 1996 to 1997;
- d) Lecturer in Medical Ethics at the Division of Primary Care and Population Health Sciences at Imperial College London from 1997 to 1999; and
- e) Lecturer then Reader in Medical Ethics at Ethox at the Nuffield Department of Population Health at the University of Oxford from 1999 to 2004.

Professional expertise

- 1.8. As indicated, I am a Professor of Bioethics and Director of Ethox, an internationally recognised, multidisciplinary ethics research centre with approximately 55 researchers and support staff. It aims to improve ethical standards in medical practice, policy and research through education, research and the provision of ethics support to health professionals, medical researchers, and policymakers.
- 1.9. In all its activities Ethox seeks to be close to practice and to engage with ethical issues faced by real world actors in real world settings i.e. doctors, researchers, policy makers. One implication of this is that its research is often conducted in partnership with health professionals and medical scientists.
- 1.10. Ethox has developed an innovative model for embedding ethics into large scale scientific initiatives. This has included Genomics England, The Pandemic Sciences Institute, Oxford Biomedical Research Centre, The Big Data Institute, and the Wellcome Africa and Asia Research Programmes.
- 1.11. In terms of professional expertise, I am an academic bioethicist with a focus on ethical aspects of global health, infectious diseases, genomics, and data science.

Genomics and genetics

- 1.12. In 2001, I established, together with clinical colleagues, the Genetics Forum, the UK's national ethics resource for clinicians, researchers and laboratory staff in genetics. This is both an innovative model of ethical support and a valuable research resource. The Genetics Forum has met three times a year since 2001. It provides a valuable national resource for the identification and addressing of ethical issues in genomics and genetics, and for the sharing of good practice between different regional teams. In my research on ethics and genetics I have published on a range of ethical questions including:
 - a) The limits of confidentiality and the uses of genetic information in patient and family care;

- b) Prenatal testing;
 - c) Genetic testing of children and young people;
 - d) Issues arising out of the close relationships between clinical practice and research; and
 - e) The uses of pathogen genomics in public health.
- 1.13. In 2013, because of my work on ethics of genetics, I was invited by the then Chief Medical Officer for England Professor Dame Sally Davies to chair the Ethics Advisory Committee for the '100,000 Genomes Project' and to become a member of the Genomics England Board.
- 1.14. In 2022, on reaching the end of my second term of office, I left Genomics England and became the chair of the Ethics Advisory Board for Our Future Health.
- 1.15. I am currently an ethics adviser to both Our Future Health and UK Biobank. Both are large cohort studies and research biobanks. UK Biobank includes samples and data from approximately 500,000 people. Our Future Health was launched in 2023 and aims to recruit five million people as part of its research study.
- 1.16. As of January 2025, I am also an Ethics adviser to the Advanced Research and Invention Agency ('**ARIA**').

Global Health and Infectious Disease Ethics

- 1.17. Since 2004, I have conducted extensive research into global health bioethics and infectious diseases ethics.
- 1.18. In 2011, together with partners in Kenya, Malawi, South Africa, Thailand and Vietnam, I established the Global Health Bioethics Network, which conducts collaborative research on ethical issues in global health and supports career development, doctoral research and small-scale local research projects. The funding for this network has recently been extended by the Wellcome Trust to 2029.
- 1.19. In 2020, together with Professor Jeffery Kahn at the Berman Institute of Bioethics at Johns Hopkins University I established the Oxford-Johns Hopkins Global Infectious Disease Ethics Collaborative ('**GLIDE**'), which is an infectious disease ethics network bringing together collaborators from the UK, the US, and a range of low and middle-income countries ('**LMIC's**').
- 1.20. With partners in LMIC settings, I have published on a wide range of ethical issues in global health. This includes topics like fair research collaboration, genomic research in

LMIC settings, data sharing, ethics of research in global health emergencies, the use of phylogenetics in global health research, and the ethics of research with 'vulnerable groups'.

1.21. Two pieces of work in global health are of particular relevance to my role in SAGE and the UK's response to COVID-19:

- a) **Research in Global Health Emergencies - ethical issues:** From 2018 to 2020, I chaired a two-year international working group on the ethics of research in global health emergencies for the Nuffield Council on Bioethics. The Working Group report, which was informed by extensive processes of evidence gathering, including fact-finding visits to West Africa and China, was published in January 2020 (Available as PDF on the Nuffield Council website) [MP-7/01 – INQ000553349]. In February 2020, at the World Health Organisation ('WHO') Plenary meeting on COVID-19, the report was described as 'the cutting edge of relevant ethics guidance'. I was subsequently invited to become a member of the WHO COVID-19 Ethics and Governance Working Group; and
- b) **Ethics and the use of contact tracing mobile phone apps:** I provide further detail on this work at paragraph 4.3.

