

UK Covid-19 Inquiry Module 1
Closing written statement on behalf of the British Medical Association (the BMA)

Introduction

1. This written statement develops the issues addressed within the BMA's oral closing statement provided on 19 July 2023, drawing on wider written and oral evidence before the Inquiry in Module One and setting out key areas that the BMA would urge the Inquiry to consider as it develops its report and recommendations for this module. Our statement covers the following nine areas:
 - a. The impact of the failure to properly consider aerosol transmission in pandemic planning, including in relation to Respiratory Protective Equipment (RPE)
 - b. A failure to provide adequate guidance in advance on risk assessments for a pandemic virus
 - c. Decades of under resourcing and a failure to do proper workforce planning in the health and social care systems
 - d. Fragmented, understaffed and underfunded public health services
 - e. Deficiencies in pandemic planning
 - f. The lack of planning to deliver testing and contact tracing at scale
 - g. Missed opportunities for learning lessons
 - h. The need for improved government structures and processes for civil contingencies
 - i. Failure to consider inequalities and vulnerabilities in pandemic planning

A) The impact of the failure to properly consider aerosol transmission in pandemic planning, including in relation to Respiratory Protective Equipment (RPE)

PPE planning was inadequate for a pandemic event and had tragic consequences for many doctors and other healthcare workers

2. The Inquiry has received evidence from multiple sources that planning for the provision of PPE (and in particular RPE) to healthcare workers was inadequate for a prolonged pandemic event. There was not enough PPE and not the right types of PPE to allow the staff who would rely on it to protect themselves and their patients in a pandemic. Key evidence includes the following:
 - a. **Rosemary Gallagher** MBE (professional lead for Infection Prevention and Control and nursing sustainability at the Royal College of Nursing) gave oral evidence on 26 June 2023. She told the inquiry that there had been

inadequate consideration of planning for the sustained provision of RPE required for an infection that is spread predominantly through the respiratory route, and that surgical masks are not PPE (with which the BMA agrees (see paragraphs 7 to 10 below)). At paragraph 70 of Ms Gallagher's witness statement it is stated, "the Government did not adequately plan or have the supply of PPE, specifically RPE, needed for a pandemic on the scale of Covid-19...this was due to the fact that the UK government's planning focussed on dealing with an influenza pandemic which at the time was considered to be predominantly spread via respiratory 'droplets' and did not adequately consider what RPE and PPE would be needed if dealing with a respiratory disease pandemic more like SARS or MERS-CoV." (INQ000177809_0025)

- b. The expert evidence of **Dr Claas Kirchhelle** includes the following statements within Dr Kirchhelle's witness statement, at paragraph 140:

"140. The significant decline of UK preparedness stockpiles was another indication of the relatively low political priority of contingency planning within the Department of Health as well as PHE's constrained ability to defend core preparedness capabilities...initial decisions to reduce the overall stockpile were taken from 2012 onwards...In addition to attempts to prolong product shelf life via supplier certification, the Pandemic Influenza Preparedness Programme (PIPP) also examined ways of reducing the overall stockpile.

140.1 One way of reducing costs was to complement the Just In Case (JIC) stockpile model of physically stored emergency supplies with Just In Time (JIT) contract frameworks, which were designed to procure items within 12 weeks of a pandemic being declared. Relying on JIT provision of critical PPE would result in substantial savings since PPE stock would not actually be purchased or stored outside of pandemics.

140.2 However, the approach also created great vulnerabilities should supply chains be disrupted...

140.3 ...the switch to JIT purchasing meant that up to 20 percent of the 34 million FFP3 respirators (6.8 million items) that were deemed necessary under a reasonable worst case scenario would not actually exist before a pandemic occurred. Meanwhile, defects in official quality assurance processes for emergency PPE procurement that had already surfaced in 2009 remained unaddressed.

140.3 While a detailed assessment of provision decisions for other PPE components is beyond the scope of this report, it is clear that cost-cutting considerations also dominated other restocking decisions." (INQ000205178_0090-92)

- c. **Sir Christopher Wormald**, Permanent Secretary of the Department of Health and Social Care (DHSC), in his evidence to the Inquiry on 19 June 2023, noted that the PPE held for an influenza pandemic had limited applicability to non-influenza pandemic threats and was not designed for a disease with a significant amount of asymptomatic transmission, which required PPE provision in a lot more settings than had been planned for. Sir Christopher Wormald accepted that PPE was in very

short supply but maintained that the UK never ran out of PPE nationally. This is a claim that the BMA suggests will require careful scrutiny and more detailed examination in later modules of the Inquiry, not least because it does not accord with feedback from BMA members who reported that PPE did not reach them, did not fit and was, often, not the right type (i.e., not FFP2/3 respirators).

- d. **Clara Swinson**, Director General of international health and domestic public health issues in DHSC, gave evidence to the Inquiry on 19 June 2023 and accepted that the need to consider sufficient supplies of PPE to fit a wide range of face shapes and sizes was not adequately considered as part of pandemic planning prior to Covid. She told the Inquiry, *"it was evident in the first few months that that is something where there were not enough different types of face mask, and that is something both in business as usual and in our stockpiles of course we need to make sure are covered in future, now and in the future"*. The impact of this disproportionately impacted some groups more than others, including staff from ethnic minority backgrounds and women.
3. These failures, coupled with the distressing accounts of healthcare workers about the circumstances in which they were required to work without adequate protection while exposed to a deadly disease, is damning evidence. Accounts from healthcare workers include how they were initially accused of scaremongering and instructed to remove their masks or respirators while at work, concerns at the absence of FFP3 respirators, and the inadequate consideration given to the risks of aerosol transmission. The BMA's oral opening and closing statements to Module 1, and the BMA's COVID-19 Review Reports (INQ000118474, INQ000118475, INQ000185355, INQ000185356, INQ000185357) contain numerous quotes from doctors expressing these and similar concerns, including the following from a GP in England:

"We were seeing patients who had COVID but because of the advice that was behind the curve, they were deemed to be low risk...We needed proper protection with FFP3 masks, but these were not considered necessary and were not provided. It was in April 2020, whilst wearing inadequate PPE that I caught coronavirus from a patient."
4. The BMA's position is that there is no doubt that the provision of PPE to healthcare workers during the pandemic was hopelessly inadequate, and the BMA respectfully submits that the task for the Inquiry is to determine why this occurred, to ensure that it does not happen again.
5. Tragically, doctors and healthcare workers died because of Covid-19 infection acquired in their workplace, and significant numbers are suffering from long-Covid. The BMA has very recently (on 4 July 2023) published a report about the impact of long-Covid, titled, *"Over-exposed and under-protected: the long-term impact of Covid-19 on doctors"*¹, which is informed by a survey of over 600 doctors suffering from long-Covid. The report establishes that a lack of

¹ This report is available on the BMA's website here:
<https://www.bma.org.uk/media/7318/bma-long-covid-report040723.pdf>

preparedness for a pandemic, and poor risk-management in health services contributed to many doctors contracting Covid-19 at work.

6. A key finding of this report is the lack of access by staff to FFP3 respirators, which are the type of filtering face piece respirators that provide maximum protection from infection transmitted by aerosol. 77% of the respondents to the BMA survey who acquired a Covid-19 infection in the first wave of the pandemic believe that they were infected while at work, and only 16% of respondents had access to these more protective FFP3 respirators at the time they were infected.

Planning for an airborne virus should have been undertaken, even if the main pandemic focus was influenza

7. An appreciation of the limitations of fluid resistant surgical masks (which were commonly provided to healthcare workers in place of the required FFP3 respirators) is key to understanding the concerns of the BMA and its members. The protective features of filtering facepiece respirators (FFP) compared to surgical masks are explained within the 2008 report prepared by the Health and Safety Laboratory for the Health and Safety Executive (HSE) titled "*Evaluating the protection afforded by surgical masks against influenza bioaerosols. Gross protection of surgical masks compared to filtering facepiece respirators*" (INQ000101591). Page 1 of this report states:

*"The UK is preparing for a potential influenza pandemic. The main route of transmission of influenza is believed to be via direct contact with large droplets. The relative importance of aerosols in transmission is considered to be minor, but it cannot be ruled-out. The current UK Pandemic Influenza Infection Control Guidance recommends that workers who are in close contact with patients should wear surgical masks to reduce exposure to large droplets. However, **surgical masks are not intended to provide protection against infectious aerosols.** The guidance recommends that procedures that are likely to generate aerosols should be minimised, or where unavoidable, workers should wear appropriate respiratory protection. There is a common misperception amongst workers and employers that surgical masks will protect against aerosols. This study aims to evaluate the relative levels of protection provided by both surgical masks and respirators against aerosols."* [emphasis added]

8. The main findings from the report are summarised at page 8, including that:

*"surgical masks will mitigate a mean reduction factor of around 2 against a simulated sneeze of inert airborne particles compared to FFP respirators which are capable of offering a mean reduction factor of 100 or higher...**Consequently they [surgical masks] should not be used in situations where close exposure to infectious aerosols is likely.**"* [emphasis added] (INQ000101591_0008)

