Witness Name:

Professor Nicola Fear

Dated: 25.10.2022

Ref: M2/SAGE/01/NF

COVID-19 INQUIRY - MODULE 2

Questionnaire Response - Professor Nicola Fear

1: Overview of qualifications, career history, professional expertise and major publications:

Qualifications

- 1.1. I am a trained epidemiologist who has worked in the field of occupational health since undertaking my doctorate in epidemiology at the University of Oxford, which I completed in 1997. Since September 2002, the majority of my work has focused on the health and wellbeing of the UK Armed Forces community (service personnel, veterans and family members). However, due to my training in epidemiology, I have been involved in other projects, including working with Professor James Rubin (Professor of Psychology & Emerging Health Risks at Kings College, London) and his team initially on flu, and more recently on the COVID-19 pandemic (The CORSAIR study),see: http://epr.hpru.nihr.ac.uk/our-research/research-themes/response/corsair-study). This work has focused on the public's response to the pandemic, their behaviours and how those behaviours have changed over the course of the pandemic.
- 1.2. I have also been involved with IGARD (the Independent Group Advising NHS Digital on the Release of patient Data). I have been a specialist member of IGARD since December 2016, and during the pandemic specific meetings were held weekly to ensure the timely release of patient data to help manage the pandemic. All business as usual meetings and COVID-19 response meeting minutes are in the public domain, see: <a href="https://digital.nhs.uk/about-nhs-digital/corporate-information-and-documents/independent-group-advising-on-digital/corporate-information-and-documents/independent-group-advising-on-

the-release-of-data/meetings#igard-meeting-minutes. My involvement as a participant in SPI-B (the Independent Scientific Pandemic Insights Group on Behaviours) was declared at the start of each meeting and formally recorded in the meeting minutes.

1.3. Please find at **ANNEX A** a copy of my recent CV which details my qualifications, career history, expertise, and recent publications.

Publications

- 1.4. I have published over 300 academic papers. The main COVID-19 related papers are:
- 1.5. Sharp, M.-L., Serfioti, D., Jones, M., Burdett, H., Pernet, D., Hull, L., Murphy, D., Wessely, S., <u>Fear, N.T.</u> UK veterans' mental health and well-being before and during the COVID-19 pandemic: A longitudinal cohort study. (2021) BMJ Open, 11 (8), art. no. e049815. DOI: 10.1136/bmjopen-2021-049815
- 1.6. Smith, L.E., Potts, H.W.W., Amlôt, R., <u>Fear, N.T.</u>, Michie, S., Rubin, G.J. Adherence to the test, trace, and isolate system in the UK: Results from 37 nationally representative surveys. (2021) The BMJ, 372, art. no. n608. DOI: 10.1136/bmj.n608.
- 1.7. Smith, L.E., Potts, H.W.W., Amlôt, R., Fear, N.T., Michie, S., Rubin, G.J. Do members of the public think they should use lateral flow tests (LFT) or polymerase chain reaction (PCR) tests when they have COVID-19-like symptoms? The COVID-19 Rapid Survey of Adherence to Interventions and Responses study. (2021) Public Health, 198, pp. 260-262. DOI: 10.1016/j.puhe.2021.07.023.
- Murphy, D., Williamson, C., Baumann, J., Busuttil, W., <u>Fear, N.T.</u> Exploring the impact of COVID-19 and restrictions to daily living as a result of social distancing within veterans with pre-existing mental health difficulties. (2022) BMJ Military Health, 168 (1), pp. 29-33. DOI: 10.1136/bmjmilitary-2020-001622.
- 1.9. Rubin, G.J., Smith, L.E., Amlot, R., <u>Fear, N.T.</u>, Potts, H., Michie, S. Do people with symptoms of an infectious illness follow advice to stay at home? Evidence

- from a series of cross-sectional surveys about presenteeism in the UK. (2022) BMJ Open, 12 (5), art. no. e060511. DOI: 10.1136/bmjopen-2021-060511.
- 1.10. Smith, L.E., Potts, H.W.W., Amlôt, R., <u>Fear, N.T.</u>, Michie, S., Rubin, G.J. Who is engaging with lateral flow testing for COVID-19 in the UK? The COVID-19 Rapid Survey of Adherence to Interventions and Responses (CORSAIR) study. (2022) BMJ Open, 12 (2), art. no. e058060. DOI: 10.1136/bmjopen-2021-058060.
- 1.11. Smith, L.E., Potts, H.W.W., Amlôt, R., <u>Fear, N.T.</u>, Michie, S., Rubin, G.J. How has the emergence of the Omicron SARS-CoV-2 variant of concern influenced worry, perceived risk and behaviour in the UK? A series of cross-sectional surveys. (2022) BMJ Open, 12 (8), art. no. 061203. DOI: 10.1136/bmjopen-2022-061203.
- 1.12. Smith, L.E., Potts, H.W.W., Amlôt, R., <u>Fear, N.T.</u>, Michie, S., Rubin, G.J. Engagement with protective behaviours in the UK during the COVID-19 pandemic: a series of cross-sectional surveys (the COVID-19 rapid survey of adherence to interventions and responses [CORSAIR] study). (2022) BMC Public Health, 22 (1), art. no. 475. DOI: 10.1186/s12889-022-12777-x.
- 1.13. Smith, L.E., Potts, H.W.W., Amlôt, R., Fear, N.T., Michie, S., Rubin, G.J. Patterns of social mixing in England changed in line with restrictions during the COVID-19 pandemic (September 2020 to April 2022). (2022) Scientific Reports, 12 (1), art. no. 10436. DOI: 10.1038/s41598-022-14431-3.