Major publications relevant to TTI

1.22. A complete list of my relevant publications can be found in Annex A, however my publications I consider directly relevant to TTI are set out below:

- a) **'Ethical Hotspots in Infectious Disease Surveillance for Global Health Security Social justice and Pandemic Preparedness'**, Parker M, 20 April 2023 [MP-7/02 – INQ000553360]
- b) **'Top five ethical lessons of COVID-19 that the world must learn'**, Smith MJ, Ahmad A, Arawi T et al, 29 January 2021 [MP-7/03 – INQ000553368]
- c) **'Immunity certification for COVID-19: ethical considerations'**, Voo TC, Reis AA, Thome B, Ho CW, Tam CC, Kelly-Cirino C, Emanuel E, Beca JP, Littler K, Smith MJ, Parker M, Kass N, Gobat N, Lei R, Upshur R, Hurst S, Munsaka S, 1 December 2020 [MP-7/04 – INQ000553369]
- d) **'SARS-CoV2 challenge studies: risks and ethics (or risk minimisation in context)'**, Bull S, Binik A, Jamrozik E, Parker M, 25 September 2020 [MP-7/05 – INQ000553370]

- e) **‘Ethical challenges in pathogen sequencing: a systematic scoping review’**, Johnson SB, Parker M., 3 June 2020 [MP-7/06 – INQ000553371]
- f) **‘The ethics of instantaneous contact tracing using mobile phone apps in the control of the COVID-19 Pandemic’**, Parker M, Fraser C, Abeler-Dorner L, Bonsall D, 4 May 2020 [MP-7/07 – INQ000553372]
- g) **‘Quantifying SARS-CoV-2 transmission suggests epidemic control with digital contact tracing’**, Ferretti L, Wymant C, Kendall M. et al., 31 March 2020 [MP-7/08 – INQ000553373]
- h) **‘Science in the time of COVID-19 Reflections on the UK Events Research Programme in England’**, Marteau TM, Parker MJ, & Edmunds WJ, 10 August 2022 [MP-7/09 – INQ000498474]

List of groups (i.e. SAGE and/or any of its sub-groups or other groups/committees) of which I have been a participant, during the relevant time period

1.23. During the relevant period, I participated in the following groups:

- a) SAGE from 10 April 2020 to 10 February 2022;
- b) SPI-B from 11 May 2020 to 9 December 2022;
- c) Vaccine Science Coordination Group from 6 November 2020 to 3 June 2021;
- d) SAGE sub-group on children and schools, I attended one meeting on 23 April 2020;
- e) SAGE sub-group on ethnicity, I attended one meeting on 21 August 2020;
- f) SAGE Task and Finish Group on Mass Screening from 11 August 2020 to 19 August 2020; and
- g) Events Research programme Science board (Department of Media, Culture and Sport) from 1 March 2021 to 22 October 2021.

1.24. Prior to my involvement in SAGE, I undertook some collaborative research on the ethics of digital contact tracing with Professor Christophe Fraser and his group who did much of the design for the COVID-19 contact tracing apps used in the UK and elsewhere. In collaboration with Professor Fraser’s group, I identified and analysed the ethical issues that would need to be addressed if digital contract tracing were to be successfully implemented in ways conducive to public trust and confidence. This research was published in two papers. One primarily focused on the science but with

some consideration of ethics. The other primarily concerned with the ethics [see MP-7/07 – INQ000553372 and MP-7/08 – INQ000553373].

- 1.25. I discuss the key findings of these papers and their implications for TTI policy below in paragraph 4.3.

