

The UK Covid-19 Inquiry

Written opening statement of the British Medical Association (BMA) in Module 5

Introduction

1. The BMA is grateful for its designation as a core participant in Module 5. The overwhelming priority of the BMA's members is to ensure that they provide the best possible care and treatment to their patients. During the pandemic, doctors and other healthcare staff worked tirelessly to care for their patients, against a backdrop of poor pre-pandemic planning, limited resources and equipment, and a lack of appropriate personal protective equipment (PPE), all while being exposed to a potentially deadly virus. To this day, doctors and healthcare workers are still not being provided with adequate respiratory protection as a result of Infection Prevention and Control (IPC) guidance continuing to fail to properly recognise that Covid-19 can be spread via airborne transmission. This is inexcusable and must be remedied as swiftly as possible.
2. As a core participant in Modules 1, 2, 3 and 4 of the Inquiry proceedings, the Inquiry will be aware that the lack of adequate supplies and the lack of protection of healthcare staff, as well as the impact this had and continues to have on staff, are of particular concern to the BMA and its members. Within Module 5, the BMA respectfully urges the Inquiry to elicit evidence that enables it to publish recommendations that will:
 - a. Lead to better protection for healthcare staff, including through a reliable, diverse supply of PPE available to suit all staff and suitable for a range of potential pathogens.
 - b. Improve patient care and reduce staff moral injury through better supplies of key equipment such as ventilators and the ability of NHS estates to supply oxygen at scale in future emergencies.
 - c. Reform procurement processes to ensure greater transparency, efficiency, and accountability, thus reducing waste and improving the allocation of resources.
 - d. Increase domestic manufacturing capacity for PPE and other key healthcare supplies.
3. This opening statement highlights, under five categories, the BMA's key concerns regarding matters within the scope of Module 5:
 - a. The quantity and quality of PPE supply was woefully inadequate.
 - b. There was a lack of access for healthcare workers and patients to testing, contributing to nosocomial infections and impacting on staff capacity in the NHS at a critical time.
 - c. Inadequate procurement and distribution of ventilators led to localised shortages and distress for staff and patients.
 - d. There were critical oxygen shortages.
 - e. Private outsourcing significantly increased during the pandemic, typified by a lack of transparency and poor value for money.

The quantity and quality of PPE supply was woefully inadequate

4. There were significant issues with the procurement, distribution and supply of PPE to health and care settings during the pandemic. There are multiple causes for these issues, ranging from failures in pre-pandemic planning; procurement processes unfit for the challenges of a pandemic; a failure of government leaders to act quickly to secure adequate stocks of PPE in the context of global shortages and supply issues; and inappropriate PPE being procured as a result of flawed IPC guidance.
5. While some of these issues have been considered as part of earlier modules, particularly modules 1 and 3, there remain a number of significant and interconnected issues that need to be examined as part of Module 5.
6. It is well established, and the Inquiry has heard a substantial amount of evidence, that healthcare staff experienced widespread PPE shortages in the early months of the pandemic. By early March 2020, global demand for PPE had surged and there were severe shortages. In evidence in Module 3, Professor Susan Hopkins noted that in April 2020, supplies were *"down to days"* [18.09.24/124:24], while Matt Hancock stated that at one point the UK was *"within 6 or 7 hours of running out"* [21.11.24/124:8-9]. The shortages were so severe that in April 2020, Public Health England was forced to issue Acute Shortages Guidance on the use of PPE in healthcare settings. This guidance was intended to help healthcare workers manage, prioritise and re-use PPE during the peak of the crisis.
7. Some witnesses have stated that the UK never ran out of PPE, and that the problems were with the distribution rather than the quantities. It is the BMA's view that if staff do not have the PPE required when they need it then there is a problem, regardless of whether it arose from the distribution of PPE or the levels of PPE available, whether from existing stockpiles or PPE that was procured during the pandemic.

Infection Prevention and Control (IPC) guidance had a significant influence on what PPE was procured both pre and during the pandemic

8. IPC guidance sets out the measures healthcare organisations must take to protect against infection in their workplaces. This includes general precautions and so-called Transmission Based Precautions. It is the latter that sets out what measures, including ventilation and PPE are required in different situations. This includes when Respiratory Protective Equipment (RPE) is required. The IPC guidance dictates to a large extent the type and quantity of PPE, including RPE, that is required to be procured.
9. A key failure of pandemic planning and in the response to the Covid-19 pandemic was that relevant authorities did not take a sufficiently precautionary approach, including in the IPC guidance, to prepare for the potential of a pandemic caused by an airborne respiratory virus. It was well established prior to the pandemic that RPE provides far greater protection against an airborne virus than a Fluid Resistant Surgical Mask (FRSM). Yet the Inquiry has heard extensive evidence in Module 3 that, even in the face of emerging and growing evidence of the significance of aerosols in the transmission of Covid-19, for the majority of the pandemic – and to this day – the IPC guidance in place in healthcare settings recommends only FRSMs rather than RPE, including FFP3 respirators, for doctors and other healthcare workers providing routine healthcare to patients with a known or suspected Covid-19 infection.

