
NHS ENGLAND CLOSING SUBMISSIONS – MODULE 5 OF THE UK COVID-19 INQUIRY

Introduction

1. These are the written submissions of NHS England at the conclusion of Module 5 of the Covid-19 Inquiry – Procurement.
2. NHS England had a limited role in the procurement of supplies, including Personal Protective Equipment (PPE), prior to the pandemic, and it was not responsible for the composition or management of the pandemic 'flu or Brexit stockpiles, which were managed by Public Health England (PHE), as it was then. It was not responsible for the NHS Supply Chain. However, the evidence before the Inquiry has shown how, as a part of the 'all hands-on deck' approach that was adopted in the public health crisis and its role as a Category 1 responder, its staff played a key role in facilitating the ability, on the part of DHSC, to buy and deliver supplies of PPE as a matter of urgency, and in the manufacture and delivery of ventilators. The secondment of Dame Emily Lawson¹ to DHSC and the role of Professor Ramani Moonesinghe² in providing essential clinical leadership to the government's Ventilator Challenge are two of the most visible examples of that commitment.
3. The Inquiry has heard that the teams who delivered this effort from mid-March 2020 onwards, worked under extreme pressure, putting in long hours. Many were often working from home for the first time and thus relatively isolated; others had to travel to a command centre in lockdowns. All were always conscious of the importance and urgency of their work for frontline staff. We hope that the Inquiry's Report will recognise their commitment and hard work, and welcome the comments that have been made by the Inquiry's Chair that have done so, during the course of this Module, as well as the recognition given to this issue by some of the Core Participants, including the Scottish Covid Bereaved.
4. NHS England participated in this Module by filing a Corporate Witness Statement (CWS) from Mr Julian Kelly,³ and personal witness statements from Dame Emily Lawson,⁴

¹ National Director for Transformation and Corporate Operations, until April 2020; Acting Chief Commercial Officer, from 1 July 2019, Chief Commercial Officer, 1 April 2020 – 16 July 2021.

² National Clinical Director for Critical and Perioperative Care (from March 2020); now Interim National Director of Patient Safety (from March 2025).

³ Chief Financial Officer, NHS England [INQ000528585].

⁴ [INQ000531295] – second statement; [INQ000572261] – third statement. Referred to as EL2 and EL3 on occasion in these submissions.

Preeya Bailie,⁵ Professor Ramani Moonesinghe,⁶ Keith Lincoln⁷ and Nick Dawson.⁸ In addition, Mr Kelly and Dame Emily were called to give evidence on 11 March 2025 and Professor Moonesinghe, on 17 March. We have drawn on their evidence, but not repeated its detail, in these submissions.

5. Against that background, we have addressed the following subjects below:
- a. NHS England's role in the procurement of supplies for the NHS, including its involvement with SCCL before the pandemic;
 - b. Pandemic planning, including technology, existing stockpiles of PPE and other supplies;
 - c. Surge in early 2020 and creation of the PPE Cell;
 - d. NHS England and its staff's role in the pandemic;
 - e. Data and modelling;
 - f. Ventilators and Oxygen supply;
 - g. PPE: shortages, quality, diversity, and the High Priority Lane;
 - h. The present day, and recommendations, including the impact of the proposed abolition of NHS England on its participation in this Inquiry.

NHS England's role in the procurement of supplies for the NHS.

6. NHS England's limited role in the procurement of PPE and other supplies for the NHS, prior to the pandemic, is set out in the CWS.⁹ In essence, a feature of the NHS in England is the relative independence of those who deliver care, such that *"Purchasing and procurement decision-making falls to individual providers that are commissioned to provide health services in England, as they are separate, individual bodies. This would include decision-making around the procurement of key healthcare equipment and supplies, including in the event of a pandemic."* (CWS, para 70). Paragraph 79 sets out how in 2020/2021 (for example) some 4,411 FTE staff were employed in a procurement function by Trusts. *"As a commissioner, rather than provider, of health services, NHS England does not generally procure or purchase goods and/or services on behalf of NHS providers"* (para 66). Mr Kelly's statement provides details of the limited procurement undertaken by NHS England itself, and its support to NHS providers by (for example) procuring national frameworks for goods and services or issuing guidance on managing conflicts of interest.

⁵ Director of Procurement Transformation and Commercial Delivery during the pandemic: [INQ000513643].

⁶ [INQ000518349]: National Clinical Director for Critical and Perioperative Care (from March 2020); now Interim National Director of Patient Safety (from March 2025).

⁷ Head of System Performance and Delivery for the SE Region, NHS England [INQ000513407]. Mr Lincoln was the PPE Lead for the SE Region- working across 6 CCGs/ICBs to ensure supplies.

⁸ Deputy Director of Commercial Income, NHS England; he worked in the Treatment and Support Unit, led overall by Steve Oldfield (DHSC) [INQ000569126].

⁹ [INQ000528585] paras 58-84.

7. Thus, Trusts and other providers of NHS services including GP practices and pharmacies were (and remain) responsible for their own procurement of PPE and other supplies, and the provision of these to their staff members. Trusts¹⁰ were able to buy goods from the NHS Supply Chain, which from 2018 onwards was managed by Supply Chain Coordination Limited ("SCCL"). As Mr Kelly explains at paragraphs 136 – 142 of his statement, SCCL was set up in April 2018 by DHSC, with DHSC as a sole shareholder, to manage the NHS Supply Chain. *"At that time and during the pandemic, it operated as a small management function and outsourced the procurement of goods and services through 11 specialist buying functions called 'towers'."* (para 138; see also [INQ000492082], second statement of Paul Webster:¹¹ *each Category Tower had a Category Tower Service Provider responsible for the procurement of all products within its category*). The Inquiry has heard that the procurement of PPE formed only a small part of SCCL's activities, with staff split across 3 Towers (Towers 2, 8 and 10, which ultimately loaned some of their staff to the DHSC PPE Cell).¹²
8. SCCL was scheduled to be handed over to NHS England in April 2020 (CWS, para 141). To plan for this, Dame Emily explained how she and Miranda Carter, Director of Provider Development,¹³ joined the SCCL Board as Non-Executive Directors in July 2019. The purpose of their presence was to prepare for the safe handover of SCCL to NHS England.¹⁴ The DHSC maintained its own appointed shareholder Director until transfer. (In the event, the transfer did not take place until 1 October 2021, with the delay due to the pandemic). Dame Emily explained the issues which she became aware of, in the three SCCL Board meetings which she and Ms Carter attended before January 2020, in oral evidence: first, the nature of the customer relationship between SCCL and Trusts; second, the complexity of the 'towers' structure and SCCL's commercial/financial model; and third, the limited nature of SCCL's IT structures – SCCL being just about to embark on a major IT transformation.¹⁵ These all proved to be relevant issues during the pandemic,¹⁶ but it would be wholly unrealistic to suggest that Dame Emily, or her fellow SCCL NED from NHS England, should not only have identified but ensured transformational change, on these or any other issues, by early 2020.
9. SCCL pandemic preparedness is addressed briefly at paragraph 16 below.

¹⁰ Mr Webster, the Executive Director of Governance and Legal and Company Secretary, SCCL, explains [INQ000492085], para 3.10 that at the start of the pandemic, NHS Trusts and Foundation Trusts only were supplied by SCCL, and in England only.

¹¹ Mr Webster noted that most Trusts will have their own procurement teams and some will also be members of a purchasing consortium.

¹² Webster [INQ000492085] para 4.12, para 7.13, 7.17 (PPE was not a defined category prior to the pandemic); 11/3/25: 103:7 – 16.

¹³ At the time of joining the SCCL Board. She is now the Director of System Architecture.

¹⁴ Dame Emily, 11/3/25 21:13 – 16.

¹⁵ 11/3/25 21:25 – 22:21.