Section 2: Overview of relevant involvement in respect of TTI with those groups during the relevant period

- 2.1. I was invited by Lord Vallance of Balham and Professor Sharon Peacock (via a telephone call) to be a participant in SAGE on 10 April 2020.
- 2.2. Later invitations to participate in various SAGE sub-groups arose during SAGE meetings or direct approaches from sub-group chairs.
- 2.3. I attended every SAGE group meeting from 14 April 2020 until its final meeting on 10 February 2022, totalling 69 meetings [MP-7/10 – INQ000553350].
- 2.4. My role in SAGE and its sub-groups was to:
- a) Encourage SAGE participants and sub-group members to pay careful attention to the ethical dimension of their analyses, advice, and decisions;
 - b) Highlight ethical and value questions pertinent to specific advice under consideration and provide analyses of these questions as required;
 - c) Ensure that discussion at meetings paid attention to morally significant considerations. These included issues such as equity, social justice, impacts on those who are already disadvantaged, liberty, privacy, the importance of reducing harms, and priority setting questions;
 - d) Highlight that difficult decisions might be required with regards to these important but sometimes competing values, and to emphasise the need for such decisions to be explicitly justified; and
 - e) Respond to requests for discussion papers on ethical questions.
- 2.5. I saw my role on SAGE as being primarily concerned with providing policymakers and scientists with tools to navigate the value judgements involved in policymaking. My role was not to provide answers but to provide policymakers with useful, relevant tools for decision-making. In this way, I was able to provide some, hopefully useful, input into discussions leading to SAGE advice and inform the work of all sub-groups in paragraph 1.23 of this statement and papers emerging from them. Discussion papers produced as a result of these meetings are listed at paragraphs 3.3 and 3.4 below.

Your role in providing research, information and advice in respect of TTI.

2.6. My role in SAGE and its sub-groups was to encourage SAGE participants and sub-group members to pay careful attention to the ethical dimension of their analyses, advice and decisions and highlight ethical and value questions pertinent to specific advice under consideration and provided analyses of these questions. I also ensured that discussions paid attention to morally significant considerations like equity, social justice, impacts on disadvantaged, liberty, privacy, importance of reducing harms and priority setting questions, and highlighted that difficult decisions might be required with regards to important but competing values, and to emphasise the need for such decisions to be explicitly justified. The majority of my input consisted of input of this kind into whatever issues were being discussed in specific meetings. The following issues were specific to TTI:

- a) It became apparent fairly early on in the Pandemic that there were significant numbers of members of the public who were very well-intentioned with regards to testing and 'doing the right thing' but were concerned with the effect isolation would have on their family. There were members of the public who were hesitant to test when a positive test could mean they would not be able to work or perform other crucial activities that were imperative for their livelihood and their family. This presented important questions of social justice and meant that those who were already disadvantaged, for example if employed on zero hours contracts, had their disadvantage and that of others around them compounded. My view, and that of others on SAGE and sub-committees, was that much more needed to be done to enable individuals to test and isolate without this having very serious personal ramifications. My advice was that the public required protection to be put into place, especially job protection for those who took tests and were forced to stay at home to isolate;
- b) Similarly, for a contact tracing app to succeed there needed to be a willingness to upload test results. There needed to be support or protections in place in order for the public to participate in testing without fear of losing their job or similar risks, if they were required to self-isolate. Groups that were disadvantaged found adherence to testing the most challenging;
- c) In my work with the contact tracing app team, I became convinced both that the contact tracing app and other digital tools could play an important and ethically acceptable role in pandemic prevention and control if they provided

appropriate privacy protections, their use was equitable and proportionate, and subject to appropriate oversight. More details on these questions can be found in the paper titled 'The ethics of instantaneous contact tracing using mobile phone apps in the control of the COVID-19 pandemic' [MP-7/07 – INQ000553372]; and

- d) Finally, I argued throughout the Pandemic that there was a strong ethical obligation to undertake research and conduct methodologically rigorous evaluations of all interventions to ensure learning for future pandemics and to protect future generations. This was a key finding of my working party for the Nuffield Council on Bioethics on the ethics of research in global health emergencies. One of the strongest recommendations I would want to make to those involved in pandemic preparedness, prevention, and response is that research and the systematic gathering of data should be integrated throughout. The report titled 'Research in global health emergencies - ethical issues' is exhibited as MP-7/01 – INQ000553349.

Section 3: Summary of documents to which I contributed, articles I have written, interviews and/or other evidence given for the purposes of advising SAGE and/or its related subgroups in respect of Test, Trace and Isolate.