10. This meant that PPE and RPE procurement was based on recommendations that failed to provide adequate protection to healthcare workers and put them at risk of infection, Long Covid and death. It also increased the risk of healthcare workers passing an infection to patients and thereby of increasing rates of nosocomial infections in healthcare settings.

The IPC guidance was itself influenced by FFP3 shortages

11. Alongside the above influence of the IPC guidance on PPE and RPE procurement, there is also evidence that in early 2020 the availability of FFP3 respirators and associated fit testing capacity played a significant part in influencing the IPC guidance. As such, these two mutually reinforcing influences resulted in staff being left severely unprotected.
12. It was known prior to the pandemic that coronaviruses are transmitted through aerosols (not solely droplets), and in 2013 a paper co-authored by, among others, Dr Lisa Ritchie and Professor Sir Jonathan Van-Tam [INQ000130561] recommended FFP3 for routine treatment of SARS-CoV-1, which is closely related to SARS-CoV-2 with 80% genomic similarity. However, the UK entered the pandemic with an inadequate stock of FFP3 respirators for routine use because, as described in an email sent by Professor Sir Jonathan Van-Tam on 23 January 2020, *“The historical HSE statutory position is that maximum level RPE is required. This was neither affordable nor practical for pandemic stockpiling”* [INQ000151353].
13. When Covid-19 arrived, these FFP3 shortages influenced the guidance developed by the IPC cell, something confirmed by both Matt Hancock and Laura Imrie in Module 3. For example, in oral evidence Laura Imrie stated that *“if we wrote guidance as a precautionary principle to put everybody into FFP3 then not only would they have had a large amount of the workforce that couldn’t comply with the guidance, and therefore couldn’t come to work, we would also have had high risk areas...that might have been left without the FFP3s”* [05.11.24/149:17-24]. The role that FFP3 shortages played in influencing the IPC guidance is similarly demonstrated by a 29 March 2020 report produced on behalf of DHSC, and referred to in the witness statement of Jonathan Marron, in which it was estimated that there was 10 weeks of FFP3 stock remaining and that *“demand will burn down existing stock”* [INQ000339131/3]. This observation is accompanied by an appalling action to *“reduce demand [of FFP3] with policy”*. Healthcare workers should not have to bear the consequences of poor pre-pandemic planning, and FFP3 shortages should not trump adequate protection of healthcare workers’ lives.
14. When the initial critical FFP3 supply shortages were resolved, there was an opportunity over the summer of 2020 to procure sufficient numbers of FFP3 respirators to protect all staff caring for patients with, or suspected to have, Covid-19, not solely those working in ICU or areas where Aerosol Generating Procedures (AGPs) were undertaken. However, instead of providing this protection, a stop order was placed on the purchase of FFP3 respirators in June 2020 – again reinforcing the previously outlined influence of the IPC guidance on what PPE and RPE was procured.

Pandemic planning for PPE, including the PPE stockpile, was inadequate

15. There were a number of critical failures in pandemic planning that impacted PPE supply for healthcare workers; an inadequate pandemic stockpile; a reliance on 'Just in Time' procurement; and a lack of domestic manufacturing.
16. First, multiple pandemic planning exercises (Exercise Alice, Exercise Cygnus and Exercise Iris) emphasised the importance of PPE for staff. Exercise Alice specifically highlighted the importance of ensuring sufficient PPE quantities were available in pandemic stockpiles, a crucial suggestion that was overlooked.
17. In addition, the focus in pandemic planning solely on pandemic influenza rather than preparing for a wider range of pandemic threats, impacted the type and amount of PPE included in the pandemic stockpile. Influenza pandemic stockpiles were primarily based around a higher reliance on FRSMs (which are not considered to be PPE by the Health and Safety Executive) for use by healthcare workers, rather than the significantly more protective items of Respiratory Protective Equipment (RPE) including FFP2 and FFP3 respirators and powered air pressure respirator (PAPR) hoods. This was based on the belief that influenza was predominantly spread via direct contact with large droplets, rather than aerosols, although it was known well before the Covid-19 pandemic that flu could spread via the airborne route and FFP3 respirators provide significantly higher protection against respiratory viruses, including coronaviruses and influenza.
18. Secondly, the use of 'Just in Time' procurement contracts significantly reduced the ability to supplement the PPE held in stockpiles. When the pandemic began, it became clear that many of these contracts could not be fulfilled due to increased global shortages and demand. A 'Just in Time' approach to PPE procurement is inappropriate for a pandemic where there is high global demand for supplies, and this was compounded by poor distribution and supply systems.
19. Third, a lack of domestic manufacturing capacity in the UK and the inability to scale up production to respond to demand, left the UK reliant on importing much of the required PPE. In a time of global demand and worldwide shortages, this left the UK scrambling to procure PPE and led to issues both with supply and quality of the PPE it received.
20. As a result of the above, and given that the threat of Covid-19 was known since December 2019, it became even more critical for the UK Government to act quickly to secure adequate stocks to protect healthcare workers once Covid-19 arrived. However, despite this, efforts to obtain PPE were marked by missed opportunities to ensure staff had access to adequate and sufficient PPE. For example, the UK was invited to join a pan-EU effort to procure PPE, but did not participate.