2: List of groups I participated in and the relevant time period:

2.1. I have been a participant of SPI-B since March 2020 (my first meeting being on 30 March 2020), with participation ending in March 2022, following an email from GO-Science on 9 March 2022 detailing the decision to stand down SAGE and its associated sub-groups.

3: Overview of involvement in groups between January 2020 and February 2022:

3.1. Prior to my invite to become a participant of SPI-B, I was working with Professor James Rubin (the then Chair of SPI-B) on a COVID-19 project (The COVID-19 rapid survey of adherence to interventions and responses study-

- also known as the CORSAIR study), see: http://epr.hpru.nihr.ac.uk/our-research/research-themes/response/corsair-study.
- 3.2. This work has focused on the public's response to the pandemic, their behaviours and how those behaviours have changed over the course of the pandemic. A more detailed description of the evolution of the CORSAIR study can be found in ANNEX B.
- 3.3. It was felt that the work we were doing would be relevant to share with SPI-B as the CORSAIR study could provide data to support evidence-informed decision making. Further, the discussions happening at SPI-B would be relevant to the CORSAIR study- as the study was focused on analysing data, which was being collected on a weekly basis and we had the chance to amend the questions set to reflect changes in government policy-hence the invite to join. I received the invite to join SPI-B in mid-March 2020 and my first SPI-B meeting was on 30 March 2020.
- 3.4. I attended a number of meetings (diary permitting) throughout 2020 and 2021 and read and commented on a number of SPI-B authored documents.

SPI-B meetings attended (and formally recorded by the secretariat, unless otherwise specified):

3.5. 30 March 2020 (my first SPI-B meeting), 6 April 2020, 13 April 2020, 20 April 2020 (attended but not formally recorded by GO-Science), 27 April 2020, 4 May 2020, 11 May 2020, 25 May 2020, 1 June 2020, 16 June 2020, 22 June 2020, 30 June 2020, 7 July 2020, 15 September 2020, 22 June 2021 (attended but not formally recorded by GO-Science).

Other SPI-B related meetings attended:

- 3.6. SPI-B meeting to discuss media activity surrounding SAGE and its sub-groups, 29 May 2020.
- 3.7. SPI-B bird table meeting (a bird table meeting is a more informal opportunity and environment in which to discuss emerging and upcoming issues), 19 June 2020; main agenda items: NHS T&T & SPI-B support and research priorities.
- 3.8. SPI-B bird table, 3 July 2020; main agenda item: to discuss public understanding and attitude towards vaccination.

- 3.9. SPI-B bird table, 17 July 2020; main agenda items: Update on SPI-B 'local lockdown measures' paper and update on SPI-B BAME messaging paper.
- 3.10. SPI-B bird table, 7 August 2020; main agenda item: Presentation of TTI contact tracing rapid literature review.
- 3.11. Briefing for SPI-B participants from Sir Patrick Vallance, 9 February 2021; this meeting was to discuss future priorities and how COVID-19 health protective behaviours could be embedded in the longer term.
- 3.12. SPI-B Working Group, DHSC compliance analysis, 24 February 2021; SPI-B were asked to provide advice on the DHSC analysis of compliance to interventions. The DHSC team asked for guidance on how best to present and interpret available data including what 'good compliance' looks like.

Papers and reports provided to SPI-B and the Department of Health and Social Care from the CORSAIR study:

3.13. The papers and reports shared with SPI-B and the Department of Health and Social Care from the CORSAIR study are available here: http://epr.hpru.nihr.ac.uk/our-research/research-themes/response/corsair-study.

Other reports /papers contributed to:

- 3.14. Public Disorder and Public Health: Contemporary Threats and Risks SPI-B Policing and Security sub-Group. 2 July 2020. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/906354/s0578-spi-b-public-disorder-public-health-contemporary-threats-risks.pdf.
- 3.15. SPI-B Priorities for consideration of vaccination by occupation: An evaluation of mortality, infection and proximity to others. Contribution made on 15 February 2021. This is not a published document. I have followed up with GO-Science to enquire whether it was shared with SAGE, or only SPI-B participants.
- 3.16. DHSC, Compliance and Behaviour Analysis (PowerPoint presentation). Contribution made on 4 March 2021. This was an internal DHSC document, rather than a SAGE sub-group paper.