- 3.1. I have written documents, articles, been involved in a podcast and contributed to international discussions on the work above.
- 3.2. In this section, I have included documents, articles, interviews and/or other evidence which are relevant to TTI as well as those which are pertinent to the question of unequal impact on people and groups across the UK.
 - a) In February 2021, I was asked to do some 'blue skies' thinking about possible ethical issues that might arise as winter 2021-2022 approached. The exam question was, 'If it proved impossible to fully vaccinate the UK population by that time, what would be required for the development of an ethical policy to the management of social distancing?' The paper is entitled, 'Lifting social distancing measures and preparing for Winter: Ethical considerations' and was, I believe, sent to the Cabinet Office. Fortunately, due to the success of the vaccine roll out, this eventuality did not materialise [MP-7/11 – INQ000215807].
 - b) I was commissioned by UKHSA to run an expert roundtable and publish a report on the ethics of incorporating research into health emergency

response. This report also references my previous submission to the Inquiry's Module 2 request [MP-7/12 – INQ000553352].

Documents

3.3. As noted above, I was commissioned to write the following papers on specific ethical issues whilst working within SAGE and SPI-B:

- a) 'Ethics of emerging from lockdowns' - At the time of joining SAGE, I was struck by the overwhelming focus in policy discussions and ethics literature on the requirements for a lockdown to be justified. I noted that little to no attention was paid to the ethical considerations of how to lift a lockdown. The paper, written in April 2020, addressed those questions. I was asked to write a one-page report on the topic, which explains why it is short and relatively high level. The paper also highlights that policy decisions informed by science always involve the making of value judgments which require justification and with regard to which ethics advice has a useful role to play. [MP-7/13 – INQ000117946]
- b) In September 2021, I was asked by GO-Science to produce a proposal for how to develop an effective approach to the integration of ethics advice into response to future emergencies, including emergencies with healthcare. Drawing on my SAGE experience, this paper is entitled, 'Ethics Advice in Emergencies'. This paper contains most of the recommendations I would personally make. [MP-7/14 – INQ000553354]

3.4. I also played a key role in facilitating communication between SAGE and the Department of Health and Social Care's ('DHSC') Moral and Ethics Advisory Group ('MEAG') to produce a paper on the ethics of immunity certification. This paper was co-authored with the chair of MEAG and one of its members in December 2020 [MP-7/15 – INQ000386875].

Articles

3.5. In addition to the articles listed above, I wrote the following articles whilst being a SAGE participant:

- a) **'Should Covid vaccination be mandatory for health and care staff?'**, Parker M, 5 August 2021 [MP-7/16 – INQ000553356]
- b) **'A network of empirical ethics teams embedded in research programmes across multiple sites: opportunities and challenges in**

contributing to COVID-19 research and responses', Ngwenya N, Ilo Van Nuil J, Nyirenda D et al., 10 February 2022 [MP-7/17 – INQ000553357]

- c) **'Vaccine-enhanced disease: case studies and ethical implications for research and public health'**, Jamrozik E, Heriot G, Bull S, Parker M., 16 June 2021 [MP-7/18 – INQ000553358]
- d) **'Should a COVID-19 vaccine authorized for emergency use be considered an 'essential' medicine?'**, Smith M, Forman L, Parker M, et al., June 2021 [MP-7/19 – INQ000553359]
- e) **'An intersectional human-rights approach to prioritising access to COVID-19 Vaccines'**, Sekalala S, Perehudoff K, Parker M, et al., 24 February 2021 [MP-7/20 – INQ000553361]
- f) **'Key Ethical Concepts and their Application to COVID-19 Research'**, Dawson A, Emanuel EJ, Parker M, Smith MJ, Voo TC, 15 May 2020 [MP-7/21 – INQ000553362]
- g) **'Fairly Allocating Scarce Medical Resources in the Time of COVID-19'**, Emanuel EJ, Persad G, Upshur R, et al., 23 March 2020 [MP-7/22 – INQ000553363]

3.6. I published the following paper after my involvement with SAGE:

- a) **'The Importance of Getting the Ethics Right in a Pandemic Treaty'**, Schaefer O, Atuire C, Kaur S, Parker M, Persad G, Smith M, Upshur R, Emanuel E., 5 July 2023 [MP-7/23 – INQ000553364].