PPE procurement processes were flawed, and lacked transparency

21. The approach to procurement taken by UK Government during the pandemic was characterised by delay, lack of transparency, and a lack of due diligence. In particular, the establishment of the UK Government's High Priority Lane for PPE suppliers prioritised suppliers with links to UK Government ministers at the expense of other potential suppliers and has been deemed unlawful.
22. The Public Accounts Committee found in its 2022 report [INQ000087211] that there was no consideration of any potential conflicts of interest between individuals making referrals through the High Priority Lane and the companies they were referring, even

though the very nature of the High Priority Lane meant that potential conflicts of interest were inherently more likely.

23. Around one in ten suppliers that came through the High Priority Lane were awarded a contract compared with one in a hundred for the ordinary lane and these suppliers were paid 80% more per unit than contracts via the ordinary lane.

Significant quantities of PPE were faulty or unfit for purpose, resulting in the waste of billions of pounds of taxpayers money, and putting healthcare staff at risk of infection.

24. Poor quality of PPE became a significant issue during the pandemic. Some items obtained from suppliers failed to meet safety requirements and were deemed "not fit for purpose" leading to recalls of faulty equipment, which ultimately had to be destroyed.
25. There were numerous reports of face mask straps breaking, for example a secondary care doctor in England told the BMA in a survey that, *"the elastic straps on FFP3 masks had perished and would unpredictably snap during the working day thereby exposing the wearer"*.
26. In some cases, as seen in the example of faulty masks produced by Cardinal Health in 2020, these defective products continued to be distributed to health and social care staff. Similarly, in February 2021 the DHSC issued an alert about an estimated 1.2million counterfeit FFP3 respirators produced by Fang Tian which had a forged CE mark.
27. Ultimately, billions of pounds worth of PPE that was procured arrived unfit for purpose and was subsequently destroyed; money that could have been spent on supporting the NHS and providing patient care.

Failures in the procurement and supply of PPE have had a significant impact on healthcare workers

28. In the BMA's surveys, respondents reported widespread shortages of PPE across all settings, particularly in the first wave of the pandemic. As a result, 81% of respondents to the BMA's Call for Evidence survey said that they did not feel fully protected during the first wave.
29. Staff had to go without PPE, reuse single-use items, use items that were out of date with multiple expiry stickers visibly layered on top of each other, or use homemade/donated items. This led to perceptions, which persist to this day, that cost was being prioritised over safety. Many workers expressed their feelings of vulnerability and frustration due to the insufficient quantities provided, as well as issues with the quality of kit. One GP in Northern Ireland told the BMA *"We were sent 6 pairs of gloves and 6 aprons in an envelope approximately 3 weeks after the start of lockdown"*.
30. Shortages were so severe that the BMA had to produce guidance on rights/moral obligations if staff did not feel adequately protected. This guidance set out the steps staff should take in raising their concerns with management and what factors to consider when making decisions about whether to treat a patient without appropriate protection [INQ000117758].
31. In BMA surveys, staff described how exposed, poorly protected and incredibly let down they felt. Others described the lengths to which they and others went to source PPE (e.g. schools 3D printing visors, purchasing from DIY stores, patients making

visors/scrubs for staff). Many, especially those most vulnerable (particularly ethnic minority groups), described the anxiety of feeling pressured to work without protection.