¹⁶ Lord Boardman found that "... PPE buying through SCCL was not scaleable, for reasons including legacy IT that was in the middle of being updated and the complex 'tower' structure of the buying organisation..." [INQ00055876_0016].

Pandemic planning, including technology, existing stockpiles of PPE and other supplies.

Data communications, and technology systems.

10. Aspects of the UK's resilience, including that of the NHS, prior to the pandemic have been examined throughout the Inquiry's Modules, but especially Modules 1 and 3. In relation to Module 5, there has been much focus on the PPE stockpiles. However, existing data, communications and technology systems also had a significant impact on the challenges faced by those seeking to respond rapidly to the public health emergency. The weaknesses in NHS data systems, caused by "years of underinvestment on technology" were outlined in the witness statement of Mr Mosley, the Executive Vice-President of Palantir Technologies UK Ltd: see para 10.¹⁷ His analysis was put to Dame Emily in evidence; she agreed with it.¹⁸ See, as practical examples of the constraints, the limits of SCCL's out-dated IT systems (the inability to scale up the numbers of contracting parties) or the absence of a proper Customer Relations Management system, all further discussed by Dame Emily.

PPE stockpiles

11. There were two stockpiles that included PPE in early 2020: the pandemic 'flu or "PIPP" stockpile and the smaller Brexit stockpile. Both were managed by Public Health England (as it then was) on behalf of the DHSC. The purpose of the PIPP stockpile, first established in 2009 after the 'swine 'flu' epidemic, was not to supply all the items that would be needed throughout the whole of a 'flu pandemic, but to support the supply chain during the initial response. The DHSC evidence from Mr Marron¹⁹ in this module is that the stocks were based on the estimated requirements for products over the first 15 weeks of a RWC 'flu pandemic, excluding BAU requirements, see [INQ000496791], para 198. Mr Webster's understanding was that the PIPP stockpile existed to support the first 26 weeks of a RWC influenza pandemic (para 17.20), but it was never intended that it would be the sole source of supply – it was intended to mitigate disruption (para 17.25).
12. There have been extensive criticisms of the make-up of the stockpile, both general ("preparing for the wrong pandemic") and the more specific criticism that the stock was not sufficiently diverse, in relation to FFP3 masks in particular. The first element has been covered in the Inquiry's Module 1 Report and NHS England does not intend to repeat this material. The issue of diversity in FFP3 masks is addressed below at paragraph 71, but we comment on a few more specific points here.

Pandemic Preparation Exercises before 2020

13. NHS England notes, first, that it is important not to conflate planning and exercises. The latter are aimed at testing plans – or aspects of them, as the exercises may be very narrow and focussed. Any analysis of exercises and their reports, etc, must not be conflated with a wider description of planning and preparation; this wider perspective was covered by NHS England's Module 1 Corporate Witness Statement and would

¹⁷ [INQ000536417].

¹⁸ 11/3/25: 74: 20-25 and 75: 1-23.

¹⁹ Director General Lead for PPE, 18 March 2020 – 1 October 2021 [INQ000528391].

recognise, for example, the NHS's experience of 'surging' every year to manage winter pressures.

14. NHS England does acknowledge the force of the factual observation that the Covid-19 pandemic demonstrated that previous pandemic exercises did not drill down in enough detail, to forecast the scale of demand for goods such as PPE, and how quickly the demand would manifest itself.²⁰ The Inquiry's Module 1 Report noted that "*The importance of PPE was an issue that arose repeatedly in the exercises, including in the lead up to Cygnus.*" This, it appears, was a reference to the earlier, preliminary 2016 Cygnet Exercise, whose report stated that although "*The planning around critical care is detailed and clear*" there was a need to extend that planning to the wider secondary and supporting community care sector. There were recommendations to consider: "*How NHS England, PHE, the CQC and LAs can develop a whole system approach to the distribution of PPE to health and care staff*"; and "*PHE to define and communicate who will receive PPE from national stockpiles and which parts of the private and voluntary sectors are expected to make their own arrangements to safeguard their workers in the event of an influenza pandemic.*"
15. The Cygnus Report (October 2016) focussed more on the later phases of a 'flu pandemic, at its peak. It made only brief mention of PPE, in the context of how recently retired nurses and care workers could be recruited to deal with the extra strain on the adult social care system, carrying out tasks such as "*such as... opening up more distribution points for personal protective equipment PPE.*" Nevertheless, following up the need to look at broader surge arrangements, Exercise Pica was run in 2018 to assess primary care's readiness for a 'flu pandemic. The relevant conclusions were focussed on the supply of medicines to the pharmacy sector, commenting: "*The business continuity arrangements of NHS Supply Chain, wholesalers and other suppliers to the NHS is not well known, and if this failed there could be a significant impact to pharmacy's ability to support patients.*" It continued "*NHS Supply Chain and wholesalers are not known to have previously BC issues however this must not lead to complacency.*" The action, for NHS England and the Pharmaceutical Negotiating Committee, was to '*Contact NHS Supply Chain, major wholesalers for assurance*'.
16. In the event, SCCL was created in 2018 and SCCL's Mr Webster gave evidence to the Inquiry that individual Category Tower Service Providers and the Logistics provider were expected to have business continuity policies, "*audited annually under our contracts with them*". Equally "*SCCL did have its own plans in place for a range of events including in relation to the disruption of supply, but again, the modelling for these did not envisage the sort of worldwide pandemic that was experienced in 2020.*"²¹ Plans to consider supply chain disruption in more detail were disrupted by the advent of the pandemic, he noted (para 9.5). However, it is not apparent that any of these measures would have addressed the real issue that materialised in early 2020 – i.e. that relationships with suppliers became ineffective, and the Just in Time contracts which were an integral part of stockpile planning failed, when manufacturers' ability to supply PPE was compromised

²⁰ See the oral evidence of Major-General Prosser, 26/3/25: 159.25-160.4.

²¹ [INQ000492085] para 9.3, 9.4.

by the pandemic - and those manufacturers were generally based in countries such as China.

17. In relation to completing recommendations from Exercise Cygnus, the Inquiry heard in Module 1 that some work was paused as a result of the need to plan for a 'no-deal' Brexit and Operation Yellowhammer. However, NHS England noted in its Module 1 Closing Submissions that: *"NHS England would agree that aspects of this Brexit preparation work assisted with the response to the pandemic"* – see para 43 of NHS England's Closing Submissions, Module 1. See also paragraphs 250 – 263 of NHS England's Module 1 CWS. That is, the Brexit work had a number of beneficial effects, from a Covid-19 response perspective. These included: the work mapping the medicines supply chain; the creation of the Brexit stockpile; and – perhaps most significantly for the purpose of Module 5 – the creation of the National Supply Disruption Response hotline ("the NSDR") which was re-established on 16 March 2020 and proved a key enabler of the response to not only Trusts but the wider NHS and social care.²² The EU Exit work was recent and within corporate memory.

International Perspectives

18. In assessing this history of pandemic preparedness, it is important not to lose sight of the further point made by Major-General Prosser, referring to Professor Manners-Bell:²³ – that the understanding of the scale of the risk has changed fundamentally. Before 2020, it would not have been anticipated that there would be an international pandemic that snapped supply chains to breaking. *"I don't think we ever thought that a pandemic would be a global pandemic that would put a global demand signal on the global supply chain. I think we always thought that it would be a national pandemic that the global supply chain would have the capacity to respond to."*²⁴ There is a need to avoid hindsight in assessing the nature of the expectations held about the resilience of supply chains. Thus, Lord Boardman's second report of 7 May 2021, whilst noting the *"need to improve contingency planning for future pandemics, not restricted to one type of airborne virus"*, also noted the scale of the challenges faced by the UK – for example, export restrictions had not been introduced in previous pandemics, notably swine flu (p9).
19. The Inquiry has heard much criticism of the efforts made to buy PPE, with criticisms both of shortages of PPE, and the fact that, by the end of December 2020, there was an oversupply of certain categories of PPE. The Inquiry is asked to bear in mind the international context. Some UK challenges were not shared with other countries (e.g. the additional sourcing pressures arising from its use of FFP3 rather than FFP2 masks). But in general, the UK was not alone either in the pressures that it faced (given the collapse of international supply chains), or the limits on the practical results that procurement efforts were able to secure during the first wave of the pandemic. Rather, although there has been limited evidence called on this topic, there is evidence that

²² Dame Emily notes at para 204 of her Third Statement that this was an EU Exit creation that her team was lucky to be able to build upon.