- 4: Summary of documents to which I contributed for the purposes of advising groups:
- 4.1. The papers and reports shared with SPI-B and the Department of Health and Social Care are available here and below: http://epr.hpru.nihr.ac.uk/our-research/research-themes/response/corsair-study.
- 4.2. Worry, behaviour and stigma following UK Government communications during the COVID-19 outbreak: results from three UK surveys (Shared with DHSC, 24 February 2020).
- 4.3. Worry, recommended behaviours and stigma. Wave 4 17th to 20th February 2020 (Shared with DHSC, 26 February 2020).
- 4.4. Vulnerable populations. Wave 6 2nd to 5th March 2020 (Shared with DHSC, 9 March 2020).
- 4.5. Key information sources, by wave (Shared with DHSC, 17 March 2020).
- 4.6. Hand hygiene behaviours impact of handwashing campaign (Shared with DHSC, 17 March 2020).
- 4.7. Vulnerable populations. Wave 7 9th to 11th March 2020 (Shared with DHSC, 17 March 2020).
- 4.8. Symptom knowledge and intentions when ill (Shared with DHSC, 18 March 2020).
- 4.9. Self-reported adherence to social distancing measures (Shared with DHSC, 3 April 2020).
- 4.10. Self-reported adherence to self-isolation (Shared with DHSC, 7 April 2020).
- 4.11. Handwashing behaviours (Shared with DHSC, 9 April 2020).
- 4.12. Symptom identification and associated factors (Shared with DHSC, 9 April 2020).
- 4.13. Changes in behaviour if you think you have ever had coronavirus or have had it confirmed by a test (Shared with DHSC, 14 April 2020).

- 4.14. Keeping well physically and psychological wellbeing during the Government "lockdown", and impact on adherence to social distancing measures (Shared with DHSC, 20 April 2020).
- 4.15. Psychological wellbeing and self-reported general health (Shared with DHSC, 7 May 2020).
- 4.16. Self-reported adherence to self-isolation and social distancing measures (Shared with DHSC, 11 May 2020).
- 4.17. Personal protective behaviours in NHS workers (Shared with NHS England, 14 May 2020).
- 4.18. Symptom prevalence (Shared with SPI-B, 22 May 2020).
- 4.19. Ethnicity, COVID-19-related behaviours, attitudes and outcomes (Shared with DHSC, 4 June 2020).
- 4.20. Public perceptions of a COVID-19 tracking app (Shared with DHSC, 8 June 2020).
- 4.21. Factors associated with uptake of the Test, Trace and Isolate (TTI) system (Shared with DHSC, 12 June 2020).
- 4.22. Physical distancing and related behaviours: changes over time (Shared with DHSC, 16 June 2020).
- 4.23. Public perceptions of a COVID-19 tracking app (Shared with DHSC, 13 July 2020).
- 4.24. Factors associated with requesting an antigen test and self-isolating after developing symptoms of coronavirus (Shared with DHSC, 14 July 2020).
- 4.25. Adherence to the test, trace and isolate system (CORSAIR study). (Shared with SAGE, 3 September 2020).
- 4.26. Annex to Evidence summary of impacts to date of public health communications to minority ethnic groups and related challenges. (Annex to Report by Ethnicity Subgroup of SAGE, 23 September 2020).
- 4.27. Socialising indoors and outdoors (Report to inform Nervtag paper, 20 October 2020).

- 4.28. Use of the NHS COVID-19 App (Shared with DHSC, 2 November 2020).
- 4.29. Clusters of behaviours and adherence (Shared with DHSC, 5 November 2020).
- 4.30. Ventilation (Shared with SPI-B and EMG, 25 November 2020).
- Clusters of self-reported behaviours and adherence in those who had COVID-19 symptoms (Shared with DHSC, 4 December 2020).
- 4.32. Workplace attendance in people able to work and factors predicting it: evidence from cross-sectional surveys.(Report to SAGE 4 February 2021).
- 4.33. Factors associated with vaccine hesitancy (Shared with SPI-B, 10 March 2021).
- 4.34. Impact of vaccination on adherence to rules and guidance about personal protective behaviours (PPBs) and social distancing (Shared with DHSC, 13 April 2021).
- 4.35. Impact of attitudes and beliefs about COVID-19 on adherence to rules and guidance about personal protective behaviours (PPBs) and social distancing (Shared with DHSC, 7 May 2021).
- 4.36. Who is engaging with COVID-19 testing? (Shared with DHSC, 14 June 2021).
- 4.37. Recognition of symptoms of COVID-19 (Shared with PHE, 14 June 2021).
- 4.38. Graphs of validated measures [PHQ4, SWEMWS, AUDIT-C] (Shared with DHSC, 23 June 2021).
- 4.39. Impact of vaccination on adherence to rules and guidance about personal protective behaviours (PPBs) and social distancing (Shared with DHSC, 25 June 2021).
- 4.40. Do members of the public think they should use lateral flow tests or PCR tests when they have COVID-19-like symptoms? The COVID-19 Rapid Survey of Adherence to Interventions and Responses [CORSAIR] study. (Shared with DHSC, 28 June 2021).
- 4.41. Changes in behaviour following 19 July 2021 (Shared with DHSC, 6 August 2021).
- 4.42. Risky social mixing (Shared with DHSC, 9 August 2021).
- 4.43. Risky social mixing age in bands (Shared with DHSC, 18 August 2021).