32. It was not only shortages of the PPE itself, but also shortages in the other equipment needed to ensure its effectiveness in protecting healthcare workers and patients. To provide protection, RPE, such as FFP2 and FFP3 masks, must be properly fitted and securely fastened. However, there were shortages of the equipment needed to conduct fit testing, including fit test adapters and qualitative fit test kits. Even when fit testing was conducted, it often proved ineffective due to shortages, which meant that only poorly fitting masks were available. As a result, many healthcare workers were unable to confirm the proper seal of protection for their RPE, which impacted the protection offered by the equipment. Sadly, again those from ethnic minority groups, as well as women were particularly affected. One consultant in England said to the BMA *"It was really poor; little or no fit testing and even if you had been fit tested, the chance of finding the right mask was very remote."*

PPE shortages and adequacy disproportionately impacted some groups of healthcare staff

33. **Ethnic minority doctors** more commonly experienced PPE shortages during the first wave, had higher rates of failing a fit test, felt pressure to work in environments without sufficient PPE and felt fearful about speaking out about issues they were concerned about. For example, only 59% of ethnic minority doctors in general practice reported having full or adequate PPE, compared to 77% of their white counterparts, according to the BMA Covid Tracker survey conducted on 30 April 2021. Ethnic minority staff were also more likely to report feeling pressured to work in higher risk settings with inadequate PPE and to be more fearful about raising concerns.
34. **Doctors with a disability/long-term health condition (LTC)** more commonly felt fearful about speaking out about issues they were concerned about. Deaf staff who relied on lipreading also faced additional challenges as the development of clear masks was painfully slow.
35. **Female doctors** particularly struggled to find well-fitting masks due to the gender bias in PPE design, and reported slightly higher rates of failing a fit test. One Consultant in England explained to the BMA *"I didn't feel fully protected at all and in particular being female and small and failing fit testing several times with several masks I was left feeling quite vulnerable from this"*.
36. **Staff who wore beards for religious or cultural reasons** - FFP3/FFP2 respirators were found not to be compatible with beards due to facial hair preventing the RPE from forming a proper seal against the skin. This affected people who had grown a beard for religious or cultural purposes and therefore had a disproportionate impact on ethnic minority staff.
37. In response to correspondence from the BMA and Royal College of Nursing raising concern about ill-fitting FFP3 masks, the British Safety Industry Federation confirmed that the variety of FFP masks available on the market had to this point been primarily led by the industry [INQ000417570]. While several manufacturers offered a range of sizes to fit smaller faces, the disruptions to supply chains caused by the pandemic limited product availability and further constrained the sizes and models of FFP respirators available.

38. In her evidence to the Inquiry in Module One, Clara Swinson (Director General covering international health and domestic public health issues within DHSC) acknowledged that the need to ensure a sufficient supply of PPE to accommodate a wide range of face shapes and sizes was not adequately addressed during pandemic planning prior to Covid-19. She stated [19.06.2023/189:16-20], *"It was evident in the first few months that we did not have enough different types of face masks. This is something that we need to ensure is covered in the future, both in our ongoing practices and in our stockpiles."*

The lack PPE and inadequate IPC measures caused harm to healthcare workers

39. The ultimate impact of these shortages and lack of adequate PPE, compounded by flawed IPC guidance was that doctors and other healthcare workers were left unprotected and came to harm as a result.
40. Many doctors contracted Long Covid during the pandemic and health and care workers have higher rates of Long Covid than the general population. 54% of respondents to the BMA's January 2023 survey of doctors with Long Covid [INQ000373375] said that they acquired Covid-19 during the first wave of the pandemic, which coincided with the most severe shortages of PPE. Of these, 77% believe that they contracted Covid-19 in the workplace.
41. Among those doctors and healthcare workers who developed Long Covid, some were unable to work for very long periods of time; indeed, others have still been unable to return to work and lost their jobs as a consequence. Around 60% of respondents to the BMA's survey reported that the post-acute effects of Covid-19 impacted their ability to carry out day-to-day activities on a regular basis. Around one fifth of respondents have been unable to work or train at all and many more have had to reduce their work or training to less than full-time as a result of their condition.
42. Many healthcare workers in the UK, including over 50 doctors tragically lost their lives while providing care for others. These medical professionals were often left unprotected and exposed, and their deaths were not inevitable. One GP in Scotland explained to the BMA *"Healthcare workers died due to insufficient PPE. It should have been FFP3 for all not just ICU staff."*
43. A lack of PPE also contributed to staff shortages and increased pressure on health systems already dealing with unprecedented demand. Covid-19 related illness alone caused a staggering 30.6% of recorded NHS staff absences in England in April 2020. In Scotland, the number of NHS hospital and community staff absences related to Covid-19 was highest between April and June 2020, hitting over 10,000 Covid-19 related absences per day in early April 2020. In Wales, the percentage of NHS staff absent due to Covid-19-related illness ranged between a peak of 2.5% during the week commencing 14 April 2020 and 1.6% during the week commencing 26 May 2020. The equivalent statistics could not be found for Northern Ireland.