Podcasts, interviews and/or other evidence

- 3.7. I contributed to one episode in the UCL Political Science Events podcast on 25 February 2022 titled: 'Policy and Practice: Three SAGES on improving scientific advice to Government' [MP-7/24 – INQ000553365]
- 3.8. On 23 September 2024, I was invited to present a paper at the GO-Science Science and Society Webinar on the topic of 'Addressing value judgements and trade-offs at the heart of good policymaking practice' drawing on my experience of COVID-19. The slides for that presentation are exhibited at MP-7/25 – INQ000553366.

Section 4: Testing Technologies

- 4.1. I am asked to set out any relevant evidence in relation to testing technologies deployed during the Pandemic. This includes the development and comparison of Assays,

testing systems and strategies for the Pandemic, the role of scientific modelling in the TTI systems, and testing systems and strategies for future pandemics.

- 4.2. My role as an ethics advisor did not include any involvement with the development of technologies with Assays. Therefore, I am unable to comment on the development and comparison of Assays.
- 4.3. As was introduced in paragraph 1.24, in early 2020, prior to my involvement in SAGE, I was approached by Oxford scientist, Professor Christophe Fraser's research group, in the early stages of their development of the algorithms for a COVID contact tracing app. Professor Christophe Fraser was very aware of the importance of considering the ethical issues arising out of the potential uses of digital contact tracing, both the arguments in favour of a more intelligent approach to social and behavioural interventions, and the concerns that would need to be addressed for any such intervention to be conducive to well-founded public trust and confidence. He wanted me to help them identify and analyse potential ethical issues arising out of the use of a digital contact tracing tool. Together we published two papers relating to the ethics of digital contact tracing in Spring 2020 [see MP-7/07 – INQ000553372 and MP-7/08 – INQ000553373].
- 4.4. I believe these papers were shared with DHSC and Public Health England.

Testing systems and strategies in future pandemics

- 4.5. I was commissioned to write papers on specific issues relating to ethics. In relation to TTI, I was asked by GO-Science in September 2021 to put together a proposal for how to develop an effective approach to the integration of ethics advice into responses to future emergencies, including emergencies with healthcare. This paper is titled 'Ethics Advice in Emergencies' [MP-7/14 – INQ000553354].
- 4.6. The key message in this paper and arising out of my experience of the Pandemic response more broadly, is that whilst the impression was sometimes given that it was important to 'follow the science', this statement of commitment was based on a fundamental error. Whilst high quality scientific evidence based on reliable real-time data is vital to effective decision-making in the context of a health emergency, such data and the analysis of it are not capable of making decisions. The most important decisions made by policymakers, health professionals, and those who managed health services were in all cases judgements of value. Should schools be opened or closed? How do we decide when to impose social and behavioural interventions? How ought

vaccines to be distributed? Whilst deeply dependent on access to high quality and reliable science, these decisions are fundamentally value judgements.

- 4.7. Acknowledging this is important because it highlights the fact that whilst policymakers, politicians, and health service managers had good quality scientific advice throughout the Pandemic, they did not have access to advice that would have assisted with mapping the landscape in which these value judgements needed to be made. Therefore, they were less able than they might have been to engage effectively with the implications of different available courses of action. The availability of timely advice of this kind would have made it possible for better quality decision-making and greater clarity about the justifications for different courses of action.
- 4.8. The input of expert advice of the kind described above would have greatly assisted policy makers who could have benefited from having a more sophisticated mapping of value of judgements and assistance with thinking through their implications and the available justifications for available courses of action. The availability of such advice, in my view, could have contributed to clearer, less personalised, justifications of policy and to more sustained and well-grounded public trust and confidence.
- 4.9. It is important to be clear at this point that my argument here is not that advice on ethics and on values should take the form of telling policymakers or those with democratic accountability what they should do. The purpose of such advice, akin to that of science advisors, ought to be concerned with mapping out the value landscape in which policy decisions are to be made, and to encourage and facilitate discussion on ethical considerations and the implication of different courses of action. Advice of this kind would be likely to lead to policy making in which value considerations were more explicitly considered and could be more effectively justified and explained.
- 4.10. In addition to the broad points about the value of ethics advice, two more specific points are worth making here – and were made during SAGE discussions:
 - a) The first of these is the vital importance of paying close attention to questions of social justice and disadvantage when considering the distribution and seriousness of the likely impact of interventions and of the Pandemic itself. All impacts of the Pandemic were distributed in ways that reflected pre-existing and emerging forms of social and economic disadvantage. This is important intrinsically – a society has particularly strong obligations to those who are most disadvantaged, and instrumentally, developing policy informed by and sensitive to disadvantage is going to be more effective than that which is not

informed in this way. With specific regard to TTI, it was clear at an early stage that very many people, likely the vast majority, wanted to do the right thing by testing regularly and isolating when infected, but their personal circumstances, which might include precarious employment and/or housing, meant that it was not possible for them to adhere to testing and isolation without significant risk to their and their family's well-being; and