²³ [INQ000474864] at para 356; Mr Manners-Bell refers to the fact that the "14 simulation exercises which took place between 2003 and 2018 ... did not take into account what would happen if there were an obvious shortage of PPE." This was regarded by Mr Manners-Bell as an "obvious shortcoming which should not be repeated in future resilience exercises."

²⁴ 26/3/25: 16518 – 166:8.

comparable challenges were faced by other countries. See the observations in Professor Manners-Bell's report at paragraph 199 ("*Prior to the Covid-19 pandemic there were very few differences between Western countries in the way PPE and healthcare equipment supply chains were structured*"); paras 333 and 334, and the export bans placed by France and Germany in early March 2020. Whilst lessons must be learned so that we can 'build back better', it is important not to allow the clarity afforded by hindsight to colour judgments on the reasonableness of the steps taken, at the time.

Make-up of the stockpile on the eve of the pandemic

20. The Inquiry referred Mr Webster to [INQ000330795], a review of the stockpile as at 27 January 2020. According to Mr Webster "*Most products identified for the PIPP stockpile were at target volume prior to the pandemic*", the exception being gowns.²⁵ On this, there was a plan to add gowns to the stockpile following recommendation from the NERVTAG, but the procurement exercise had not yet taken place. Mr Webster stated that a procurement cycle takes about 12 months (para 17.27) and Professor Sanchez-Graells (commenting on evidence from Sir Chris Wormald) agreed that 9 - 10 months was not out of the norm, if a contracting authority was operating from scratch rather than calling off existing framework agreements.²⁶ However, also pertinent is the fact that, following advice from the NERVTAG committee on the inclusion of gowns in the stockpile, the NERVTAG sub-committee for PPE was asked to confirm the specification (sterile non/sterile) for the market analysis; and NHS England understands that this information was received by Public Health England in November 2019.
21. The Inquiry has heard that:
 - a. There was a plan that the stocks of FFP3s held would be supplemented by a further 6.8m masks, from the Just in Time contracts (see [INQ000330795], which lists a number of products intended to be supplemented by such contracts being drawn upon);
 - b. In spring 2020, there was a need for PHE/SCCL to arrange for the safety testing of large numbers of FFP3 masks to ensure that they were still fit for use, as a proportion were past 'use by' dates. Given the scope of its responsibilities, NHS England has not repeated the evidence, here, as to how this was done and stock relabelled.²⁷ However, it notes that, consistent with its role of disseminating information to the NHS, it took steps to issue information to NHS staff about the tests, and that the masks were therefore safe for use: see the letter from Professor Keith Willett dated 20 March 2020.²⁸ It is unfortunate, and speaks both to the stresses under which staff operated and the difficulties of disseminating information to each and every staff member, that it appears that there remained distrust of the masks on the part of a number of staff members.

²⁵ Webster para 17.8 [INQ000492085].

²⁶ Evidence of Professor Sanchez-Graells, 4/3/25: 18:10 – 19:18.

²⁷ But see for example Webster at para 17.29 [INQ000492085].

²⁸ [INQ000330809]. Professor Willett was NHS England's National Director for Emergency Planning and Incident Response.

- c. The PIPP stockpile was held in a deep storage facility in Haydock. Dame Emily explained that the function of the Haydock warehouse as one “not designed to ship directly to customers” was “entirely sensible”, as the stock was held for long periods of time.²⁹ It needed to be taken out of that warehouse into one where the stock held in pallets could be broken down and picked for Trusts and other customers, in a distribution warehouse. But Mr Webster has explained that this was accomplished quickly, when there was clarity of demand – the Haydock site was able to dispatch over 1000 pallets in 24 hours.³⁰

Surge and the creation of the PPE Cell

22. The evidence of Mr Kelly and Dame Emily outlined early NHS England actions, in relation to PPE supply, in January and February 2020. These included:
 - a. The approach to DHSC on 27 January 2020, by NHS England’s National Director for Emergency Planning and Incident Response, to ask about the contents of the stockpiles and their intended uses;³¹
 - b. The request from NHS England’s Incident Response that a Supply Chain Cell be set up, on 30 January 2020.³² This was duly formed and met from 3 February 2020 on a near-daily basis, and began the tasks of ensuring supplies of not only PPE but medicines.³³ It was made up of key stakeholders from DHSC, NHS England, PHE, SCCL, the MHRA and devolved administrations.³⁴
 - c. Carrying out an assurance exercise in late Jan 2020, in which Trusts, including Ambulance Trusts, and primary care were asked to review preparations and stocks of PPE held;
 - d. Starting early modelling work to understand NHS needs for material such as PPE and ventilators. This fed into emerging work on the RWCS.
 - e. Issuing, on 2 March 2020, a letter to the NHS system, setting out steps on pandemic preparations [INQ000087445].
23. The email between Professor Willett and a member of the clinical staff at Alder Hey’s Children’s Hospital of 2 February 2020 was identified.³⁵ It was a specific query about “a lack of adequate eye protection to prevent corneal transmission” (see the reference to sets” i.e. of goggles). It should be noted that his statement that “*Stock levels are not low in the NHS Supply chain – I literally have millions of sets*” – was a specific response to that query as well as dealing with the suggestion that Trusts were holding back from ordering stock. Professor Willett provided advice that Trusts should not be “*resisting*” buying PPE on grounds of cost and added “*they were written to by me last week to ensure they are checking their provision and completed an assurance exercise on*

²⁹ 11/3/25 27:6 – 9.

³⁰ Webster para 17.41 [INQ000492085].

³¹ Kelly para 199 (also see the oral evidence of 11 March 2025 at 150:11 – 151: 5).

³² J Marron para 256 [INQ000528391_0069].

³³ See the minutes at [INQ000339268]. The daily meetings shifted to twice-weekly, from 12 March 2020, see p96.

³⁴ Kelly para 200.

³⁵ [INQ000409918].

Friday.” It would be wrong, particularly given the date of 2 February 2020, to suggest he was wrongly providing reassurance about stocks more widely.³⁶

24. Running alongside NHS England system readiness actions were actions by PHE and SCCL:
- a. The SCCL ‘Just in Time’ contracts that were intended to supplement the PIPP stockpile were activated from 31 Jan 2020; stocks of 6.8m FFP3s were expected (for all 4 Nations), for example.³⁷
 - b. A ‘controlled release’ of the items actually held in storage in the stockpiles was started.
 - c. SCCL had been instructed to increase their own stock buying (in addition to the PHE stockpile Just in Time activations) and did so from 7 or 8 February 2020.³⁸
 - d. On 31 Jan 2020, SCCL agreed with DHSC that it would introduce measures to “monitor and manage demand” from customers, to check and question larger orders without causing panic (Webster para 7.27 – 7.35).³⁹ The complexities of this approach, and how restrictions to ‘business as usual’ levels were to be managed in conjunction with the need to also allow Trusts to build up supplies (and to report any issues), can be seen from the discussion in the Supply Chain Cell minutes of 19 February 2020 – both needs were being considered in a difficult and evolving situation.⁴⁰ But it is apparent that Dame Emily, for one, had some reservations about the merits of this demand management policy at least by early March 2020, and was instrumental in bringing it to a close on 18 March 2020,⁴¹ whilst developing a system of ‘pushing’ PPE out to Trusts in lieu (in place from 19 March 2020, see Mr Marron at para 612). The ‘push’ system was supplemented by the activation of the NSDR.
 - e. A letter was sent by DHSC on 11 February 2020, asking suppliers to risk assess their supply chains; this had been preceded by a webinar with over 700 participants the preceding week, setting out the same message.⁴²
25. Dame Emily’s view was that in February 2020, ‘everyone did what they were supposed to do’.⁴³ From the perspective of NHS England’s actions, seeking as it did to support NHS systems to check and prepare, it would be wrong and unfair to see this as a ‘wasted month’.
26. However, pressures in the system built as Trusts and other bodies started to try to increase stock levels, and supplies started to fail. As Dame Emily explained, as Trusts started to increase their orders in the face of concerns and insecurities, it was not

³⁶ Mr Kelly also gave oral evidence on this topic: 11/3/25 163: 4-24.