9. The HSE report also clarifies the regulatory position, at page 12, as follows:

"The European PPE Directive 89/686/EEC covers Respiratory Protective Equipment. This Directive excludes surgical masks and they are not certified for use as RPE in the UK. Surgical masks can be certified compliant with the Medical Devices directive and be 'CE' marked. However, the placing of a 'CE' mark on a surgical mask does not denote the ability to provide respiratory protection under the PPE directive. Whilst surgical masks do provide a degree of protection

against droplets and splashing, the British Standard covering surgical masks (BS EN 14683:2005) categorically states that 'The surgical masks intended to be used in operating theatres and health care settings with similar requirements are designed to protect the working environment and not the wearer. When the primary intention is to protect the wearer from infection, the use of respiratory protective devices should be considered'. As surgical masks are not intended to offer protection against airborne particles, they are not designed to fit closely to the wearers face or designed to have the filtering efficiencies required for adequate respiratory protection. Furthermore, no protection factors are assigned to surgical masks, as they are not designed to offer respiratory protection. However, there is common misperception that they will provide protection against aerosols." (INQ000101591_0012)

10. The position of the 2008 report for the HSE is that where there is a respiratory risk of infection, the use of FFP3 devices represents best practice, and where these are not available then FFP2 may be an acceptable, pragmatic compromise (INQ000101591_0013). The report also explains that filtering facepiece respirators are classified as FFP1, FFP2, and FFP3 according to the level of protection they afford, with FFP3 offering the most protection (99% filter efficiency and an assigned protection factor of 20), with FFP2 (94% filter efficiency and an assigned protection factor of 20), and FFP1 (80% filter efficiency and an assigned protection factor of 4) providing correspondingly less protection (INQ000101591_0011-12).²
11. A conclusion of the 2008 report for the HSE that sadly came to pass, is that *"the widespread use of respirators might be difficult to sustain during a pandemic unless provision is made for their use in advance."* (INQ000101591_0033)
12. The issues of airborne transmission and the inadequacy of the protection afforded to healthcare workers in the pandemic are also comprehensively addressed within the witness statement of Kevin Bampton (Chief Executive of the British Occupational Hygiene Society) on behalf of the Covid-19 Airborne Transmission Alliance (CATA) (INQ000174768). Exhibited to this statement is a report of the Health Protection Agency (also from 2008) titled *"CBRN incidents: clinical management & health protection"* (INQ000130543). The report provides guidance for clinical management and health protection in Chemical, Biological, Radiological and Nuclear (CBRN) incidents and is primarily for front line health care professionals in emergency departments. The report states that where there is exposure to respiratory secretions a FFP3 mask must be worn if SARS is suspected (INQ000130543_0010). As established through the Module 1 evidence hearings, Covid-19 is part of the same family of coronaviruses as SARs and MERs.
13. Also exhibited to the witness statement of Kevin Bampton is a report from the Journal of Hospital Infection titled *"Guidance on the use of respiratory and facial protection equipment"*, published online on 17 September 2013

² The 2008 report for the HSE describes the assigned protection factor as *"the ratio of pollutant outside the device to that inside the device and is defined by British Standard BS EN 529:2005 as the 'level of respiratory protection that can realistically be expected to be achieved in the workplace by 95% of adequately trained and supervised wearers using a properly functioning and correctly fitted respiratory protective device and is based on the 5th percentile of the Workplace Protection Factor (WPF) data'."* (INQ000101591_0011)

(INQ000130561). The guidance similarly recommended that the respiratory personal protective equipment to be worn by healthcare workers in a case of SARS is a FFP3 respirator (INQ000130561_0005).

14. Professor Sir Jonathan Nguyen-Van-Tam (Professor Van-Tam) is one of the authors of this Journal of Hospital Infection report and has also provided a witness statement to the Inquiry in Module 1 (INQ000207293). Yet despite the guidance in 2013 clearly stating that healthcare workers should wear FFP3 in the case of a coronavirus like SARS, in September 2016, as Chair of NERVTAG and Vice-Chair of the NERVTAG sub-committee on the pandemic influenza facemask and respirator stockpile, Professor Van-Tam approved the recommendations within the expert advice provided by the NERVTAG sub-committee on the clinical appropriateness of the UK's approach to stockpiling PPE for use in an influenza pandemic to help inform future stockpile and purchasing decisions (INQ000022737). While there may be debate about whether this decision was appropriate for influenza, the challenge was that this decision, as well as further advice by NERVTAG (see below) informed future stockpiling and purchasing decisions. This meant the UK was not properly prepared for a coronavirus pandemic, especially a prolonged one (see also section E in this statement).
15. This expert advice of the NERVTAG sub-committee, includes:

"...respirator (FFP3 class) use for all HCWs both in hospital and the community (including social work, ambulance staff etc) is not fully supported by the current evidence base for either transmission or respirator effectiveness. Furthermore, the logistics of fit testing and training would be extremely challenging..."

It was agreed that intensive care units (ICU) and High Dependency Units (HDU) should be classed as aerosol generating procedure (AGP) 'hot spots' and therefore respirators should be recommended for all staff at all times when a patient with pandemic influenza is present...

The evidence to support the plausibility of aerosol transmission of influenza is stronger now than it was prior to the 2009 pandemic. However, considerations of the infectious dose needed for onward transmission and whether these are regularly achieved through aerosol inhalation have not yet been determined. The relative importance of aerosol transmission compared to other routes is still unknown...

All general ward, community, ambulance and social care staff to wear single use FRSM [fluid resistant surgical masks] for close patient contact. The exception is the performance of AGPs (in isolated areas when practicable) when staff should wear respirators." (INQ000022737_0002)

16. Although the focus of the NERVTAG sub-committee's advice was on the respirator stockpile required for an influenza pandemic, the sub-committee was also asked by the Department of Health to advise on the requirements for MERS Coronavirus, and advised as follows:

"The subcommittee felt that respirators would be needed for all clinical interactions with MERS CoV patients given the high fatality rates and occurrences of HCW [healthcare workers] transmissions. This virus does not have pandemic potential and therefore stockpiling specifically for this purpose is not necessary. Should there be an outbreak, respirators could be drawn from the

influenza stockpile in the unlikely event that usual business supplies prove inadequate." (INQ000022737_0004)

17. On 12 October 2017 the issue of respirator stockpiles was further considered by Public Health England (PHE), NHS England and the Department of Health at a meeting of the Pandemic Flu Clinical Countermeasures Board. The meeting minutes (INQ000057353) record the following discussion:

*"The respirator stockpile will need to be replenished in FY 2019/20. Suppliers have been engaged to explore options to further prolong the life of the stockpile and **minimize re-procurement**. [emphasis added]*

The supplier 3M has been approached to see if there is any potential to further extend their stock. 3M agreed to send an options paper to NHSBSA [NHS Business Services Authority] by mid-October.

NHSBSA has received Medline's confirmation that they are willing to test their products and other manufacturer's products for up to a further 10 years shelf life for both respirators and facemasks.

JIT [just in time] arrangements have been put in place to purchase a minimum of 6.8m un-valved FFP3 respirators (20% of current target volume) at the start of the pandemic.

Estimates from NHS England of respirator use in ICUs have been used to calculate volumes of respirators in the absence of a real time simulation study. The volumes are large, due in part to HSE guidance that respirators are to be worn for a maximum of 1 hour (NERVTAG considers this to be excessive). In view of this, PHE intend to commission a study to understand the operational implications for high use of respirators in a typical ICU/HDU based on NERVTAGs sub committee's recommendations. HSE has been unable to provide scientific evidence for their guidance for use for no more than one hour. The real time study will examine for how long it is comfortable for staff to wear valved and unvalved FFP3 respirators. A PHE literature review on the use of FFP3 respirators and behaviour is underway to support the business case for the study.