- b) My second reflection at this point concerns the ethical importance of embedding research and evaluation into every aspect of pandemic response, particularly around TTI. It is vital that learning is supported both for the potential it offers for improved policy during the current pandemic but also, probably more likely, as a way of meeting our obligations to those in the future who are going to have to deal with the next pandemic. The conduct of research is an important responsibility to future generations.

Role of scientific modelling in the development, implementation and evaluation of TTI systems

- 4.11. I did not participate in any scientific modelling. I did, however, participate in discussions at SAGE meetings about the implications of modelling presented at those meetings. As discussed above, my role in such discussions was to encourage the exploration of the ethical dimensions of different available courses of action. In most cases this focused on the impact on equity and on the lives of those who were already disadvantaged.

Section 5: Views on lessons that can be learned and recommendations for further changes

Lessons that can be learned of relevance to Test Trace and Isolate and Module 7's outline for scope.

- 5.1. Whilst the consideration of ethics in SAGE during COVID-19 was, I believe, valuable, there are lessons to be learned from this experience for future emergencies. These are my personal views.
- 5.2. Embedding ethics input at an earlier stage in the emergency would have enabled a more proactive immediate engagement with important issues.
- 5.3. It is my opinion that the majority of crucial decisions were value-based decisions. I do not believe that enough consideration was given to the requirement of expert analysis to support the effective making of such judgements. The input of relevant expertise would have greatly assisted policy makers who could have benefited from having a more sophisticated mapping of the value of judgements.

- 5.4. I think there should be a review of the way we support policymakers with the making of value judgments. During the Pandemic, despite their crucial importance for the success of the Pandemic response and public trust, value judgments were not subject to the same level of scrutiny as scientific questions. These decisions could have been made in a more effective and defensible way if we had an analogous way of thinking about value judgments as we did with science.
- 5.5. During the Pandemic, a significant proportion of SAGE participants, including myself, were of the view that a successful response requires much greater sustained attention to be paid to questions of equity and social justice. Ethics has a crucial role to play in encouraging this. Significant value could be gained through a mechanism for the provision of complementary but integrated ethics advice alongside SAGE's scientific offerings. This would ensure that decision-makers were provided with comprehensive information and analysis needed for effective decision making on questions arising out of various courses of action suggested by scientific data. This reflects the fact that policy making decisions informed by science advice always require the making of carefully considered and well-informed value judgements.
- 5.6. Going forward, there would be an advantage in making such ethical advice available as a resource to a wide range of government departments to support connected, unified thinking of ethical questions. Although health was rightly central to pandemic thinking, broader engagement with other departments like education would have been of value. The reality is that a pandemic is not only a health emergency. All aspects of governance are relevant to any coherent response.
- 5.7. Overall, I found discussions at SAGE to be more sensitive to issues of diversity, social justice and equity than I had been expecting. As individuals, the scientists, social scientists, and chairs within these groups were very aware of the importance of paying careful attention to these considerations. However, there were ways which the composition of committees and range of expertise were sub-optimal. Firstly, there was a very substantial gender imbalance with significantly fewer women than men involved. Secondly, the proportion of participants from ethnic minority groups was too small with implications for diversity of experience, perspective, and expertise. Lastly, the groups and policy makers had insufficient access to advice informed by humanities expertise. As far as I am aware, I was the only humanities scholar in the process.
- 5.8. Otherwise, in my view the way in which groups were commissioned to work was well-managed. The support provided to SAGE and me personally by the SAGE Secretariat

and GO-Science was outstanding in every respect. The role of SAGE as a clearing house and forum for consideration of work by sub-groups worked well.