³⁷ Dame Emily Lawson, oral evidence of 11/3/25, 18:17. See the minutes of the DHSC Supply Cell 3/2/20 [INQ000339268_002].

³⁸ Mr Webster notes that SCCL would typically hold about 2.5 weeks of stock – para 8.2. See the oral evidence of 11/3/25, 18:20, referring to the minutes of the Supply Chain Cell.

³⁹ See also the discussion in oral evidence with Mr Webster 11/3/25:134:12 – 136:1. [INQ000330798] is a letter dated 19 February 2020, evidencing the management taking place.

⁴⁰ [INQ000339268_0040]. See also J Marron at para 269.

⁴¹ See the letter from Alan Wain of SCCL to E. Lawson dated 18 March 2020.

⁴² INQ000049357, INQ000339268_014

⁴³ 11/3/25: 90:23.

possible to discern which had present needs, and which were seeking, rather, to build up their own stocks.⁴⁴ See too the account from Mr Webster [INQ000492085] para 7.25, where he notes stockpiling by Trust from early 2020 – not just for PPE and other healthcare items but for many different items, or [INQ000533082], an email from SCCL which illustrates the scale of the uplift in demand from Trusts.

27. The PHE 'Just in Time' contracts that were called upon in early February 2020, were known to have failed by 28 February or shortly thereafter;⁴⁵ France and Germany banned the export of PPE on 3 and 4 March 2020 respectively.⁴⁶ In the conversations that took place over 14 – 18 March 2020, Dame Emily explained, SCCL were not able to tell her how much additional stock they had bought and did not know when it would come.⁴⁷
28. Dame Emily had been asked to investigate reports of PPE shortages by NHS England's CEO, Lord Simon Stevens, on 10 March 2020 (CWS para 204, EL3 para 129). She described this as "*a very worrying time*", given the growth in Covid-19 numbers and the reports of what was happening in Northern Italy, and acknowledged the risk that if staff feared that the right PPE would not be available, safe use of PPE and staff themselves would be potentially compromised.⁴⁸ After initial enquiries, including of SCCL, she noted that "*I'm not seeing that we're changing what we're doing in order to deal with this heightening tension and what looks like heightening lack of supplies at the trust.*"⁴⁹ At a strategic level, the issue that she detected was that although everyone was functioning 'to plan' there was a failure to grasp that the plans (developed for a 'flu pandemic) were no longer working - and there was no "*plan for when that plan demonstrably wasn't working*", as she put it.⁵⁰ That was the genesis of her work on behalf of DHSC, putting together the elements of what became known as the Parallel Supply Chain.
29. Dame Emily was clear that it would not have been possible to resource SCCL to continue as the agent for procuring and distributing PPE throughout the pandemic. Despite her preference for building on 'what you've got', by the time she was involved the limits of SCCL had already been exceeded.⁵¹ In addition, SCCL continued to be tasked with, and needed to be strengthened to, supplying the NHS 'business as usual' supplies which formed the vast majority of its pre-pandemic supply activities, and which still had to be secured throughout the pandemic.

⁴⁴ 11/3/25, 13:17 – 25. She made it clear at 16:8 - 10 that she did not subscribe to the language of "bad behaviour" by trusts in the email at [INQ000533076], being used to describe to use the increased ordering on the part of trusts.

⁴⁵ J Marron [INQ000528391] paras 272, 291 - 292; concerns about the ability of suppliers to fulfil orders were expressed on 17 February 2020 (see para 267 and the Supply Chain Cell minutes).

⁴⁶ Which led to the failure of the JIT contract with the French supplier Valmy: see [INQ000533279_002] (Webster), for example.

⁴⁷ 11/3/25: 20:3 – 14.

⁴⁸ 11/3/25: 8:17 – 9:7.

⁴⁹ 11/3/25: 9:20 – 23.

⁵⁰ 11/3/25: 91:22. There needed to be a plan that was adaptable, she agreed with Baroness Hallett.

⁵¹ 11/3/26: 35:20 – 25.

NHS England and its staff's role in procurement, in the pandemic

30. The work done to secure stocks of PPE has been described by, in particular, Dame Emily and Jonathan Marron, and will not be repeated here. It is apparent that the first challenge that was identified was that of improving the distribution capacity: see the evidence of Dame Emily. She described⁵² the nature of the SCCL warehouse capacity and that it could not be scaled up; the warehouses were not just holding PPE but 'everything else' needed by the NHS; so new dedicated capacity was needed.⁵³ But equally significant was the creation of a buying operation, building the capacity to find new suppliers and manufacturers, using all the resources of the State including the FCDO in China. Both ends of this reformed supply chain were backed by work to establish demand from the NHS, social care and other PPE users. Whilst the Inquiry heard oral evidence from Dame Emily – and many others – on the establishment of the DHSC PPE Buying Cell, further details are also contained in the witness statement of Ms Bailie ([INQ000513643] paras 14 – 17), including the work done to co-ordinate the contacts and buying efforts of Trusts via the Trust Supplier Sourcing or TSS (paras 18 – 26), enabling supplier queries or offers to be funnelled through a central system rather than allowing parts of the NHS to compete against each other. (See further, on this, the CWS at paras 221 – 227).
31. The following elements were significant:
- a. The work was done urgently and at pace. The Inquiry's Chair queried whether the early days were "somewhat chaotic", but Dame Emily⁵⁴ and Major-General Prosser⁵⁵ referred to it being 'full-on' – the term chaotic suggesting that no one knew what they were doing, and that efforts were disorganised, which would be unfair given the clear direction being given by figures such as Dame Emily and Major-General Prosser (see for example the description of the teams she set up to analyse problems and solutions over the weekend of 21 – 22 March 2020).⁵⁶
 - b. There was a wide range of real expertise called upon. Dame Emily was instrumental in making an early request for Military Assistance (MACA) on or about 19 March 2020, which resulted in the deployment of Major-General Philip Prosser and the 101 Logistics Brigade. NHS knowledge, military discipline and commercial expertise, as well as the specialist procurement expertise from the Cabinet Office and from the Government Legal Department – these were all pulled together in a team effort. Dame Emily spoke of the "*extraordinary expertise of data analysts and scientists that we had in NHS England and the Department, and Trusts, who [were] absolutely flat out*" – and that this was supplemented, when it was necessary, by private sector expertise, such as McKinsey and Palantir.⁵⁷

⁵² 11/3/25: 24:17 – 26:13

⁵³ 11/3/25: 28:8 – 9.

⁵⁴ 11/3/25: 89:22 – 90:3.

⁵⁵ 26/3/25: 157:1.

⁵⁶ 11/3/25: 36:19 – 32: 37:19.

⁵⁷ 11/3/25: 76:24 – 77:5. See also para 205 of EL3, which reflects on the experts drawn together.