There was a lack of access for healthcare workers and patients to testing, contributing to nosocomial infections and impacting on staff capacity in the NHS at a critical time

44. The UK faced significant shortages of tests in the early stages of the pandemic. There was limited testing and laboratory capacity, which meant that many patients and

healthcare workers struggled to access tests. This caused delays in identifying cases, thus impacting efforts to control the spread of the virus.

A key reason for lack of testing was processing capacity

45. While a Covid-19 test was developed very rapidly, at first it was not accessible for most people because the UK did not have the capacity to conduct testing at the scale needed. There are two main reasons for this.
46. First, PHE had been commissioned to deliver testing on a relatively small scale – it was not designed or funded for mass testing. And after a decade of underfunding, PHE did not have the capacity to scale this up.
47. Secondly, there was a lack of timely action to build more testing capacity. Action should have been taken in January and February 2020 to build more processing capacity through expanding the existing PHE, NHS and university laboratory capabilities but this did not happen.
48. Somewhat bafflingly, the UK Government made relatively little use of the 44 pre-existing NHS laboratories to process Covid-19 tests. Instead, they relied on both the private sector and seven Lighthouse Laboratories. The seven Lighthouse Laboratories involved repurposing existing facilities to process Covid testing on a large-scale. They were designed to process tests on behalf of all UK nations, but delays in processing tests led to Wales shifting capacity towards laboratories run by Public Health Wales from September 2020.
49. These alternative laboratories operated somewhat independently of existing public health and NHS infrastructures, particularly in the early stages of their implementation. This created challenges in quickly sharing test results with local authority public health teams. During the UK's first local lockdown in Leicester, for example, the local authority initially only received 'pillar 1' data (swabs from PHE laboratories of health and social care workers and people with a clinical need) and did not receive 'pillar 2' data (swabs for the wider local population), which meant they were unable to fully explain decision-making to residents and were hampered in the extent to which they could be proactive in public health messaging.
50. The Inquiry's public health expert in Module 1, Dr Class Kirchhelle, confirmed that the UK had significant testing capability within the NHS and university sector, but that in 2020 these capabilities were not used as much as they could have been [10.07.23/40:23-41:9].
51. While access to testing for staff and patients initially improved as the pandemic progressed, there were issues that arose at different times, particularly at times of high community prevalence or when there was an easing of lockdown restrictions leading to increased social mixing, such as the reopening of schools, and therefore higher levels of infection or contact with infected persons, requiring testing.

Lack of access to testing increased nosocomial infections in healthcare settings and reduced staff capacity due to test result delays

52. At the start of the pandemic, limited testing availability meant that tests were initially restricted to symptomatic individuals meeting specific travel-related criteria. A resident doctor told the BMA "There was a delay in allowing testing of all patients with possible

Covid symptoms. I was seeing patients in A&E and being told I could not test them because they had not travelled to relevant countries”.

53. As testing capacity improved, eligibility for a test was gradually expanded to a wider group of staff and patients. However, before then, healthcare workers may have been in contact with Covid-19 positive patients (while also not having adequate PPE) and therefore become infected themselves, or may have unwittingly transmitted the virus to their patients and colleagues.
54. Healthcare workers also experienced delays in getting test results back. Approximately a quarter of respondents to a BMA Covid tracker survey conducted on 13 August 2020 reported waiting four or more days for their results.
55. These delays led to healthcare workers having to self-isolate for longer periods of time, which reduced the numbers of staff available to work in the NHS at a time when it could be least afforded. Staff also reported feeling guilty that they were not able to go to work and support their colleagues and treat patients when the service was facing such high demand.
56. Even when testing capacity improved, there were times when staff and patients still faced difficulties accessing tests. At times, people could not book tests locally, forcing them to travel long distances. Additionally, during some periods of high community prevalence there was a greater demand for testing due to the higher likelihood of infection and contact with infected individuals.

The scaling back of testing put vulnerable staff and patients at risk

57. The end of free testing on 1 April 2022 in England, 18 April 2022 in Scotland, and 31 July 2022 in Northern Ireland and Wales left many high-risk individuals feeling worried and confused. The dismantling of testing infrastructure and the end of free testing weakened the UK’s ability to safeguard the most clinically vulnerable in our society.