Any recommendations for further changes that I think the Inquiry should consider making relative to Test, Trace and Isolate

- 5.9. As set out above in paragraph 4.5, in September 2021 I was commissioned by GO-Science to put together a proposal for how to develop an effective approach to integrating ethics advice into response to future emergencies.
- 5.10. As I noted in my Module 2 Questionnaire Response and as outlined above, it is my view that ethics input could be beneficial for future emergencies, and that policymakers would benefit greatly from access to expertise from a broader knowledge base and spectrum of humanities disciplines.
- 5.11. Future emergencies may take many different forms and present a variety of risks. This might include infectious disease outbreaks in humans, animals, industrial accidents, cyberattacks or acute manifestations of climate change. All major emergencies present novel ethical challenges requiring the attention of policy makers. The structures for advice during emergencies, including the availability of advice on ethics and values aspects, need to be sufficiently robust, flexible, and cross-departmentally connected to be capable of being convened for use in a variety of emergency scenarios.
- 5.12. As noted in my Module 2 Response, and above, the most obvious kind of problem is the need to make priority-setting judgements between competing values, commitments and demands. These decisions are likely to be complex and unique, requiring careful ethical analysis of significant value considerations. At key moments in the Pandemic, for example, policymakers were called to make value judgements between competing demands of education, social care, economy, employment, and healthcare, to name a few. A second source of ethical problems are tensions between actions which scientific evidence suggests will lead to the best overall consequences, and considerations relating to other important values such as those of privacy, personal freedom, respect for religious and cultural practices, and national sovereignty.
- 5.13. Ethics has well-established approaches for working through these issues and other value considerations in structured and systemic ways. Information and illustrations are in my paper titled 'Ethics Advice in Emergencies' [MP-7/14 – INQ000553354]. The role of ethics advice is to delineate the nature and form of the ethical problem, to identify and carefully describe the range of moral reasons that might be relevant to arguments in favour or against available courses of action and explore any morally

significant broader implications. The aim is to provide policymakers with the information, analysis and tools they need for effective decision making.

- 5.14. In addition to ethics input, and as stated in my Module 2 Response, I felt that we could have benefitted from having more advisers across the humanities. During the Pandemic, I was the only humanities scholar able to contribute to advice. I was greatly honoured to have been invited to play this role. However, in my view, policy makers in future emergencies would benefit greatly from access to expertise from a broader spectrum of humanities disciplines. I encourage the Inquiry to seek input from Dr Molly Morgan Jones, the British Academy's Head of Policy.
- 5.15. The Pandemic was extremely dynamic in its spread and evolution of COVID-19 as a disease and in terms of its complex impacts, practical and policy decisions needed to address them. The British Academy's work on the COVID Decade illustrates well the ways in which policy must be developed in a way that addresses the interconnections and interdependencies among the impacts of health and other emergencies. This cannot be done by medicine, science and technology alone. The report is exhibited as MP-7/26 – INQ000137299.

Section 6: Unequal Impacts

- 6.1. I have been asked to give evidence on how inequalities and unequal impacts were considered and discussed in the decision-making process. I consider much more could have been done. Policymaking needs to employ a broad knowledge base, one that also coherently integrates insights from Social Sciences Humanities & Arts for People and the Economy (SHAPE) disciplines. The aim should be to actively articulate the social, historical, cultural, behavioural and the economic, together with the medical, biological, and physical. All disciplines bring a wealth of methodologies, findings, and contexts capable of informing future policy based on decades of evidence and insight, providing ways to understand uncertainty and communicate risk. For example, when asked whether historical rates of infection and mortality are distinguishable from those seen for COVID-19 during the Pandemic, the British Academy's multidisciplinary expert-base steered them to the deeper question of what creates and sustains the inequalities in health and life which underpins the statistics.
- 6.2. Addressing 'geographical' aspects of health inequalities requires consideration of interactions at different scales, including between regions, towns, cities, communities and also between physical, social and political geographies, amongst others. A siloed

approach fails to have sufficient capacity and vision to identify and respond to local needs.

- 6.3. It is important not to understate the significant and inequitable impact of COVID-19 and of the interventions put in place in response to it on disadvantaged groups and individuals. Policies impacted disadvantaged groups in different ways and often compounded such disadvantage. Considerations of social justice and the potential for policy to have these kinds of impacts were regularly raised in SAGE discussions and were a fairly regular focus of papers from SPI-B. I am not in a position to comment on whether and to what extent they were a topic of discussion in communication between SAGE and decision-makers.
- 6.4. As mentioned above, SAGE and its advice would have benefitted from a more diverse membership.