- c. The scope of the work done was enormous, with (for example), rapid work to include both primary and social care, with their many providers, in PPE distribution. Dame Emily described how *"a range of approaches were set up very quickly to deliver to social care."*⁵⁸ This was against a background in which (according to evidence of the former Minister for Social Care, Ms Whateley) the assumption had been that Local Authorities would be responsible for pandemic planning for this sector, and basic data (such as the addresses of providers – both registered with the CQC and – yet more difficult – those who were not) was lacking. Prior to the pandemic, the DHSC focus on the social care sector was a policy one, and there was a lack of operational capacity; so the pivot to (ultimately) providing some 1.8bn items of PPE to adult domiciliary care, and 2.7bn items to residential care was a "huge operation" (13/3/25, 42:7 – 11).
- d. A part of this was the establishment of a large, new logistics operation to support delivery: see on this, not only the evidence of Dame Emily but Paul Webster⁵⁹ and Major-General Prosser.⁶⁰ Significant too was the creation of the 'push' system. There is evidence in the Inquiry's Survey of Trusts that it had a material impact: *"the use of a centralised system where PPE is ordered/distributed resulted in an improvement in stock management, often referred to as a "central push model" "The introduction of the PPE Push Model was cited by some Trusts as the factor that began to ease stock issues"* (p3).⁶¹
- e. Those working in the new teams had not only to negotiate the challenges of the new 'stay at home' lockdown rules, which meant that personnel were scattered, but also the absence of infrastructure or systems that would have assisted. The lack of central NHS data collection has been much remarked upon – see paragraphs 33 - 34 below. But the Inquiry has also heard about the challenges posed by the technological systems that had to be used by the new Parallel Supply Chain. Lord Boardman commented: *"there was a lack of cloud-based digital systems to support good procurement and logistics. The systems and data weaknesses led to negative press and undermined public trust. There was a lot of manual uploading which led to delays and further assumptions around the reasons for delays and the lack of transparency of the data. It would be helpful if the government had access to a common system to support procurement in a crisis...."*⁶²

32. Whilst it was suggested by Professor Sanchez-Graells that staff from SCCL might have been better 'spread out' amongst the cell members to share expertise, NHS England's experience was that this would not have been possible. The SCCL personnel 'loaned' by the CTSPs *"were tasked with securing PPE from existing suppliers leveraging existing*

⁵⁸ 11/3/25: 30:22 – 31:18.

⁵⁹ [INQ000492085] paras 14.9 – 14.9.

⁶⁰ [INQ000560895], paras 28 -50 and also [INQ000538647] at 27 – 29.

⁶¹ [INQ000565789].

⁶² INQ00055876_0021.

*relationships*⁶³ and they were, further, largely relatively junior members of staff; there were “*limited specialist resources*” in the words of Lord Boardman’s review.⁶⁴ And, as noted at paragraph 29 above, SCCL had still to procure everything else that was routinely needed.

Data and Modelling

NHS Inventory Management.

33. Much has been said about the absence of central information about NHS PPE stocks and usage rates. At the start of the pandemic, there was no visibility of Trust inventories, but this was quickly addressed and systems developed to inform faster and better decision making.
34. It is important to bear in mind that there was no business need for NHS England to collect information on PPE stocks and usage, prior to the pandemic. The design of the NHS in England promoted provider autonomy, as NHS England was required to do by statute.⁶⁵ Trusts are independent entities which have distinct relationships (by contract and licence) and do not report formally to NHS England. They secure their PPE by diverse means.⁶⁶ Nor would capturing this data, pre-pandemic, have been a simple exercise. There was no central stock management system from which data could readily have been ‘piped’, whether to SCCL or others – initial data capture, starting from late April 2020 onwards and rolled out during May,⁶⁷ involved manual returns from Trusts. The Inquiry also will be well aware of the fact that, for every concern expressed at the centre (whether by government or others) about the absence of NHS data, there has been an equal and opposite complaint from Trusts or other NHS organisations about the burden of data reporting, when staff were already hard pressed. At least outside of emergency conditions, this is frequently coupled with calls for greater decentralisation; these are competing priorities and pressures which NHS England has always had to manage.
35. Mr Mosley described how:

“To address the challenge in determining accurate supply of PPE, NHSE used Foundry to build a holistic, granular, accurate, and near-real-time picture of PPE supply across England. In the relevant period, Foundry enabled Trusts to manually input their own data on PPE stocks or connect directly to their local inventory management systems. Dame Emily Lawson stipulated that the provision of data on PPE stocks was a prerequisite for Trusts to be eligible to receive further PPE

⁶³ Webster [INQ000492085] para 11.3.

⁶⁴ [INQ00055876_0014].

⁶⁵ See s13F of the NHS Act 2006, which requires NHS England to have regard to the desirability of securing, so far as consistent with the interests of the health service, of ensuring that Trusts (or other healthcare providers) are free to exercise those functions or provide those services in the manner that each consider most appropriate; and also that unnecessary burdens are not imposed on any such bodies. (See the version of the Act prior to 1 July 2022; parallel requirements are placed on the Secretary of State).

⁶⁶ 11/3/25: 56:10 – 21.

⁶⁷ JK para 219; EL oral evidence 11/3/25: 57:1 – 5.

supplies. In parallel, Foundry integrated data on PPE stock levels directly from warehouse management systems at PPE distribution centres.

*To address the challenge in determining accurate demand for PPE, NHSE used key metrics from the COVID-19 data store, such as infection rates, number of ICU patients, historic PPE demand, and expected PPE delivery. Foundry enabled Trusts to update this data daily and adjust their needs, allowing for more efficient demand calculations over time.*⁶⁸

36. The longer-term answer, to ensure that such information can be “turned on” in the event of a pandemic, requires that: (a) Trusts gain a benefit from the supply of information; and/or (b) supply of the information is made easier, by procuring information systems that mean that data can easily be extracted, without manual counts and form-filling. So during the pandemic, stock information was made available to Trusts to benefit them, and to enable them to provide mutual aid and support.⁶⁹ Now, the Inquiry has heard from Mr Kelly that NHS England has supported some 60 - 70 Trusts to procure an inventory management system, on the basis that there is a business case for this investment, even outside of a pandemic. SSCL’s evidence was that by 23/24 some 60 – 70 Trusts had an inventory management system which was capable of interfacing with SCCL and that it was working with NHS England to extend that to a further 20 – but “*it’s not cheap and that’s the trouble.*”⁷⁰

37. If SCCL became the supplier of choice to more Trusts and for more items, this would also mean that SCCL would hold more information on Trust purchasing patterns.

Modelling of PPE needs and usage

38. The Inquiry will remember that the use of modelling was explored in Module 2, where Professor Medley warned that “*models are tools to aid understanding and not a panacea to resolve policy problems.*”⁷¹ The Inquiry has explored the unknowns affecting modelling of, for example, the RWCS in Module 2, such as the lack of national public health community surveillance to understand SARS-CoV-2 prevalence. Against this background, modelling of potential PPE use was not only subject to many known uncertainties, but it was not a substitute for political decision-making on risk appetite and the extent to which buffers should be built up, even at the risk of overshooting.
39. Dame Emily explained⁷² that there were three elements to the modelling of the scale of potential PPE demand and supply:
- a. McKinsey Consulting developed a model called the Requirement Model. The initial modelling of NHS acute sector demand (based on figures for matters such as bed occupancy, Covid admissions) was subsequently expanded to include non-Covid-19 demand. The inputs were not only IPC guidance (amended as it changed) but also extensive ‘fieldwork’ with staff – interviews with not only

⁶⁸ [INQ000536417] paras 30, 31.

⁶⁹ CWS para 219.

⁷⁰ 11/3/25: 121:23 – 123:6.

⁷¹ [INQ000260643_0102].