Inadequate procurement and distribution of ventilators led to localised shortages and distress for staff and patients

Ventilator procurement was highly inefficient and poor value for money

58. In Module 3 Amanda Pritchard, CEO of NHS England, described efforts to obtain ventilators during the pandemic as “*a success story of rapid procurement and manufacture*” [11.11.24/134:7-8]. In stark contrast to this description, the procurement of ventilators can instead be categorised as too late, too muddled, too rushed, and highly inefficient - with consequences for staff and patients.
59. There was a critical failure to consider ventilation capacity as part of the UK’s pre-pandemic planning and preparedness. The 2011 Influenza Pandemic Preparedness Strategy, found in Module 1 to be the only UK-wide pandemic strategy in place when Covid-19 arrived, did not even include ventilators as a possible area of need during a pandemic.
60. Astonishingly, the number of ventilators in England was not even known to UK Government prior to the Covid-19 pandemic. It was not until late February and early March 2020 that the UK Government conducted a survey of NHS Trusts to determine these figures.

61. As a result of this failure of preparedness, all four nations of the UK entered the pandemic with significant ventilator shortages. Modelling undertaken by NHS England, for example, estimated a need for up to 90,000 ventilators, compared to an absolute maximum of around 7,400 available at the time: a required increase of more than 1,000%.
62. Early in the pandemic, the UK was invited to participate in EU procurement schemes to purchase ventilators but, despite urging from the BMA and others, this deadline was (ostensibly) missed. It is likely that the UK Government could have secured better value for money through collective bargaining if they had participated in these schemes.
63. Instead, the UK Government contracted private companies to build up ventilator capacity through the 'Ventilator Challenge' procurement and production exercise. This involved multiple non-specialist firms designing new ventilator prototypes, despite the existence of designs which had already been approved by the Medicines and Healthcare products Regulatory Agency (MHRA). Scaling up the production of existing designs would have been more cost and time efficient and would also have mitigated the increased burden subsequently placed on the MHRA to consider whether new designs could be approved for use. Many of these companies had no prior appropriate experience or expertise in the manufacturing of ventilators and the Cabinet Office did not ultimately order ventilators in any of the new designs.
64. The UK Government also rushed to procure ventilators from elsewhere, however these last-minute efforts to improve stocks unilaterally rather than as part of multinational procurement exercises were costly and did not secure best value for money. The price of these ventilators was significantly inflated relative to earlier prices for the same device and by August 2020 the UK Government's emergency procurement of 26,000 ventilators UK-wide had cost the taxpayer £569 million. Part of this large sum can be attributed to the very expensive purchase of Chinese ventilators costing £50,000 per unit which, as outlined below, were unfamiliar to healthcare staff and in some cases unsafe to use.
65. Moreover, in addition to the ventilator machines themselves, ventilator capacity also depends on the availability of specialist intensive care beds and highly trained staff to provide constant care. As the Inquiry heard during Module 3 evidence, staff shortages meant that staffing ratios had to be stretched to unsafe levels, seeming to reach 1:4 as a regular occurrence and on occasion reaching 1:6 rather than the required 1:1 care ratio. Any examination of ventilator capacity and procurement, including the impacts of these on staff and patients, cannot be separated from the context of extreme workforce and bed shortages as a result of pre-pandemic under-resourcing.

Inadequate ventilator procurement had consequences for both staff and patients

66. Localised ventilator shortages, alongside shortages of specialist intensive care beds, necessitated the transfer of patients between hospitals. Evidence heard by the Inquiry in Module 3 demonstrated the large increase in the number of these transfers for capacity reasons, with an increase of up to fourfold during the first two waves. While a transfer can be done safely, it comes with the risk of moving a critically ill patient, it takes additional resources and staff capacity and it is distressing for the patient and their family for them to be moved sometimes hundreds of miles away.

67. Localised shortages and issues with ventilator distribution meant that, at times, some ICUs were forced to use anaesthetic machines in lieu of ventilators. Anaesthetic machines are not designed for long-term ventilatory support and usually require supervision by staff specifically trained to use them as they are notably different to ventilators in their operation. In their Module 3 evidence Professor Summers and Dr Suntharlingam described the use of anaesthetic machines as creating a *“significant burden”* for staff [02.10.24/99:25].
68. As described by Professor Fong in Module 3, localised shortages also directly impacted on how care was delivered to patients, with one ICU matron telling him that *“they ran out of normal ventilators and pumps and had to sometimes make decisions about which patients could be taken off a ventilator for a period of time”* [26.09.24/20:6-9].
69. These localised ventilator shortages put additional pressure and uncertainty on healthcare staff during an already highly stressful period.
70. Moreover, reports of ventilator shortages likely added to the high levels of fear and anxiety experienced by patients who caught Covid-19. When seriously unwell, these individuals may have further worried that, should they need to be admitted to hospital, they might not have been able to access vital equipment.
71. In addition to the impact of ventilator shortages, the Shangrila 510 ventilators imported from China were unfamiliar to UK healthcare staff and therefore not always intuitive to use which increased stress and anxiety for staff. In addition to being designed for ambulance rather than hospital use, these ventilators had widely reported safety issues including a ‘variable and unreliable’ oxygen supply and a ‘non-EU’ oxygen connection hose. This inadequate procurement was highly dangerous for patients and risked causing harm or even death.
72. To help mitigate these impacts in a future pandemic, it is vital for the UK’s pandemic planning to pay sufficient attention to ventilator capacity and distribution. While Amanda Pritchard confirmed in Module 3 that there are plans to create a central register of assets including ventilators, it is worrying that, at least at the time of her oral evidence in November 2024 (nearly five years on from the start of the pandemic), this central inventory had not yet been created. It is also essential to have an adequate stockpile of ventilators, something which requires regular maintenance and replenishment of any ventilator parts which have degraded over time.