Options are being considered by NHSBSA in order to mitigate the impacts of a delay to the procurement to replace stocks that begin to expire in 2019/20." (INQ000057353_0004)

18. This suggests, as highlighted by Dr Kirchelle (see paragraph 2b of this statement), that cost rather than safety considerations played a decisive role in decision making.
19. The minutes of a later meeting of the Pandemic Flu Clinical Countermeasures Board, on 19 March 2019 (INQ000057464) further record that consideration was being given to holding the JIC (Just In Case) stocks of respirators by a managed service contract with the manufacturer, *"whereby the manufacturer will hold the JIC stocks to cycle through their business. This will mean procuring a service contract rather than capital spend on stocks which should result in improved VfM [Value for Money]."* (INQ000057464_0004)

Infection Prevention and Control (IPC) guidance for Covid-19 did not reflect the evidence of aerosol transmission and recommended inadequate protection for healthcare workers

20. In addition to inadequate stocks, because of deficiencies within Infection Prevention and Control (IPC) guidance, even when FFP3 respirators were available they were not always provided to staff who were treating patients with confirmed or suspected Covid-19. Apart from in the very early weeks of the pandemic and for a brief period from January to March 2022, the IPC guidance for Covid-19 in healthcare settings, produced by the four-nation IPC Cell and published by PHE (and later the UK Health Security Agency (UKHSA)) stated that a fluid resistant surgical mask (FRSM) is suitable protection for healthcare staff providing routine care to patients who were known or suspected to be positive for Covid-19, outside of a limited list of specified Aerosol Generating Procedures (AGPs). This egregious position continues to this day, with the current NHS England National Infection Prevention and Control Manual for England (version 2.5 dated 24 April 2023). While acknowledging that Covid-19 can be spread by aerosols as well as droplets and contact it states that FRSM is appropriate protection for the routine care of patients with confirmed or suspected Covid-19. This appears, although it is not clear, to be based on the view that Covid-19 is not *predominantly* airborne. Even if this were the case (which the BMA and many experts vigorously dispute), if a virus can be spread via the airborne route, respirators should be worn. This guidance is at odds with the current WHO guidance and recommendation (cited by Professor Heymann within his expert report (INQ000195846_0019 at paragraph 88)) that a particulate respirator should be worn by healthcare workers along with other PPE before entering a room with an infected person. The NHS England guidance also fails to properly take account of the fact that actions such as coughing and sneezing are capable of generating more aerosol than AGPs). In these circumstances, the failures to provide healthcare workers with adequate PPE/RPE are not simply historic, they remain an ongoing issue of serious concern to the BMA and its members.
21. There was also a failure to ensure that there was PPE/RPE available to suit a diverse range of facial features, including for smaller, often female face shapes, for staff from some ethnic minority backgrounds and for staff who wear a beard or hair covering for religious reasons. Respondents to BMA surveys from ethnic minority backgrounds during the pandemic consistently reported slightly higher rates of failing a fit test than those from white ethnic backgrounds.
22. The position of the BMA is that, having regard to this evidence, it will be necessary for the Inquiry to determine the following issues:
 - a. Why was the approach recommended by the Health and Safety Laboratory in the report for HSE in 2008 not followed and the pandemic stockpile of PPE appropriately and adequately stocked to provide healthcare workers with protection against infectious aerosols?
 - b. Notwithstanding the reservations expressed by NERVTAG in 2016 about the extent of transmission of influenza by aerosol, there was a clear understanding that FFP3 respirators were required when treating patients with suspected cases of SARS and MERS. Why then was no

adequate provision made for the number of FFP3 respirators that would be required in the event of more easily transmissible coronavirus with pandemic potential, as occurred with Covid-19?

- c. Whether cost-cutting was prioritised over safety, having regard to the available evidence, including:
 - i. repeated extensions of expiry dates of PPE equipment (which caused significant alarm to healthcare workers and led to equipment failure such as straps disintegrating);
 - ii. the introduction of JIT (Just in Time) procurement with all its inherent vulnerabilities in a pandemic with squeezed global supply;
 - iii. the failure to provide an adequate quantity of RPE within the PPE stockpile despite knowledge of the potential for airborne transmission, including the airborne transmission of influenza;
 - iv. the decision that FFP3 respirators would only be provided in limited circumstances (AGPs), when the same risks are presented by actions such as coughing and sneezing; and
 - v. the expert opinion of Dr Kirchhelle that cost-cutting considerations dominated restocking decisions.
23. The adequacy of the PPE stockpile is firmly within the scope of Module 1 as a matter of planning and preparedness, and it will be important that this appalling failure to protect doctors and other healthcare workers is reflected within the Inquiry's Module 1 report.
24. However, the BMA recognises that PPE is a cross-cutting issue with relevance to Modules 2, 3, and 5, and that in these circumstances the Inquiry will not yet be able to make final findings and recommendations about where responsibility lies, and why the PPE stockpile remained deficient for so long in the knowledge of the risks posed to healthcare workers.
25. The BMA commends the modular approach adopted by the Inquiry, and from experience gained over the course of the Module 1 proceedings, has the following observations and suggestions about the Inquiry's approach to PPE in future Modules:
 - a. It is accepted that there was insufficient time within the Module 1 hearings to address the issues identified above in adequate detail. However, they are very significant issues for the healthcare profession that directly concern failures of planning and preparedness that placed healthcare workers at very serious and unnecessary risk, and it will be important to ensure that there is an opportunity to question witnesses who were responsible for key decisions in this area in future Inquiry Modules.

- b. The first opportunity will be in Module 2 when it is anticipated that witnesses including Professor Van Tam and other key witnesses will provide oral evidence.
- c. Module 2 has disclosed documents that are highly relevant to decisions about stockpiling PPE, and FFP3 respirators in particular. These documents cannot be referenced within this statement for reasons of confidentiality. However, in the BMA's view, they need to be considered by the Inquiry for the purposes of providing its Module 1 report (and the BMA will of course be happy to identify this material).
- d. A further opportunity to address the issue of the adequacy of the protection provided to healthcare workers will be in Module 3 when considering the impact of the pandemic on healthcare workers and this will have the advantage of the core participation of CATA and a range of healthcare worker representative organisations.
- e. We strongly recommend that in Module 3 the Inquiry ask the HSE, as well as other health and safety experts, to provide evidence to inform considerations of how protected healthcare staff and their patients were during the pandemic. The BMA will of course be happy to help identify any such experts if this would be helpful to the Inquiry.

B) A failure to provide adequate guidance in advance on risk assessments for a pandemic virus

26. On 14 December 2021 the British Medical Journal³ published an article, "protection from covid-19 at work: health and safety law is fit for purpose"⁴, authored by Professor Raymond Agius (emeritus professor of occupational and environmental medicine, a member of BMA Council and co-chair of the BMA Occupational Medicine Committee), Barrister Diana Kloss (an expert in employment law and occupational health law) and others. The article includes the following information:

*"The law imposes the duty on all employers to undertake a, 'suitable and sufficient risk assessment' proportionate to the risk arising from exposure at work and appropriate to the nature of the work, **and this obligation overrides IPC guidance...**[emphasis added]*

In addition to the legal obligations to assess and mitigate risks to all employees who are vulnerable to ill health by virtue of collective classes of exposure, the law imposes obligations to safeguard individuals. Thus, risk assessments should also address the protection of groups of individuals who are susceptible to a higher risk to health because of factors such as gender, age, comorbidity, and ethnicity. The Equality Act imposes obligations on employers to take into account individual disabilities: for instance, a reasonable adjustment might entail a 'clinically extremely vulnerable individual' continuing to work from

³ The British Medical Journal is owned by the BMA but operates independently.

⁴ Agius et al (2021), available online at: <https://www.bmj.com/content/375/bmj.n3087>

home. Such legal obligations antedate and will persist independently of any coronavirus regulations...

The Management of Health and Safety at Work Regulations impose a duty on employers to give comprehensible and relevant information to employees of risks to their health and safety identified by the risk assessment and preventive and protective measures...

Most of the serious shortcomings in protection of workers and others from contracting covid at work arise from the authorities and many employers ignoring legislation and precautionary principles as well as inadequate enforcement, rather than from the existing law being unfit for purpose."

27. It is the BMA's contention that the UK Government failed to ensure that employers met their responsibilities under health and safety law and did not provide sufficient guidance or support for employers to undertake risks assessments in response to the risks posed to workers by Covid-19 in the workplace.

28. This was a particular issue in environments where individuals were more exposed to the virus, such as in healthcare, leading to individuals coming to harm. At page 9 of the BMA's report on the impact of long-Covid on doctors (referenced at paragraph 5 above), it is stated:

"Risk assessments are an integral part of IPC (Infection Prevention and Control) practice and are an important tool in ensuring that employees are safe and protected at work. Health and Safety law imposes a duty on all employers to undertake a 'suitable and sufficient risk assessment' proportionate to the risk arising from exposure at work, however many doctors did not receive these at the start of the pandemic. Nearly 7 in every 10 (69%) doctors responding to the survey who contracted COVID-19 in 2020 told the BMA that they had not been individually risk assessed before acquiring COVID-19. The effectiveness of the risk assessments carried out could also be questioned as around half (49%) of doctors reported self-completing their individual risk assessment."

29. Healthcare workers, including those more susceptible to serious illness from Covid-19, for example due to factors such as age, ethnicity, sex or underlying health conditions, did not receive timely and adequate workplace risk assessments which could, if undertaken and acted upon, likely have prevented the death and long-term illness of some workers.

30. In addition, some staff from ethnic minority backgrounds, despite being at higher risk from the virus, told the BMA that they felt their protection was sacrificed to maintain staffing levels. As the first report of the BMA's COVID-19 Review states, "48% of respondents from an ethnic minority background said risk assessments had been mostly or completely ineffective, whereas only 35% of their white colleagues said so". (INQ000118474_0023).