⁷² 11/3/25: p60.

clinicians but a range of staff to “to try to get as close as we could to actual usage rates.”⁷³

- b. The Reasonable Worse Case Scenarios data, from sources such as NHS modellers, Imperial and Oxford scientists. The RWCS contained many assumptions⁷⁴ and was not a prediction or “best-guess”⁷⁵ but a planning scenario.
 - c. The risk levels relating to contracts not being fulfilled or arriving late, etc.⁷⁶
40. In this exercise, appropriate expertise was brought in at speed from the private sector. Initially this was from McKinsey, which had relevant modelling experience and which provided 10 days pro-bono assistance before receiving a DHSC contract.⁷⁷ The modelling work was supported and strengthened by Palantir’s Foundry programme, from about 19 April onwards. The inputs have already been summarised above, but:

“NHSE also used Foundry to run forecasting models to predict PPE needs at individual hospitals. Using model chaining, where the output of one model became the input to the next, Foundry enabled NHSE to manage and govern these complex sequence of models, ranging from national epidemiological models developed at academic institutions to site-level PPE burn-rates developed by NHSC analysts.”⁷⁸

41. Criticisms of the modelling would, we submit, be unfair and heavily influenced by hindsight. First, it is apparent that very detailed work was done to diminish uncertainties where possible – e.g. the interviews of NHS frontline and social care staff, to understand PPE usage. Second, the fact that the variables were conservative (and there was a multiplying effect)⁷⁹ was appreciated, but reflected the many inherent uncertainties and unknowns which were the lived reality of the time. These were set out to Dame Emily by CTI in her oral evidence,⁸⁰ although also see discussions such as that at [INQ000506021] which also noted, for example, the uncertainties generated by the decision to reopen hospitals for elective procedures.⁸¹ Dame Emily further explained how, whilst modellers worked to model up to 90 days in advance, commercial lead times for PPE of 150 days – almost 5 months – were standard, meaning that it was not until June 2020 that the team became confident that contracts placed at the height of the global surge were going to be honoured.⁸²
42. Of critical importance is also the fact that the Parallel Supply team switched to measures to manage oversupply from late June 2020 onwards: see the account in Mr Marron’s

⁷³ 11/3/25: 58:10 – 19.

⁷⁴ See for example the CO analysis of January 2021 at [INQ000506021_003]

⁷⁵ 11/3/25: 73:3.

⁷⁶ See [INQ000506021_005].

⁷⁷ CWS para 219. It is understood that a framework agreement already existed with the consultancy.

⁷⁸ [INQ000536417] para 32.

⁷⁹ See the CO analysis of January 2021 at [INQ000506021_002]

⁸⁰ 11/3/25: 62:20 – 65:13.

⁸¹ Or see for example [INQ000472818], a PPE Portal Update of 29/05/20, which refers to the PPE portal being rolled out to all GPs and social care homes; the significant number of ‘new providers’ being put onto the system was another source of uncertainty.

⁸² 11/3/25: 71:17 – 72:12.

statement at paras 724 – 727 and Part C, including the list of dates on which further procurement was stopped (para 724).⁸³ Dame Emily noted, more generally, that:

*“it will be important in any consideration of perceived ‘over-supply’ of PPE and other items procured during the emergency, to distinguish between the different phases of the pandemic response, and what was possible (and intended) at each stage. By that I mean that in the initial stages, both obtaining stocks at all and the timelines for any supply were so uncertain that it was considered essential to complete deals that were checked to be credible and technically compliant at a reasonable price on items that were needed. As the pandemic progressed and uncertainties persisted, the government directed the PPE Cell to ensure a minimum of four months of supply were available in central stocks before the focus on buying could lessen. This deliberate stockpiling against uncertainty is not the same, in my view, as oversupply.”*⁸⁴

43. It is submitted that much criticism of these matters is heavily affected by hindsight. The period during which earlier decisions to end or restrict purchases would have needed to have been made is extremely narrow: it would have required a pivot in late May / early June, in the teeth of the uncertainties referred to above. These included, at the time, matters such as the impact the new universal mask-wearing directive would have; the extent of the second wave predicted for the autumn; and the scale and impact of reopening of elective procedures in the NHS. It was not known that a vaccine would be available by the end of the year.⁸⁵ It was not foreseeable that – for example – in June 2020, the team would find that *“we started to have a higher success rate of things actually arriving”*.⁸⁶ Rather, at that point there were continued stresses on (for example) categories such as FFP3 masks (see below, para 45).
44. However, the overall purchasing directives were set by Ministers, who were clear that a surplus of 4 months stock should be built up, and second, that ‘oversupply’ was a preference to undersupply or shortages.⁸⁷ The state of mind of Ministers can be seen from the exchange of emails with Mr Hancock in the summer of 2020. On 28 July 2020, a submission on options for the disposal of surplus medical supplies was sent to Mr Hancock (amongst others). The reply from Mr Hancock’s Private Office on 19 August 2020 was one of cautious approval, requiring officials to revert for final Ministerial sign-off of plans and to: “...**proceed extremely cautiously** and maintain a % of buffer stock above what the RWCS would suggest we might need” – *emphasis taken from the original* [INQ000551653].

⁸³ See also the evidence of Sir Gareth Rhys Williams [INQ000497031]: at page 169, the graph provides confirmation that the volume procurement of PPE ended at the end of June 2020, beginning of July 2020.

⁸⁴ Third statement, para 202.

⁸⁵ Or see, for further illustrations of the nature and extent of uncertainties by the end of May 2020 [INQ000472818] which is a PPE Portal Update dated 29/05/20, showing how use of the PPE portal was being rolled out to social care homes and GP practices as at that date.

⁸⁶ 11/3/25: 61:19.

⁸⁷ On the preference for “more rather than less” see the evidence of Mr Hancock 19/3/25: 106:6 – 17.

45. The complexity of this issue can also be seen from the fact that in this Inquiry, the BMA has criticised the 'stop' order for FFP3s masks that took effect on 29 June 2020.⁸⁸ Dame Emily acknowledged that in June 2020 “*we were very close to not being able to send trusts what they needed*” – on one day in June, 3 out of 73 trusts did not get their ideal mix of the 7 types of FFP3 masks then being shipped, with the numbers being sent having to be made up with the type of mask most widely available.⁸⁹ However, analysis of the supply of FFP3 masks shows that this position would not be the basis for fair criticism of the decision to stop placing new contracts at the end of June 2020, given the deliveries expected⁹⁰ as well as the impact of the Make programme.⁹¹ Thus it is apparent by December 2020, there was a stockpile of some 46m FFP3 masks.⁹² Furthermore, the stock was considerably more diverse, with some 12 types of FFP3 masks available by late 2020 (with 8 further models added to the 4 previously available) as result of the fit-testing project that had been carried out over the autumn, see paragraph 73 below.
46. Finally, we note the observations of Lord Boardman in his second report of 7 May 2021, which examined this issue amongst others:

“... Given the amounts of money spent on these programmes, and the importance of the programmes to the national recovery, it is imperative that there is proper scrutiny of the procurement actions taken by the Government. However, I am conscious in writing this report that the scrutiny must be in the context of decisions made in a crisis. That is a very real risk that the already considerable problem of attracting civil servants and others to support the management of these programmes will be further jeopardised in future crises if individuals who have volunteered for an extremely difficult task and have worked tirelessly and beyond all normal limits to protect the country are then subsequently criticised for the actions they have taken in good faith and under extreme circumstances.”⁹³

47. The Report itself recommended that “*The Government should review the effectiveness of its current forecasting and modelling capability in light of the performance of forecasting models through COVID-19. This should include how to best utilise and employ accredited resources from the Government Analysis Function.*”⁹⁴

Ventilators and Oxygen Supplies

Preparedness

48. Prior to the pandemic, and now again, the procurement of ventilators was a matter for individual Trusts, with no requirement to inform a central body such as NHS England of

⁸⁸ [INQ000528391_0191]

⁸⁹ 11/3/25: 66:6 – 67:23. The most widely available, in March 2020, were the 4 models of mask provided by the manufacturer 3M.