- 4.44. Testing when symptomatic, and staying at home with influenza-like illness, during autumn and winter 2021 (Report to SAGE, 30 September 2021).
- 4.45. Agency and risk impact on adopting protective behaviours (Shared with DHSC, 5 November 2021).
- 4.46. At risk groups (Shared with SPI-B Chairs, 21 December 2021).
- 4.47. Final report: The COVID-19 Rapid Survey of Adherence to Interventions and Responses (CORSAIR) study: Final report. (Shared with DHSC, 22 June 2022).

5: Summary of articles, interviews and/or evidence:

- 5.1. Papers and reports that I have been involved in via CORSAIR are available here: http://epr.hpru.nihr.ac.uk/our-research/research-themes/response/corsair-study
- 5.2. I have been involved in two COVID-19 studies of UK veterans (i,e. former members of the UK Armed Forces). Academic papers emerging from these studies are listed below:
- Sharp, M.-L., Serfioti, D., Jones, M., Burdett, H., Pernet, D., Hull, L., Murphy, D., Stevelink, S., Wessely, S., Fear, N.T. COVID-19: Impact on the health and wellbeing of ex-serving personnel (Veterans-CHECK) protocol paper. (2020) medRxiv. DOI: 10.1101/2020.09.02.20186577.
- 5.4. Sharp, M.-L., Serfioti, D., Jones, M., Burdett, H., Pernet, D., Hull, L., Murphy, D., Wessely, S., Fear, N.T. UK veterans' mental health and well-being before and during the COVID-19 pandemic: A longitudinal cohort study. (2021) BMJ Open, 11 (8), art. no. e049815. DOI: 10.1136/bmjopen-2021-049815.
- 5.5. Murphy, D., Williamson, C., Baumann, J., Busuttil, W., Fear, N.T. Exploring the impact of COVID-19 and restrictions to daily living as a result of social distancing within veterans with pre-existing mental health difficulties. (2022) BMJ Military Health, 168 (1), pp. 29-33. DOI: 10.1136/bmjmilitary-2020-001622.

6: Views as to whether the work of the groups in responding to the Covid-19 pandemic succeeded in its aims.

- 6.1. In my view, SPI-B had a diverse membership and included a range of disciplines and individuals from different organisations. SPI-B "operated" separately from SPI-M (Scientific Pandemic Influenza Group on Modelling), which was a shame as I think both groups would have benefited from the expertise of the other.
- 6.2. We were often asked to draft documents or provide comments on documents in a short timeframe but given the ever-changing nature of the pandemic this was to be expected. Recommendations and advice given by SPI-B were then fed into SAGE either via papers or updates to SAGE by the SPI-B Chair. The Chair of SPI-B (Professor James Rubin) was very good at explaining to SPI-B participants which recommendations/advice had been taken forward and which had not.
- 6.3. The colleagues from the Cabinet Office (GO-Science) who supported SPI-B were excellent, they worked long hours and were incredibly supportive of SPI-B and its participants.

7: Lessons that can be learned

- 7.1. I thought SPI-B worked well, the participants worked hard to meet deadlines given to us and ensured that advice given, or recommendations made, were evidence based. Recognition that participation in SPI-B impacted other work-related tasks was not always acknowledged, including but not limited to, writing academic articles not related to COVID-19, submission of applications for funding for non-COVID-19 studies and the completion of non-COVID-19 related studies.
- 7.2. Transparency about how actions were then made/taken by Government would have been helpful, not only for us as participants of SPI-B, but also for the public.

8: Documents that I hold

8.1. I will retain any relevant documentation (electronic and paper copies) as requested. I currently have papers circulated by GO-Science, other SPI-B

participants, documentation regarding the CORSAIR study and the work I have been conducting on the impact of COVID-19 on veterans. I have also retained all paperwork relating to my role on IGARD. All documentation is mainly held electronically on my computer, but I also have some brief handwritten notes relating to my attendance at SPI-B meetings. These brief notes document any key points arising and emerging actions.