31. These failures occurred despite the 2011 UK Influenza Pandemic Preparedness Strategy stressing the importance of employers continuing to undertake risk assessments for their staff in healthcare settings during a pandemic:

"Employers will need to undertake risk assessments to determine whether the provision of facemasks or respirators is appropriate for their staff, and workers

who need to wear a facemask or respirator will need to receive training in their safe use, removal and disposal. Where a risk assessment indicates respirators are necessary, staff must be fit tested." (INQ000130554_0038, paragraph 4.17)

32. In a letter dated 28 April 2020 the BMA asked NHS England to develop a national risk profiling framework to assist employers in conducting risk assessments, to take account of factors such as age, ethnicity, sex and underlying health conditions to enable proportionate action to protect healthcare workers at heightened risk from Covid-19.
33. It was not until 24 June 2020, three months into the pandemic, that NHS England issued a letter reminding employers to undertake risk assessments for their staff, and feedback from the BMA's membership was that risk assessments did not take place routinely, and where they did, they were inadequate.
34. Ultimately, the BMA produced its own risk assessment tool for members along with separate guidance for GPs, in the absence of clear guidance from national bodies. The fact that the BMA was required to take this step, is clear evidence of the failure to plan and prepare to keep healthcare workers safe in their place of work.
35. Other healthcare worker representative organisations took similar action and Rosemary Gallagher MBE (professional lead for Infection Prevention and Control and nursing sustainability at the RCN) exhibits to her witness statement the guidance produced by the RCN, titled, "COVID-19 workplace risk assessment toolkit" (INQ000114307).
36. However, it is not the responsibility of representative organisations such as the BMA and the RCN to ensure that legal duties owed to healthcare workers by employers are met, this is the role of central government, employers, and the HSE.
37. A contributory factor to these failures, in the view of the BMA, is the fact that occupational health services were (and still are) inadequately resourced, especially in primary care, which impacted the support available to staff. Further, pandemic planning failed to have sufficient regard to the expertise of occupational physicians.

C) Decades of under resourcing and a failure to do proper workforce planning in the health and social care systems

38. For the BMA, it is critical that there is an appreciation and understanding of how the lack of capacity and resource within the NHS and social care systems, and the repeated failures to address the longstanding problem of staff recruitment and retention, has meant that the UK's health and care systems were desperately underprepared and had no spare capacity to enable them to effectively respond to the pandemic.
39. The third report of the BMA's COVID-19 Review sets out how the failure to properly resource the UK's health and care systems meant that the UK entered the pandemic with an understaffed and under resourced system, ill-suited to

modern needs and unable to cope with the spike in demand caused by the pandemic (INQ000185355). Compared to other OECD EU nations, the UK entered the pandemic with far fewer doctors, hospital beds and critical care beds per 1,000 people (3.0, 2.4 and 7.3 respectively, compared to OECD EU averages of 3.7, 4.6 and 15.9) (INQ000185355_0011 and _0016). Further, it was well known that the NHS 'runs hot', with bed occupancy frequently above safe levels and infamously high staff vacancy rates, leaving very little slack in the system - something that was brutally exposed by the pandemic. These issues indicate gross failures of resilience and preparedness.

40. Not only is a well-funded and resourced social care system important in its own right and for the people who rely on it for support, it also has an impact on health services, with a well reported issue being patients who no longer need medical care being stuck in hospital due to unavailability of a social care placement or community support. The dire state of social care in the UK has long been a focus of attention in health circles, the media and government. Successive governments have promised to fix social care, but it remains underfunded with serious workforce shortages. This significantly impacted the sector's ability to respond to the pandemic and keep people safe and had an impact on capacity within healthcare services.
41. The BMA submits that these are fundamental issues for consideration in Module 1 and are an essential precursor to understanding how failures in preparedness contributed to the impact of the pandemic on these sectors, which will be examined in detail in Module 3.
42. This lack of proper investment in these services exacerbated the severe disruption to healthcare delivery during the pandemic and resulted in calls for retired doctors and nurses to return to service, medical students joining the workforce early and the use of volunteers. Staff had to be redeployed, often starting new roles without training or adequate supervision.
43. A key consequence of this lack of capacity was that elective procedures, diagnostic tests and routine outpatient services had to be suspended in order for staff, resources and beds to be utilised for Covid-19 care. This added to pre-existing backlogs leading to record numbers of people across the UK now on waiting lists for treatment. In addition, some people will have delayed seeking care, which is likely to have led to people presenting later with more severe conditions, further increasing pressure on health services. All of this had, and continues to have, a significant impact on patients' health, especially conditions needing timely treatment, such as cancer.
44. Higher absences amongst healthcare workers due to Covid-19 infection, self-isolation and long Covid compounded workforce shortages, which unsurprisingly, also impacted patient care and forced remaining staff to take on more work. This meant that doctors worked in intense and often unsafe conditions for much of the pandemic.
45. Staff were redeployed to high-risk services where support was most needed. For many, redeployment was a stressful, difficult period in their working lives. Healthcare staff were asked to work within unfamiliar services, on different or more onerous rotas, and often started new roles without induction or training.

Such high-pressure environments, alongside the cancellation of annual leave and other forms of respite, had an impact on staff burnout and wellbeing.

46. Training for doctors was disrupted, which caused a reduction in career progression opportunities and fewer opportunities to learn the vital skills needed to address the backlog of care. For many junior doctors and medical students, exams were suspended or cancelled at short notice while redeployment and disrupted rotations meant that some doctors missed out on placement and clinical exposure opportunities altogether.
47. The impact of the pandemic on the medical workforce across the UK cannot be underestimated. During the pandemic, doctors and other healthcare staff worked tirelessly to safeguard the nation's health within underfunded, understaffed, and underprepared systems. Staff were exposed to a deadly virus without adequate protection, and they have experienced moral distress and moral injury⁵ as a result. Many are also living with long Covid and, sadly, some lost their lives.
48. In his oral evidence on 17 July 2023, the current Chair of the BMA's UK Council, **Professor Banfield**, told the inquiry that the BMA had for a number of years been highlighting the issue of capacity within the health service to all four governments and raising concerns that prior to the pandemic there was not even enough capacity to run these health services under normal conditions.
49. He is not alone in this regard, and over the course of the hearings, the Inquiry has heard from numerous witnesses across a range of fields of expertise that health services in the UK are suffering from a lack of resources, equipment and capacity which impacted their ability to respond to the Covid-19 pandemic. Notably, **Jeremy Hunt**, the former Secretary of State for Health told the Inquiry that he became convinced as Health Secretary that the NHS needed more capacity.
50. Other key evidence on this issue has included:
 - Expert witnesses **Professor Heymann**, who noted that preparedness is not just about a strong public health system and discussed the need for NHS surge capacity, and **Professor Whitworth** who included as a key recommendation for the future the need for sufficient reserve capacity within the health system.
 - **Dame Sally Davies** commented that there was no resilience in the NHS and that compared to similar countries the UK was bottom of the table on numbers of doctors, nurses, beds, intensive care units, respirators and ventilators.
 - **Rosemary Gallagher** from the RCN spoke about how workforce resilience is essential in order to deliver healthcare services and that the UK went into the pandemic 50,000 nurses short which put staff at risk when seeking to surge capacity to support patients who were infected.

⁵ Moral distress is the feeling of unease when institutional or resource constraints prevent an individual from taking an ethically correct action, for example providing patients with the right care at the right time; moral injury results from sustained moral distress.

- **Nigel Edwards** of the Nuffield Trust told the Inquiry that some hospitals had to make very major engineering and structural changes to accommodate high flow oxygen at the outset of the pandemic, a point echoed by Professor Banfield in his evidence. This, he said, indicated a broader issue about the way hospitals have been designed and built in the UK, which is to strip out any kind of redundancy, to compress spaces that are available, to save money where that is possible by reducing to the lowest tolerance that sits within the guidance.
- **Mr Edwards** also said that many health systems, but the UK in particular, have traditionally run with very low margins of spare capacity, which means that having a plan for how to deal with a sudden surge or emergency is very important, but it also limits the scope of that plan because the level of spare capacity in the system is relatively low.
- **Dr Catherine Calderwood** (former Chief Medical Officer for Scotland 2015-2020) gave evidence on 5 July 2023 and was asked about how the system could be kept in a high state of readiness when it has to deal with the reality of running a healthcare system. She told the Inquiry:

"I think that's extremely, extremely difficult. Our NHS is at the moment working at or if not beyond full capacity at times. If you take my own area, the labour ward, the babies keep coming, day and night, and we don't have the luxury of saying, 'There's going to be an exercise, we're going to send six of you for mask fitting'...What we do do is exercises that are relevant and pertinent to the emergencies that might happen on a labour ward...To engage people in something that may or may not happen in several years' time is always going to be very, very difficult in a hard-pressed system."