⁹⁰ See the 90-day PPE requirement and supply forecast of 18/6/20 – 19/9/20 at [INQ000528294_0004].

⁹¹ [INQ000528294_0004], [INQ000551657_0033].

⁹² [INQ000528295_0008] (document of 16/12/20).

⁹³ [INQ00055876_003].

⁹⁴ [INQ00055876_006].

decision-making.⁹⁵ All the mechanical ventilators being used in the UK for critical care prior to the pandemic were manufactured abroad.⁹⁶

49. It has been suggested that there should have been more central knowledge of ventilator stocks prior the pandemic. As in relation to data on PPE stocks more generally, there would have been no business need for NHS England to keep – and, just as significantly, to update regularly by asking Trusts – data on what ventilators were in use at a local level. As was pointed out in Module 3 submissions, as part of establishing surge capacity, a ventilator survey was rapidly carried out in late February 2020 (which validated estimates previously obtained in 2017 as part of part of pandemic ‘flu preparations’).⁹⁷ Dame Emily confirmed in her statement that she had no concerns about not having exact ventilator numbers as this information could be obtained quickly.⁹⁸
50. It is acknowledged that, at the start of the first wave of the pandemic, there were not enough ventilators to be able to support the numbers of ventilated beds that the RWCS projected would be needed at peak times. Ventilators are a critical aspect (but by far not the only one) of the supply of intensive care (ICU) beds. Not having enough ventilators therefore impacted on the ability to scale up ICU beds. Not having a significant stockpile of ventilators (and associated consumables) is therefore part of the wider debate on the numbers of ICU beds that England (and the other three Nations, as part of their healthcare choices) should maintain. NHS England has referenced the observations of Professor Moonesinghe that set out the case for enhanced critical and high dependency care provision in England.⁹⁹ She noted in oral evidence that the most obvious way to build a buffer of ventilators is to have more critical care beds.¹⁰⁰ There is need for central decision-making here, on the level of resources that it is reasonable to deploy in this regard. As noted in paragraph 7 of NHS England’s First Module 3 Statement, due to the growing and ageing population, the NHS in England operates at high levels of usage and occupancy – having little headroom in comparison to similar health systems. While this has delivered significant productivity improvements, it is recognised that this has impacted the ability of NHS services to surge capacity.

Modelling and Procurement of ventilators

51. NHS England carried out modelling of the capacity and needs of the NHS in England, including ventilator demands, based on the SPI-M RWCS: see the CWS of Mr Kelly at paras 273 – 287. The scale of the potential pressures but also their uncertainties can be seen from the RWCS projections referenced: on 1 March 2020, a possible peak demand of 90,000 ventilated beds; on 17 March 2020, some 138,000 (with no mitigations); or, with compliance, a suggested peak demand of 17,500 in April 2020.
52. The ventilator procurement programme was led by the DHSC. The ventilator ‘Make’ programme was led by the Cabinet Office. The directive that the national effort should be directed at securing some 30,000 additional ventilators was set by Government. The

⁹⁵ EL3, paras 99 – 100.

⁹⁶ [INQ000518349] para 26.

⁹⁷ Module 3 evidence: 29/133/4 – 17.

⁹⁸ Para 100, EL3.

⁹⁹ [INQ00018349]. The Inquiry heard much evidence on this in Module 3, which is not repeated.

¹⁰⁰ 17/3/25 157:22-158:23.

bulk of the procurement activity took place in March – April¹⁰¹ and the target was met by 3 August 2020.¹⁰²

53. The clinical and technical assistance and support from – in particular – Professor Moonesinghe is addressed briefly below.

Support for Procurement

54. On 6 March 2020, Dame Emily Lawson was asked by Lord Simon Stevens to take a lead on the oxygen supply position, including ventilators, and had already made contact with the DHSC task and finish group at DHSC charged with procuring oxygen, oxygen concentrators and ventilators. By this point, and at the start of March 2020, a decision had been taken that more ventilators were needed and should be procured (i.e., prior to Dame Emily becoming involved in ventilator procurement activity).¹⁰³ She worked to provide an executive level connection into the NHS and information on NHS requirements, becoming SRO for the “oxygen & ventilation and medical devices & clinical consumables” sub-category of the supply workstream.¹⁰⁴
55. Clinical advice and support were provided by, in particular, NHS England’s National Clinical Director for Critical and Perioperative Care, Professor Moonesinghe; please see her statement at [INQ000518349] as well as her oral evidence of 17 March 2025. She notes that she provided clinical leadership to the DHSC Ventilator Supply Team, the Oxygen/Concentrators/NIV task and finish group and the Cabinet Office Ventilator Challenge, with her involvement starting on 2 March 2020. She has outlined the work done to develop the Rapidly Manufactured Ventilator Specification, the independent expert advisory panel established to review proposals and provide feedback to companies, and the clinical advice provided on the suitability of devices for deployment in the NHS. She has also explained how she commissioned and contributed to national guidance, produced both by NHS England and professional stakeholders, which aimed to support local teams to maintain patient safety in critical care (see, on this, paras 110 – 112).

Allocation and Support for Staff

56. NHS England led work to ensure the fair and efficient allocation of newly procured ventilators to the NHS. As machines became available, and on 2 April 2020, NHS England established the National Ventilation Allocation Programme. Allocation was based on clinical need – it was important this was properly evidenced to ensure the maximum benefit from the resources available. It was also important to prevent Trusts from competing against each other to secure scarce resources.¹⁰⁵ Please see paragraphs 294 – 304 of the CWS (Mr Kelly) and Section 3, paragraphs 117 – 123 of Dame Emily’s second statement.

¹⁰¹ Third Statement of Dame Emily para 106.

¹⁰² [INQ000518349] para 114.

¹⁰³ Third Statement, para 100.

¹⁰⁴ [INQ000531295] paras 23 – 26.

¹⁰⁵ Including in securing ventilators; see the third statement of Dame Emily at para 117 as well as the letter relating to central allocation of ventilators 25 March 2020: CWS at para 299.

57. Palantir joined the daily allocation meeting for ventilators from early April 2020 onwards; NHS England was using its Foundry system to integrate sources of NHS data on ventilator demand and use, to better inform the equitable allocation of ventilators.¹⁰⁶ Palantir built a system which enabled data on ventilator capacity at a Trust, the number of Covid-19 cases, the growth rate of cases and the ventilator supply to be visualised by decision-makers, so that decisions about prioritisation could be made. The allocation meetings were always chaired by a clinician.¹⁰⁷
58. NHS England noted in its Module 3 Closing Submissions that evidence from the ICU experts noted that NHS England “*should be recognised*” for “*providing training packages for unfamiliar devices*”.¹⁰⁸ Dame Emily also notes the decision, from the third week in March 2020, that a ‘care package’ of consumables should be sent alongside a ventilator, to reduce the need to search around before being able to use the ventilator.¹⁰⁹ There was a real commitment to supporting staff in the use of new or unfamiliar models.

Oxygen

59. Oxygen supply was a key consideration and challenge throughout the pandemic.¹¹⁰ NHS England undertook considerable work throughout the pandemic in relation to oxygen, in terms of getting the oxygen to patients from the oxygen tanks. NHS England assisted in the management and improvement of the infrastructure across the NHS for delivering oxygen to patients. The work included a rolling package of funded capital works for Trusts, but also regional and national oversight to manage critical incidents affecting oxygen supply.
60. To be clear, there were no material procurement supply issues in relation to the manufacture and supply of oxygen to providers during the Relevant Period.¹¹¹ In fact, the UK has generally made more oxygen than it needs.¹¹² There was a discussion with Mr Kelly in oral evidence about NICE clinical guidance regarding reduction of acceptable oxygen saturations;¹¹³ but this was about the limitations on the hospital infrastructure enabling the delivery of oxygen to ward beds, rather than the limitations of supplies available to be delivered to hospitals. It is, thus, an issue about the state of the NHS estate on the eve of the pandemic.¹¹⁴
61. NHS England set up the National Oxygen Infrastructure Programme in March 2020, which carried out detailed work to ensure the delivery of oxygen to an increased number of beds, and to monitor the use of oxygen to avoid incidents (assisted by the steps taken to fit tank gauges to all Trusts, to monitor oxygen consumption in real time). The first

¹⁰⁶ [INQ000536417] paras 19 – 24 (Statement of Mr Mosley, Palantir), EL3 para 121.