There were critical oxygen shortages

There was not a reliable oxygen supply to cope with the increasing demand

73. The Covid-19 pandemic exposed significant vulnerabilities to the UK’s medical oxygen supplies. The increased use of both invasive and non-invasive ventilation placed abnormally high demand on hospitals’ piped oxygen delivery systems, which struggled to cope with ensuring high flow rates of oxygen around hospital buildings.
74. For instance, in April 2020, a major London hospital nearly exhausted its oxygen supply while treating a surge of Covid-19 patients requiring immediate use of ventilators. This incident prompted NHS leaders to urgently advise hospitals to limit the use of

mechanical ventilators and continuous positive airway pressure (CPAP) machines to prevent these situations going forward.

75. To reduce the risk of a sudden loss of oxygen pressure with hospital oxygen delivery systems, there was a pre-emptive rationing of oxygen to patients by lowering the patient oxygen saturation levels that were deemed appropriate. For example, in April 2020, NHS England urged Trusts to lower target oxygen saturation levels from the normal 94-98% to 92-96%.
76. Despite oxygen never officially running out, the near depletion of oxygen supplies highlights the need for robust procurement strategies to ensure that all essential medical resources are abundant during health emergencies. As one Resident Doctor from England commented, *"It was mostly luck that our oxygen supplies didn't fail in various hospitals"*. Furthermore, the fact that NHS England had to issue a number of urgent alerts for immediate action suggests a lack of anticipation of and planning for such high use of oxygen.
77. Hospital infrastructure has been identified as a key strain to oxygen shortages. It is crucial that hospital estates are upgraded to ensure they are able to deliver high flow piped oxygen when the next pandemic hits so that life-saving resources like medical oxygen are readily accessible when needed most.

Oxygen shortages endanger patients and overwhelm healthcare workers

78. Oxygen shortages pose a critical threat to patient care, especially in high dependency settings like ICUs and emergency departments. A sudden drop in oxygen pressure, if overall demand through wall outlets exceeds system capacity, could mean patients receiving oxygen through face masks, CPAP, ventilators, and in operating theatres would simultaneously stop receiving oxygen, which would be highly dangerous and potentially fatal.
79. As well as providing direct patient care, staff were therefore required to conduct complex oxygen calculations to ensure wall outlets did not exceed capacity. Working in these environments, and the pressure to perform the calculations under tight time constraints, exacerbated the stress experienced by healthcare staff, who were already working under intense circumstances.
80. Oxygen shortages also contributed to increased staff anxiety, distress and guilt. For example, the requirement to lower the patient oxygen saturation levels may have caused staff to feel that they were not able to provide patients with the level of care they would wish to. Additionally, concerns over fires breaking out on wards due to the high concentration of oxygen in the air likely heightened anxiety even further. These pressures, alongside many others, contributed to the extremely stressful experience of both providing and receiving healthcare during the pandemic. It meant that the mental health burden on staff continued to grow, leading to increased burnout and declining mental well-being, arguably these long-lasting effects are still felt today among patients and staff alike.

Private outsourcing significantly increased during the pandemic, typified by a lack of transparency and poor value for money