- **Sir Jeremy Farrar**, the Chief Scientist at the World Health Organisation, sets out in his witness statement that public health, clinical care, care homes, health services and the NHS were chronically underfunded for what they were expected to deliver during the period 2010-2020. Efficiency was the singular focus and spare capacity, resilience, and support for the staff within the NHS and all allied services was neglected. He said, *"This was a system that was not really coping with normal pressures and there was no spare capacity when a crisis hit."* (INQ000182610_0015)

51. The BMA wishes to make clear its position, as a specialist healthcare organisation representing the interests of over half of all practising doctors in the UK, that the lack of resource, capacity, and staffing within health services prior to and during the pandemic meant that the adverse impact of the pandemic on patients, doctors, and other healthcare workers, was and continues to be more severe, including worse outcomes for patients and more serious physical and mental health impacts for doctors and other healthcare workers, than would have been the case had there been better resourcing, capacity, and staffing.
52. Given the increased probability of extreme epidemics (referenced also by **Sir Jeremy Farrar** when he told the Inquiry that we are living in a pandemic age and **Professor Alexander** who described another novel pandemic as an inevitability), it is essential that healthcare systems are more adequately

prepared and resourced to respond to future health emergencies. This includes ensuring healthcare systems have sufficient capacity to deliver care to the growing number of patients currently waiting for treatment, as well as the ongoing capacity to avoid the build-up of future backlogs.

D) Fragmented, understaffed and underfunded public health services

53. The Inquiry has also heard about specific concerns that the public health system was hindered in its pandemic response because of years of budget reductions and funding cuts, inadequate staffing and the continuing impact of the structural reforms introduced in England by the 2012 Health and Social Care Act (the 2012 Act), which fragmented the system and fractured links between public health and NHS colleagues.
54. The three key pillars of public health are:
 - a. Health improvement – addressing the preventable risk factors which cause death and ill health, including tackling health inequalities.
 - b. Health protection – addressing environmental or external health threats, including infectious diseases.
 - c. Healthcare public health – maximising the population benefits of healthcare and reducing health inequalities while meeting the needs of individuals and groups through effective and efficient health and social care interventions, settings and pathways of care.
55. In England, the 2012 Act moved responsibility for public health away from the NHS. PHE became responsible for health improvement and health protection. Local Authorities were responsible for health improvement and the provision of public health services, such as smoking cessation services, weight management and alcohol and drug misuse initiatives.
56. As early as 2011 (prior to the implementation of the 2012 reforms), in response to the consultation on the government's influenza pandemic preparedness strategy, the BMA had raised concerns that the proposed reorganisation of the NHS and the public health system which would result from the 2012 Act jeopardised a coordinated and integrated approach and asked the government to consider the knock-on effects of these reforms on the strategy:

"The BMA supports a UK-wide strategic approach to planning for and responding to the demands of an influenza pandemic. We support the dual national and local focus of the strategy but believe that more work needs to be done to ensure integration between both spheres. The current reorganisation of the NHS and the public health system (due partly to their application to England only) jeopardises a coordinated and integrated UK approach. The BMA would ask that the government consider the knock on effects of these reforms on the strategy. Moreover, it is important to note that in future years, new health and social care organisations may be in place and it will take time for them to develop knowledge and organisational memory."
(INQ000145842_0003)

57. Some BMA members felt that the 2012 reforms resulted in public health specialists in local authorities being less confident in their response to health protection, and one public health doctor told the BMA that: *“The separation of public health into Local Authorities and Public Health England meant that many public health consultants and teams in Local Authorities became deskilled in health protection work”*.
58. This loss of health protection expertise is also set out by the Inquiry’s public health expert, **Dr Claas Kirchhelle**, who states in his report that:

“109. Described financial problems were accompanied by pressures on the public health workforce ... councils established sharing agreements for public health teams. Alongside reduced salaries for some newly appointed specialists, and a wider fall in the number of public health directors, consultants, and specialists, these agreements led to increasingly thin-stretched local public health services. By 2017, the scaling back of public health staffing, retirements, and recruitment problems had left 17 percent of DPH posts vacant. Although DPH vacancies were subsequently reduced, rising pressures also accelerated a shift of workforce composition. Until 2003, the UK’s public health speciality had been a branch of medicine but had been formally widened to include workforce groups from other disciplinary backgrounds. In view of accelerating pressures on local services, many clinically qualified professionals with core skills in epidemiology, health protection, and health services opted to work at PHE or in the NHS. Over time, this resulted in an increasing preponderance of non-clinical posts in local authorities. By 2021, 69 percent of the service medical workforce were located in the newly established UK Health Security Agency (UKHSA), the Office of Health Improvement and Disparities (OHID), and the NHS. Of non-clinical specialists, which include the majority of DPHs and consultants, 90 percent were in local authorities and largely concerned with health promotion. This shift inevitably compromised local-level infection control capabilities.” (INQ000205178_0073-74)

59. Other issues highlighted by BMA members as a result of the 2012 Act include the fracturing of links between public health colleagues and the NHS which impacted the pandemic response, including in relation to data sharing. Members also reported that they felt that local public health knowledge and expertise was undervalued, as noted by **Professor McManus** (President of the Association of Directors of Public Health) in his written statement, where he said at paragraph 250: *“The knowledge of DsPH about health protection, local communities, and their role was not valued by national government and the early design of systems, such as the Test and Trace Service reflected this.”* (INQ000183419_0045). These issues are also addressed at paragraphs 77 and 78 in connection with the lack of planning to deliver testing and contact tracing at scale.
60. The BMA invites the Inquiry to examine the capacity of public health systems at national, regional and local levels (including resourcing, staffing and levels of expertise), the structure of the public health system and the communication and sharing of data between different parts of the system. In particular, we suggest an examination of the extent to which capacity at a local level impacted on practical implementation of government-level decisions, whether there was the knowledge and expertise centrally to advise on what was necessary for a local population and whether data was shared properly between central and local structures to enable timely and smooth decision making in a pandemic.

61. In addition, the major reforms to the UK's public health structures, particularly in England, alongside a decade of underfunding, meant that public health systems across the UK entered the pandemic without the resources, workforce, capacity, structures, or voice they needed (see also paragraphs 77 and 78 below).
62. In her witness statement (INQ000148429_0025) and oral evidence on 26 June 2023, **Dame Jenny Harries** talked about the 40% reduction in the funding of PHE in real terms over the course of its life, while its costs increased, e.g., expensive laboratories. Dame Jenny Harries told the Inquiry that,
- "the organisation therefore, in order to sustain itself, became very dependent on its earned income. It has absolutely brilliant scientists and it can generate some income. But by the end of this period my view would be that, rather than having a system that was a critical system for the UK, founded on a substantial grant that could maintain it, it was trying to pedal fast to keep up, generating income, and often using its scientists to do that rather than perhaps strengthening the wider health protection system."*
63. There were also severe budget cuts affecting **local** public health services. While in England PHE saw its budget decrease by 12% in real terms in the three years between 2016/17 and 2019/20, the English local public health structure experienced even bigger cuts. Since 2015, the public health grant for local authorities has fallen by about a quarter in real terms. **Dr Kirchhelle's** report at paragraph 108 states that *"pressures on local public health were exacerbated by an overall 49% real term cut in central government funding for local authorities between 2010/11 and 2016/17 and a resulting practice of 'top slicing' whereby authorities reallocated ring-fenced public health budgets to other services broadly impacting health and wellbeing such as trading standards or parks and green spaces"*. (INQ000205178_0073)
64. The widespread deterioration of public health funding occurred in concert with an equally concerning decline in the size of the public health workforce. The UK Faculty of Public Health *"has long advocated for a workforce of 30 public health specialists per million of the population as a reasonable and realistic provision"* (see paragraph 40 of the statement of **Dr Kevin Fenton** (INQ000148405_0012)). BMA analysis found that in order to meet this recommended target, the workforce would need to increase by 59% (England), 32% (Scotland), 18% (Wales) and 97% (Northern Ireland) (INQ000185356_0016).
65. The witness statement of **Professor Jim McManus** states that:
- "The overall extent of cuts to public health funding across the UK has inevitably impacted upon the capacity available in local public health teams to plan and prepare for pandemics. In particular the budget for health protection locally was tiny to non-existent which led to a lack of specific expertise which was needed during the pandemic."* (INQ000183419_0033)
66. These factors: the reduction in health protection expertise; the fragmentation of public health services and the fracturing of links between public health and the NHS as a result of the 2012 Act; the very significant cuts to public health funding in the years prior to the pandemic (both central government and local authority funding cuts); and the understaffing of the public health system have all been

strongly reflected in the evidence provided during the Module 1 hearings, including (in addition to those already mentioned) the following:

- **Dr Richard Horton** (Editor-in-Chief of The Lancet) told the Inquiry on 13 July 2023 that the UK has not got an effective public health system that is able to focus on health promotion and disease prevention and the disabling of the public health system left us particularly vulnerable to Covid-19. Dr Horton referred to "*chronic underfunding*" of public health and also to the very centralised public health system in England that hindered the planning and response to the pandemic. He said, "*it's that lack of investment in public health, both in terms of health protection and health promotion, that left us vulnerable*".
- **Duncan Selbie** (Chief Executive of PHE from its foundation in 2013 until August 2020 when PHE was disbanded) agreed that the links between NHS staff and public health specialists became fractured and this affected community infection prevention and control. Mr Selbie described it as one of his 'greatest regrets' that in strengthening the relationship between public health and local government, it came at the expense of removing that capability and that experience from the NHS.
- **Professor Jim McManus** told the Inquiry in his oral evidence on 5 July 2023 that the public health grant paid to local authorities by DHSC had decreased since the financial year 2015/16 by between 26% and 33% ("*depending in which estimate you read*"). Professor McManus also said that although Directors of Public Health took a proactive approach during the pandemic to sourcing PPE, recalibrating their services (e.g., in relation to sexual health and drug treatment services, etc.), and coordinating local systems for test and trace etc., it could have been better had the cuts and impact of austerity not happened, and if there had been better working with aspects of national government.
- In his oral evidence on 5 July 2023, **Professor Kevin Fenton** (President of the UK Faculty of Public Health) described the 2012 Act as one of the most significant reorganisations of the health service since its creation, and that it meant there were public health practitioners operating in many different organisations, in PHE, in local government, in the NHS and elsewhere. He told the Inquiry that for the pandemic response, it was critical to bring that 'public health family' together, to clarify roles, responsibilities, governance, and ways of working. He talked about how this adversely impacted health protection capacity in local government, and similarly how the NHS lost its close relationship with public health expertise and public health functions, and that over time it had to be rebuilt.
- **Dr Kirchhelle** agreed with views expressed by Dame Jenny Harries that all significant reorganisations require a significant bedding in period, but pointed out that the adverse impacts of the public health reforms were still being experienced seven years after the reforms, i.e., in 2019 (the end period of his report).

E) Deficiencies in pandemic planning

67. The Inquiry has also heard extensive evidence about the dual failure to adequately plan for a coronavirus type pandemic, and separately, to plan to prevent the spread of the disease (rather than simply manage its impact).
68. The UK's pandemic planning exercises predominantly focused on an influenza-style pandemic. This narrow focus was an oversight, particularly considering that we had already seen serious outbreaks/epidemics of two coronaviruses in the 21st century: SARS and MERS.
69. One consequence of this is that the UK's response failed to **properly** consider the potential for aerosol transmission during a pandemic, as influenza was understood to be spread primarily by droplets or contact (although more than a decade before the pandemic, a report by the Health and Safety Laboratory for the HSE from 2008 had shown the potential for aerosol spread of influenza, albeit small).
70. This failure to properly consider aerosol transmission impacted the protections available to healthcare workers, as set out within sections A and B of this statement.
71. Pandemic planning policies also primarily focused on how to respond to a situation where there was already significant mortality and morbidity. For pandemic planning to be effective, it also needs to fully consider strategies to detect and contain the spread of disease in order to prevent the worst-case scenario from occurring. Little consideration was given within pandemic planning policies to strategies to detect and contain the spread of disease at scale, but rather the emphasis was on how to respond in a situation where there was already significant mortality and morbidity. This was a key conclusion of the 'Coronavirus: lessons learned to date' committee inquiry (joint Health and Social Care & Science and Technology committees, October 2021) (INQ000090541).
72. A major consequence of this failure to adequately plan to prevent the spread of a disease was that there was no contingency to carry out mass testing and tracing (addressed in the section F of this statement), leading to the abandonment of contact tracing on 12 March 2020 which left the UK without any effective measures (other than a complete lockdown) for controlling the pandemic at this critical time.
73. Many Inquiry witnesses have accepted these dual failures, including:
 - **Professor Dame Sally Davies** (former Chief Medical Officer), stated in her witness statement at paragraph 4.1, that pandemic preparations, *"assumed a pandemic for influenza. This reflected a longstanding bias in our preparations in favour of influenza and diseases that had already occurred, with, we now know, [is] an underestimation of the impact of novel and particularly zoonotic diseases."* (INQ000184637_0005)
 - **Duncan Selbie** agreed (on 27 June 2023) that it was a flaw to have a plan that only dealt with influenza, and that a better plan would have been a generic respiratory plan.

- **Professor McManus** told the Inquiry when he gave evidence on 5 July 2023 that, *"the national [pandemic] plan was unclear. We seemed to prepare for flu when a coronavirus, I would have thought, would have been a perfectly plausible scenario. A range of scenarios nationally were not explained. Some of the communication from national government was lacking. Participation in national exercises was unclear. And I don't believe we learned the lessons from the 2009 flu pandemic. I think the lack of resourcing was unhelpful"*.
- **Dr Fenton** said that, *"there was no space for considering other respiratory infections or a Disease X, another kind of pandemic that would have occurred, and the frame or mental model in which the pandemic plan was being developed would have suggested that we would build upon the lessons of how we responded to seasonal influenza epidemics, which would largely be related to the health service response, mitigating the impact..."*.
- **Professor Mark Woolhouse** (Principal Investigator at the Epidemiological Research Group) gave evidence to the Inquiry on 5 July 2023 and commented that the thinking tends to be reactive, and after the 2003/4 SARS epidemic, there was a lot of thinking about SARS-like events. But then there was the swine flu pandemic in 2009/10 which reignited interest in pandemic flu and the 2011 strategy was concerned only with pandemic influenza. It was not a pandemic preparedness plan, and it was inappropriate and ineffective for a coronavirus.
- **Nigel Edwards** (Chief Executive of the Nuffield Trust) told the Inquiry on 13 July 2023 that, *"Most of the focus had been on planning for an influenza type outbreak, and the significance of that was that a number of the proposals for how to deal with that did not take into account the airborne nature of transmission for Covid-19"*.
- **Professor Sir Chris Whitty** said that there was insufficient thought about how we could stop Covid in its tracks.
- **Professor Sir Michael McBride** (Chief Medical Officer for Northern Ireland) gave evidence on 10 July 2023, in the course of which the lessons identified from Exercise Goliath in 2003 were discussed, which included: the development of operational contact tracing mechanisms with the potential for scaling up at Board and Trust level; contact tracing capacity; and the need to focus on preventing the spread of the coronavirus. Counsel to the Inquiry observed during the discussion, *"That was a long time before 2020 of course, but many of the aspects or at least the inadequacy in terms of sufficient mass testing, mass contact tracing and the need to prevent spread at an early stage of the outbreak, can all be traced back to some of the concerns expressed following Exercise Goliath..."*

74. There is also some evidence that because the 2009 swine flu outbreak did not materialise to any significant degree in the UK, this led to complacency. On 29 June 2023, **Sir Jeremy Farrar** said that because the influenza pandemic of 2009 proved to be less severe than expected, *"in the UK and around the world,*

despite the warnings of the last 20 years, there has been a complacency about the need to prepare..."

F) The lack of planning to deliver testing and contact tracing at scale

75. As already mentioned, a major consequence of the failure to adequately plan, was that there was no contingency to carry out mass testing and tracing, and this resulted in the abandonment of contact tracing on 12 March 2020 which left the UK without any effective measures for controlling the pandemic at this critical time and which essentially necessitated the national lockdown that followed.

76. However, the UK did have existing diagnostic capability, within 44 NHS laboratories that simply was not fully utilised, and **Dr Kirchhelle's** evidence to the Inquiry on 10 July 2023, when asked about criticisms made of PHE that they had been reluctant to engage with private testing laboratory facilities, is instructive in this regard. He said:

"I think that in the UK case it's a slightly odd criticism, because the UK has a significant sequencing public capability within the NHS and it also has significant sequencing capabilities within the university sector of which Public Health England were naturally aware because they were working with all of these laboratories prior to the pandemic...It's very interesting to see the NHS capabilities perhaps not being used as strongly as some observers would have wanted them to be used in 2020".