Statement of Truth

I believe that the facts stated in this witness statement are true. I understand that proceedings may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief of its truth.

Signed:

Personal Data

Dated: 15th May 2025

Annex A: Major Publications

My major publications include:

1. **'Science in the time of COVID-19 Reflections on the UK Events Research Programme in England '**, Marteau TM, Parker MJ, & Edmunds WJ, 10 August 2022.
2. **'Ethical Hotspots in Infectious Disease Surveillance for Global Health Security Social justice and Pandemic Preparedness'**, Parker M., 20 April 2023
3. **'Vaccine-enhanced disease: case studies and ethical implications for research and public health'**, Jamrozik E, Heriot G, Bull S, Parker M., 16 June 2021.
4. **'Should a COVID-19 vaccine authorized for emergency use be considered an 'essential' medicine?'**, Smith M, Forman L, Parker M, et al., June 2021.
5. **'An intersectional human-rights approach to prioritising access to COVID-19 Vaccines'**, Sekalala S, Perehudoff K, Parker M, et al., 24 February 2021.
6. **'Top five ethical lessons of COVID-19 that the world must learn'**, Smith MJ, Ahmad A, Arawi T et al., 29 January 2021.
7. **'Immunity certification for COVID-19: ethical considerations'**, Voo TC, Reis AA, Thomé B, Ho CW, Tam CC, Kelly-Cirino C, Emanuel E, Beca JP, Littler K, Smith MJ, Parker M, Kass N, Gobat N, Lei R, Upshur R, Hurst S, Munsaka S, 1 December 2020.
8. **'SARS-CoV2 challenge studies: risks and ethics (or risk minimisation in context)'**, Bull S, Binik A, Jamrozik E, Parker M, 25 September 2020.
9. **'Ethical challenges in pathogen sequencing: a systematic scoping review'**, Johnson SB, Parker M., 3 June 2020.
10. **'The ethics of instantaneous contact tracing using mobile phone apps in the control of the COVID-19 Pandemic'**, Parker M, Fraser C, Abeler-Dorner L, Bonsall D, 4 May 2020.
11. **'Key Ethical Concepts and their Application to COVID-19 Research'**, Dawson A, Emanuel EJ, Parker M, Smith MJ, Voo TC, 15 May 2020
12. **'Quantifying SARS-CoV-2 transmission suggests epidemic control with digital contact tracing'**, Ferretti L, Wymant C, Kendall M. et al., 31 March 2020.

13. **'Fairly Allocating Scarce Medical Resources in the Time of COVID-19'**, Emanuel EJ, Persad G, Upshur R, et al., 23 March 2020.
14. **'In emergencies, health research must go beyond public engagement toward a true partnership with those affected'**, Wright, K., Parker, M., Bhattacharya, S. et al., 28 January 2020.
15. **'The ethics of sequencing infectious disease pathogens for clinical and public health'**, Johnson SB, Parker M., 20 March 2019.
16. **'Ethical Considerations in HIV Phylogenetic Research'**, Coltart, C., Hoppe, A., Parker, M., et al. on behalf of the Ethics in HIV Phylogenetics Working Group, 30 August 2018.
17. **'Using a genetic test result in the care of family members: How does the duty of confidentiality apply?'**, Parker M, Lucassen A., 27 April 2018.
18. **'Ethics and the social contract for genomics in the NHS'** in Chapter 16 of Chief Medical Officer, Generation Genomes: Annual Report of the Chief Medical Officer 2017, Lucassen A, Montgomery J, Parker M, 2017.
19. **'Good and Bad Research Collaborations: Researchers' Views on Science and Ethics in Global Health Research'**, Parker M, Kingori P, 13 October 2016.
20. **'Ethics of sustainable genomics research in Africa'**, Parker M, Kwiatkowski D., 8 March 2016.
21. **'What is the role of individual accountability in patient safety? A multi-site ethnographic study'**, Aveling E, Parker M, Dixon-Woods M., 4 November 2015.
22. **'Attitudes of nearly 7000 health professionals, genomic researchers and publics toward the return of incidental results from sequencing research'**, Middleton A, Morley KI, Bragin E, Firth HV, Hurles ME, Wright CF, Parker M; DDD study, 29 April 2015.
23. **'Scaling ethics up and down: moral craft in clinical genetics and in global health research'**, Parker M, 16 December 2014.

Annex B: Exhibit Schedule

Please see attached.