The UK spent billions of pounds on private contracts without proper scrutiny

81. Outsourcing care to the private sector was a key way in which the NHS aimed to gain access to healthcare staff and equipment to provide patient care during the pandemic, particularly maintaining some critical non-Covid-19 care and it is important that this is considered within scope of Module 5, alongside the direct procurement of critical equipment such as PPE. These arrangements were characterised by a similar lack of transparency and robustness, as the procurement of PPE and other equipment and supplies, already covered in this statement.
82. There is no doubt that significant under-resourcing of the UK's health and public health systems in the years prior to Covid-19 led to a reliance on private sector organisations to bolster capacity and deliver services during the pandemic. This includes the £37billion spent on England's outsourced NHS Test and Trace which, despite its cost and the size of its staff, was unable to reach many Covid-19 cases and their contacts, particularly in its first two months. As the pandemic progressed, more use was made of local public health teams for contact tracing, which improved success rates. As described by a Consultant in England, the response *"would have been much better run if funding and resources had not historically been cut on a year on year basis from public health"*.
83. The contingency measures that were put in place during the pandemic meant that the contracts awarded to private providers circumvented normal tendering processes. Emergency procurement is said to have enabled a rapid response to the crisis, but proper and timely scrutiny of contracts are no less important during a pandemic. Guidelines stated that departments must publish the details of awarded contracts within 30 days of agreement, and yet billions of pounds spent on private sector Covid-19 contracts was unaccounted for.
84. In addition, independent sector providers (ISPs) were contracted to provide additional surge capacity for healthcare systems and to ensure that some critical services (for example cancer care) continued. At the height of the pandemic, enlisting ISPs to support overstretched NHS services was needed to safeguard patient care, however this should have been done transparently with clearly defined targets. Instead, there was a lack of detail regarding the terms of ISP involvement in elective recovery, particularly in relation to possible incentives to increase activity, the transparency of contracts, and how value for money would be assessed.
85. Despite the monumental cost, some parts of ISP healthcare provision were ineffective. For example, in March 2020 NHS England contracted a large number of private hospitals to make 100% of their facilities available to the NHS in return for the NHS covering all their operating costs. Much of the financial information about this agreement is still not available, but in practice very few Covid-19 patients were treated in private hospitals. One of the reasons for this is that many staff who work in the private sector also work in the NHS, meaning the deal often simply secured access to hospital buildings and equipment but without the staff to run them. At the same time, this agreement meant that, while many private sector hospitals stood empty, private sector waiting lists were growing and doctors working exclusively in the private sector had their ability to work temporarily restricted as they had no premises from which to operate.

86. These contracts were not a good use of public money. Spend on ISPs was £2 billion higher in 2020-21 compared to the previous year, and the Covid-19 contracts with private sector hospitals had to be negotiated and revised to ensure better value for taxpayers' money.

The impact of private outsourcing during the pandemic continues today

87. Properly resourced health and public health systems are key to improving the UK's ability to cope with a future pandemic or health emergency. The money paid to companies with no relevant public health experience represented a missed opportunity to restore and resource the UK's public health system. As described by a GP in England, "*Significant sums of money were directed at private organisations by the government which could have been spent more wisely on public health*". Instead, the UK Government's response during Covid-19 has in fact accelerated private outsourcing and the fragmentation of health and public health systems.
88. Governments must significantly strengthen long-term NHS and local public health capacity and expertise through a substantial and sustained increase in funding, rather than directing that taxpayer-funded investment towards private companies or the independent sector.
89. Moreover, the complex and disconnected web of private providers contracted during the pandemic meant that, instead of accountable and coordinated leadership, there was ineffective oversight and a lack of mechanisms to hold companies to account. This opened up substantial procurement risks, including the risk of fraud and poor value for money.
90. A failure to establish clear and robust commissioning rules could lead to similar mistakes being made in the future. A much more robust governance system under NHS control needs to be introduced to oversee the management and coordination of procurement in England or at a UK-wide level. This needs to guarantee proper scrutiny and transparency, as well as ensuring there is greater in-house expertise in managing complex procurement systems. Specifically, these rules should establish the NHS as the default provider of NHS services.
91. Where outsourcing occurs, patient safety standards must be safeguarded and the arrangements must not widen health inequalities. Contracts should be transparent, with clear expectations and KPIs so that private companies can be held to account for any poor performance or failure to deliver what has been agreed. ISPs must also contribute towards the education and training of the current and future NHS workforce, something they currently do not. Ultimately, the guiding features of transparency and value for money should always be adhered to, even during emergencies.

Conclusion

92. It is vital that during its Module 5 investigations, the Inquiry examines and makes recommendations that address the concerns outlined in this opening written statement.
93. In particular, the BMA looks forward to recommendations that will improve protections for staff and patients, enhance patient care, reduce staff moral injury and ensure greater transparency and accountability in procurement processes.

94. Both staff and patients were let down by the procurement failings outlined in this statement, and a large number continue to experience the consequences today. Procurement and distribution are about far more than bureaucratic processes; they are about ensuring healthcare systems look after the people who work within them and who rely on them for care, including the most vulnerable.
95. These failings have damaged healthcare workers' trust and confidence in the systems that should be designed to protect them. Trust does not return easily, and the Inquiry's recommendations in this module will be a vital part of the journey to rebuild this.

14 February 2025