77. Similarly, there was significant expertise to carry out contact tracing within local authority public health functions, which again was not properly utilised and could have been scaled up with adequate resource rather than spending billions on an outsourced test and trace system. **Professor McManus** told the Inquiry why it was so important to engage with Directors of Public Health, who were trained and expert in contact tracing and knew their local areas and local communities. He said, *"we have capabilities that we could mould and shape rapidly, such as test and trace, and it was pretty obvious when local directors of public health and local authorities took on test and trace additional work, that the improvement in test and trace was marked nationally in multiple reports"*. And within his witness statement, Professor McManus makes a series of similar points, as follows:

"248. Communication with DsPH was inadequate, hampered by the DHSC not holding or maintaining a list of contact details for DsPH at the start of the pandemic. Data sharing was also limited and left DsPH in the dark about the presence and spread of Covid-19 in their communities

249. There was a disconnect between national government and local government, DsPH were not consulted and engaged with sufficiently in the early stages of the pandemic and their expertise was overlooked in formulating policy and guidance

250. The knowledge of DsPH about health protection, local communities, and their role was not valued by national government and the early design of systems, such as the Test and Trace Service reflected this." (INQ000183419_0045)

78. Other relevant evidence from the hearings on this issue, includes:

- **Professor Heymann** told the Inquiry that, *"The UK had quite a good case -- contact tracing systems. In fact they're used at the local level regularly for outbreaks that occur. But they occur at the local level, where trust is very important, because if people are going to give information about their contacts, they're going to give it to people who they trust. Countries, including the United Kingdom, centralised more [of] their contact tracing activities, and by so doing there was less of a trust in that contact tracing, and it may be that it was less effective."*
- **Duncan Selbie** said that the big gap in pandemic readiness and response was mass testing and mass contact tracing, **"because the flu plan didn't ever envisage that would be necessary"** and although consideration was given to high consequence diseases such as MERS, this did not require a mass response.
- **Sir Frank Atherton** (Chief Medical Officer for Wales) told the Inquiry that both the 2011 UK Pandemic Influenza Preparedness Strategy and the 2014 Wales Framework for Managing Major Infectious Diseases Emergencies discounted without sufficient consideration, countermeasures suitable for dealing with high-consequence infectious diseases such as mass diagnostic testing and mass contact tracing.
- **Sir Jeremy Farrar** told the Inquiry that, *"The testing capacity in the first three months of 2020 in the UK was woefully inadequate. It wasn't possible to scale that up at the speed that was required and testing got way behind the speed of the epidemic...I would personally like to see a much closer interrelationship between what we call public health, public health laboratories, clinical and NHS facilities, and the broad and very strong research environment in the UK."*

G) Missed opportunities for learning lessons

79. The process by which learning from expert reports and pandemic planning exercises is implemented was woefully inadequate. Over six weeks of hearings the Inquiry questioned many witnesses about the failure to implement recommendations, and the Inquiry will have a comprehensive account that it is not proposed to duplicate in this statement.
80. However, the BMA does wish to highlight that concerns and recommendations about the need to ensure adequate PPE, especially RPE, risk assessment processes, test and trace capability, and adequately resourced and staffed public health, health and social care services, have been raised repeatedly since at least 2003 following the SARS outbreak, and yet by the time the pandemic struck almost two decades later, they had still not been properly addressed.

81. These concerns and recommendations include:

- a. Following the SARS outbreak the Health Protection Agency (HPA) published its report in December 2003 titled "*Interim Contingency Plan for severe acute respiratory syndrome (SARS)*" (INQ000179082). Within the introduction at page 3 it is stated:

"The effective detection, prevention and control of outbreaks of SARS will depend on the many actions which include the following:

- *Public information for those at risk*
- *Education, training and mobilisation of health care professionals*
- *Alerting of those likely to see cases*
- *Rapid detection and reporting of cases with immediate action following*
- *Prompt isolation and investigation of cases*
- *Provision of high quality laboratory testing to confirm SARS and exclude other causes*
- *Appropriate provision of hospital isolation facilities*
- *Effective application of infection control measures especially in acute hospital settings*
- *Rigorous contact tracing and management of close contacts of probable cases."* (INQ000179082_0003)

- b. A 2008 research report by the Health and Safety Laboratory for the HSE (INQ000101591) into the limitations of surgical masks in the prevention of aerosol infection, including the misperception among staff that surgical masks will protect against aerosols and the need for appropriate respiratory protection (addressed at paragraphs 7 to 19 above).
- c. The 2009 Influenza Pandemic Report: An independent review of the UK response to the 2009 influenza pandemic chaired by Dame Deirdre Hine, which makes 28 recommendations across a range of issues including the central government response to the H1N1 pandemic, working arrangements across the UK, scientific advice, containment, and communications with the public. (INQ000145901)
- d. The UK Influenza Pandemic Preparedness Strategy 2011 (INQ000130554), which includes as a key element of a pandemic response the importance of employers continuing to undertake risk assessments for their staff in healthcare settings (see section B above).
- e. The BMA's response to the draft UK Influenza Pandemic Preparedness Strategy (INQ000145842) which highlighted concerns that some of the key lessons from the 2009 H1N1 (swine flu) influenza pandemic had not been learnt, including stockpiling PPE, planning for staff redeployment, the prioritisation of scarce resources and surveillance data. The response also warned that the current reorganisation of healthcare and public health systems in England jeopardised a coordinated and integrated UK approach (see paragraph 56 above).

- f. Exercise Alice in 2016 (INQ000090431) which included recommendations to review current stocks of PPE, to have pandemic stockpiles in order to ensure sufficient PPE was available, and to ensure staff have clear instruction/training in the use of PPE and infection control. It also recommended planning for the development of a MERS-CoV serology assay (a test), plans for a process to scale up such testing capacity, and a plan for the process of community sampling in a MERS-CoV outbreak.
 - g. Exercise Cygnus, also in 2016 (INQ000022792), included recommendations to develop a whole system approach to the distribution of PPE to health and care staff, and the need for national PPE stockpiles. It also identified that further work was required to consider surge arrangements for a reasonable worst-case scenario, and that "*consideration should be given to providing more detailed national guidance which could be applied at the operational level during a response and to arrangements for 'scaling up' the local response to pandemic influenza in a manner that recognises its impact nationally*". (INQ000022792_0008)
 - h. Exercise Cygnet in 2016 (the precursor to Exercise Cygnus) (INQ000113297) recommended that NHS England, PHE, the CQC and Local Authorities develop a whole system approach to the distribution of PPE to health and care staff.
 - i. Exercise Iris in 2018 (INQ000147839) recognised that the availability and use of PPE would be a key consideration in the early stages of an outbreak, and that amongst frontline staff there is unease at the lack of clarity on PPE availability, training and testing. It also identified the need for further work to ensure the resource impact of extensive contact tracing is considered.
 - j. Exercise Pica in 2018 (INQ000113205), which focused on primary care, identified the need for further consideration of the recruitment and management of staff to assist in the surge capacity response.
82. Despite these and many other warnings and recommendations over two decades, the same unresolved issues remained when the Covid-19 pandemic started in 2020, including: a lack of capacity within public health, health and social care services; appalling failures to ensure that healthcare workers were protected with adequate PPE; an inadequate system for test and trace; fragmented public health services; and inadequate IPC and risk assessments within workplaces.
83. Having regard to the many repeated failures over such a lengthy period to implement learning and improvement there is an obvious and urgent need to consider what needs to change to ensure planning is improved and recommendations are acted upon.
84. A striking feature of the process for commissioning and running exercises was the apparent absence of responsibility for the implementation of recommendations. PHE told the Inquiry that they just ran the exercises but were

not responsible for implementing their recommendations. Similarly, there was no clear process by which those who commissioned and instigated exercises knew whether and how recommendations had been put in place. An example of this being Exercise Alice instigated by the then Chief Medical Officer in 2016 in response to MERS. **Dame Sally Davies** responded to a question from Counsel to the Inquiry as to why the workstreams designed to give effect to the Exercise Alice recommendations, particularly in relation to quarantining and mass contact tracing, did not appear to have borne fruit, as follows:

"No. I instigated it. I felt we needed it. If you look at the report, you will see it was published, written by Public Health England. My understanding was having written the report...that they would get on and make sure that they addressed the agreed recommendations...I would have expected them [the recommendations] to be [put into place]. It appears they weren't."

85. **Sir Oliver Letwin**, when he gave evidence to the Inquiry on 20 June 2023, suggested that there needs to be a system/body with responsibility for implementing the recommendations of exercises with Parliamentary oversight to ensure that the recommendations are implemented (and that this should not be left to individual departments).

H) The need for improved government structures and processes for civil contingencies

86. Dealing briefly with the government systems and processes for ensuring resilience and preparedness, the BMA's position is that there is an urgent need for clear accountabilities and responsibilities to be established. Existing structures are overly complex and fractured, and **Dame Sally Davies** commended the Inquiry's effort to portray the structures within an organogram by noting "because of course it's a three-dimensional spaghetti mess". And the system was described by the Inquiry's expert, **Professor Alexander** on 15 June 2023, as follows:

"My opinion of the British civil protection system is that it actually is not a system, it is a set of fragments, which is a way of saying that it isn't terribly well connected, despite the spaghetti diagram."

87. The quality of decision-making is also a concern. As **Sir Oliver Letwin** told the Inquiry the revolving door of ministerial and official appointments tends to undermine experience, efficacy, and the ability of ministers and officials to be able to do the job with which they are tasked. In this regard, the Inquiry has heard about a concerning lack of knowledge and awareness at senior levels within lead government departments, including in relation to key documents such as the 2011 UK Influenza Pandemic Preparedness Strategy.
88. The Inquiry has also heard about failures to engage and to share information with key stakeholders, for example the Exercise Cygnus report, which was only published in 2020 following a judicial review challenge brought by a doctor.
89. Another key issue with the structures and governance for pandemic planning was the disconnect between national policy formation and the local teams (particularly in public health) who were often at the frontline of the public health response.

90. The witness statement of **Professor McManus** identifies the,

"significant disconnect between how policy was formed nationally and how it was implemented on the ground. The top-down approach by government meant that DsPH — particularly in the early months of the pandemic — were side lined in terms of the national decision making and centrally run programmes (e.g., PPE and the testing regime). There was an assumption decisions could be made at a national level that would be suitable for all local areas and that proved costly" (INQ000183419_0040).

91. This relates to the BMA's view that there was a failure to sufficiently engage independent public health specialists in pandemic planning structures and decisions at all levels. In the BMA's response to the 2011 Pandemic Influenza Strategy (see paragraph 56 above) the BMA called for the involvement of public health doctors, with specialisms in health protection, to be enshrined in the pandemic response system:

"The BMA strongly supports the sentiments of chapter 3 that decisions about the nature of the response to the pandemic must be made on the basis of expert scientific evidence. Further detail is needed about how this would be operationalised, both at national and local level. We recognise that this would involve a range of specialists, but strongly believe that the involvement of public health doctors, with specialisms in health protection, is key and should be enshrined into the response system." (INQ000145842_0006)

92. These views are echoed by **Sir Jeremy Farrar**, who states:

"...it is local communities where epidemics start and end. The UK did not get the balance right between the national and the local. Local knowledge and expertise are crucial in addressing complex issues that affect diverse communities. Working out what is the responsibility of the centre and what is better led and owned by local authorities and communities is crucial and has been in every epidemic and pandemic..." (INQ000182610_0023)

93. Add all of this together: the failure to implement learning; the lack of clarity around roles and responsibilities; concerns about levels of knowledge and expertise; cost cutting; a top-down approach; and a tendency towards unnecessary secrecy, and it was inevitable that there would be failures to plan and prepare properly.
94. Given the increased probability of extreme epidemics, before the next event inevitably hits, there is an urgent need to establish clear and coherent decision-making processes, responsibilities, and accountability.

I) Failure to consider inequalities and vulnerabilities in pandemic planning

95. Pre-existing inequalities and the vulnerabilities of different groups were not adequately considered in the UK's emergency and pandemic planning and preparedness. This had implications for healthcare workers (which the BMA includes as a vulnerable group due to their greater exposure to the virus through their work). There were also further consequences for certain groups of healthcare workers more susceptible to severe illness from Covid-19, including,

but not limited to, staff from ethnic minority backgrounds and those who were classified during the pandemic as clinically extremely vulnerable to the virus. It also had implications for vulnerable groups in the wider population, such as staff exposed to the virus as a result of their occupation, ethnic minorities or those coming from deprived backgrounds. All of this is set out in more detail in the BMA's second and fifth COVID review reports looking at the impact of the pandemic on healthcare workers and population health more widely respectively.

96. The lack of adequate consideration of healthcare workers and vulnerable healthcare workers can be seen in the severe shortages of PPE. On top of that, the need to ensure sufficient supplies of RPE to fit a wide range of face shapes and sizes (including smaller, often female, face shapes or staff who wear a beard or hair covering for religious reasons) was not adequately considered as part of pandemic planning prior to Covid-19 leading to a lack of availability. This was accepted by Clara Swinson (Director General, Global Health, DHSC) when she gave evidence. Moreover, the BMA's call for evidence survey for its COVID-19 review found that feeling worried or fearful about speaking out about a lack of PPE was more commonly reported by ethnic minority respondents, those with a disability or long-term health condition, GP trainees and SAS doctors – exacerbating these issues.
97. Looking beyond healthcare workers, the UK's significant pre-existing health inequalities profoundly impacted outcomes for certain groups in the population. Those who were most at risk of infection, severe symptoms and death were those with the worst health outcomes prior to the pandemic. In addition, those most economically vulnerable (often the same groups that were most vulnerable to the virus with significant intersectionality) were often most affected by government decision during the pandemic. This suggests that more could have been done to protect these groups by giving considerations to the unequal impact of a fast spreading disease on different groups within the population (e.g., by ensuring these groups had up to date information about the risk to them in their language), and similarly the unequal impact of government decisions taken to mitigate such spread (for example the impact of asking people to isolate on those with the lowest income).
98. Many witnesses have agreed that inequalities – particularly those not related to clinical vulnerability or susceptibility - were not properly considered, if considered at all, in pandemic planning:

- **Professor Marmot and Dr Bambra** told the Inquiry on 16 June 2023 that,

"...most of the health differences we see are not attributable to healthcare, but to health. Let me make two comments about this slowdown in improvement in health post-2010. The first is close to unprecedented – it's hard to overstate how important this is: that we were used, as a country, based on the evidence, to expect health to get better every year. Fewer babies would die, fewer old people would die, health would improve year on year and that's what the history of the 20th century led us to expect. And in 2010 that rate of improvement slowed dramatically, more markedly in the United Kingdom than in any other rich country expect Iceland and the United states. That's really dramatic. It slowed in many countries, but nowhere near to the extent that the improvement in life expectancy slowed in the UK. Second –

we've described the social gradient in health – the social gradient got steeper, so the inequalities got bigger, and, particularly for people from the northeast, what we saw was a decline in life expectancy. A decline. Not just a slowdown in improvement, a decline in life expectancy for people in the bottom 10% of deprivation, the most deprived, in every region of the country except London. So the regional inequalities got bigger. If you were lucky enough to be in London, then the consequences of your deprivation for your health was not as bad as if you were deprived in the northeast or the northwest."

- **Sir Christopher Wormald** accepted that there was no thinking in any of the exercises between 2007 and Exercise Pica in 2018 about the impact of pandemic plans, the pandemic, or the response to the pandemic on vulnerable people, ethnic minorities or any sector of the population other than insofar as they may be affected clinically.
- **Sir Patrick Vallance** told the Inquiry that, *"there is a terrible, terrible truth, and it's something that we all need to reflect on, which is that all pandemics feed off inequality and drive inequality...that needs to be understood and is relevant, of course, to the many people who suffered during Covid. That needs to be built into the thinking, the thought process, right at the outset."*
- **Professor McManus** said, *"From time immemorial, every pandemic has hit those worst who have been least able to bear the burden. So health equalities have to be at the centre."*
- **Dr Fenton** was asked on 5 July 2023 to explain how the approach to planning for pandemics can take account of equalities and vulnerabilities, and replied:

"First there has to be leadership commitment from the highest levels of government and at all levels of government to address inequalities, recognising the detrimental impact it has on overall population health. Second, we need to ensure that we're investing in programmes which are culturally competent, co-produced with our communities and ensuring that we're using the assets that we have to deliver those programmes effectively. Third, ... the importance of having good data sets that enable us to both understand where inequalities occur and to be able to evaluate the impact of interventions. ... Fourth, ensuring that we have ways in which we are communicating and engaging with communities. ... Finally, for a number of the inequalities that we observed, the experience of our communities on poor trust, stigma, discrimination, including structural racism has repeatedly come up as a huge issue that our communities need us to confront and address, and ... I believe that organisations working in health and care have a responsibility to visibly state and to visibly act on these inequalities in a much more comprehensive way."

Recommendations

99. The BMA has identified a number of critical areas that we believe the Inquiry should consider in order to ensure that the UK is better prepared and able to respond effectively to future pandemics. These include:
- a. Proper structures and systems for ensuring that the learning and recommendations from planning exercises are embedded and implemented.
 - b. Ensuring the safety of healthcare workers in the workplace, including through adequate and timely risk assessments; supply of PPE, including sufficient RPE, and training in fit testing of RPE; IPC guidance that prioritises safety; and improved awareness of health and safety duties owed to workers.
 - c. Maintaining an adequate rotating stockpile of appropriate PPE and having robust plans to quickly scale up procurement and manufacturing if required.
 - d. Improving public health infrastructure and capacity, including adequately funding public health, and reversing any cuts made in recent years, ensuring public health systems have adequate contact tracing capacity that can be rapidly scaled up for future pandemics, urgently increasing the number of public health staff at a local, regional and national level, and increasing the number of public health medicine training places provided.
 - e. Take action to reduce health inequalities, including through a cross-government strategy to improve population health and reduce health inequalities in order to reduce the disproportionate impact of future pandemics; implement a 'health in all policies' approach; and ensure consideration of inequalities is embedded in pandemic planning and preparedness structures and is a key element of pandemic planning exercises.
 - f. Ensure the health and social care system have the resources, capacity and flexibility needed to respond to future pandemics, including sufficient surge capacity. This must include:
 - i. Undertaking and publishing regular assessments of workforce shortages and future staffing requirements and government commitment to ensure safe staffing levels.
 - ii. Developing a credible plan for increasing capacity in hospitals and General Practice and addressing the historic shortfalls in bed capacity.
 - iii. Improving capital investment, modernising physical and digital infrastructure, and improving ventilation of the NHS estate.
 - iv. Developing and implementing a properly resourced plan to address the historic funding and workforce challenges in the social care system.