¹⁰⁷ See EL3 at para 120.

¹⁰⁸ Transcript of evidence (Module 3): 15/99/4 – 5.

¹⁰⁹ Third statement para 115.

¹¹⁰ Professor Moonesinghe para 126.

¹¹¹ See for example Professor Moonesinghe at para 149.

¹¹² At least historically; this is linked to UK steel production, see para 93 of Dame Emily's third statement.

¹¹³ 11/3/25: 167:5 – 168:16. Professor Moonesinghe notes that clinical guidance was regularly updated: see para 146.

¹¹⁴ A similar issue arises in relation to the point flagged by Mr Mortimer of the NHS Confederation, that if patients were housed on mental health wards, these would not be optimised for oxygen delivery. See also the section on NHS Resilience at paras 381 – 387 in the NHS England CWS.

phase of the project delivered oxygen to over 3,000 additional beds at acute hospitals in just over 4 weeks (compared with a 'normal' 16 weeks) with a further 1,547 in various stages of completion. Further work followed; please see paras 318 – 342 of the NHS England CWS, including the summary of the 'lessons learned' at para 339, including the need for board assurance that it had followed applicable guidance (para 339(a)).

PPE: Shortages, Quality, Diversity and the High Priority Lane

(1) PPE shortages.

62. NHS England acknowledges evidence from NHS staff that they at times either lacked specific items of PPE or lacked confidence in the items supplied (e.g. if unfamiliar) or that future stocks would be available for them, when needed. For example, it is apparent that in the first wave, there was a particular issue with gowns, which had not been put into the PIPP stockpile by the time when the pandemic broke out, and which were available only by direct request from the NSDR for a period.¹¹⁵
63. Staff concerns at a local level co-existed with the fact that, at a national level, supplies were never exhausted.¹¹⁶ In particular, the NSDR was always able to fulfil requests for stock. Major General Prosser spoke eloquently about the value of this exercise, to give staff confidence that needs would be met. However, he acknowledged that that it was not always possible to supply enough to 'build stock' – supplies would be for the next 3 days rather than enabling hospitals to build up a buffer.¹¹⁷ Further, this does not mean that the stock supplied through this route was always prolific¹¹⁸ and nor does NHS England side-step the specific issue of the limited models of FFP3 masks available, in the earlier part of 2020, and the consequential need for fit-testing when new groups of staff required such masks, and when new types were delivered to a Trust for the first time.
64. Equally, we note the opinion of Professor Manners-Bell that there is a 'systems failure' if PPE does not make it to the frontline – delivery to the 'front door' is not enough, it was suggested.¹¹⁹ This raises the issue of Trust and other organisations planning for pandemics and how that can be simplified. The complexity is illustrated by the evidence from University Hospital Birmingham NHS Foundation Trust, which was that if stock was received (whether via the DHSC Supply Chain or any other source) that was from an unknown supplier, it would be 'quarantined' until staff from the Trust were satisfied, from the certification and/or testing, that it was safe and could be circulated.¹²⁰ This evidence reflects the ultimate responsibility of a Trust for the safety of its employees. It also may imply that, whilst whole-system planning should take account of delivery 'beyond the front door', there should also be consideration of how and to what extent local hospital Trust checks should take account of regulatory or other safety checks prior to that point of delivery.

¹¹⁵ Mr Marron, para 20.

¹¹⁶ See, eg, Mr Marron at para 20.

¹¹⁷ 26/3/25: 174:2 – 24.

¹¹⁸ Ibid; and see Dame Emily's evidence at 11/3/25: 66:6 – 67:11 (FFP3 scarcity in early June 2020).

¹¹⁹ 10/3/25, 11:5-12:2.

¹²⁰ [INQ000513253] para 25 – statement of S. Clarke.

(2) The contents of IPC Guidance

65. There have been assertions during the course of this Module that the IPC guidance was affected by scarcity of supply. In the experience of NHS England and its staff, that is simply not true or accurate and the Inquiry is asked to reject that assertion. The question of shortages was addressed separately (e.g. in the PHE 'Shortage Guidance' of 17 April 2020).¹²¹ This issue was investigated carefully by the Inquiry in Module 3 and was addressed by NHS England in its Module 3 Closing Submissions (para 145); it should not be reopened in a module that was not geared to investigate any such relationship. That said, the evidence heard in this Module how by December 2020/January 2021, there was no shortage of FFP3 masks.¹²² This is a significant factor which goes to undermine any possible suggestion that the decision not to make widespread changes to IPC guidance at that time was influenced by concerns over supply.

(3) Quality of Supply

66. The Inquiry has also heard concerns or allegations about poor quality PPE being supplied.
67. It is submitted, however, that the processes designed by the Parallel Supply Chain had safety as a key concern and that every reasonable effort was made to ensure the safety of goods supplied. There is evidence of the processes for checking technical compliance in Mr Marron's statement [INQ000528391] including:
- a. Evidence that the '8 step process' leading to the placement of contracts had a technical assurance process built into it (J. Marron para 228, 481 – 487 [INQ000528391]).
 - b. Staff in the Parallel Supply Chain worked closely with the regulators as well as using staff from the MOD who were well used to carrying out quality assurance checks (and whose staff headed the Technical Assurance Team). We note that in-country quality assurance checks were dealt with at paras 600 – 604 of Mr Marron's statement.
 - c. The Cell also liaised closely with the British Embassy in China, and tried to overcome the obstacles presented by the inability to carry out physical inspections of manufacturing premises, in the midst of a pandemic and when stock was being offered by manufacturers with whom there was no pre-existing relationship.
68. Mr Marron's evidence was that by 31 March 2023, 99.7% of stock had been quality assured. Of all the items received (38.85 billion), 1.38 billion were classed as not fit for any purpose. This is equivalent to approximately 3.55%.¹²³ Reference was made in

¹²¹ I.e., the "Considerations for Personal Protective Equipment in the Context of Acute Supply Shortages" (PHE) [INQ000106358]. It was withdrawn in September 2020.

¹²² For example [INQ000528295_008] (132% of stock levels by 7/12/20).

¹²³ Marron para 604.

Dame Emily's oral evidence to a change in process / risk appetite: see 11/3/25 at p51 - 54. This was not a reason why there was ultimately an oversupply of some categories of PPE (see, rather, the discussion on modelling and procurement), or a reason why some goods were not of the right quality.

69. Specific issues in relation to certain categories of PPE have been discussed, including:
- a. The shelf-life extension for Cardinal FFP3 respirators from the PIPP stockpile which were subject to accelerated shelf-life testing in February 2020.¹²⁴
 - b. Masks with ear loops: the stock that was bought matched the specification and was not 'faulty' but it was not appreciated that staff did not find masks with ear loops, rather than ties, effective. This is an example of early procurement where the team would have benefitted from more direct clinical expertise.
 - c. Flaking nose pieces: in May 2020, there were complaints of that parts of the FRSM (Type IIR) Cardinal masks disintegrated on use or led users to experience breathlessness.¹²⁵ Deliveries were suspended, a CAS alert¹²⁶ issued and testing (in the US) arranged. Advice from the MHRA in June 2020 was that the product should be disposed of locally and a further alert was issued.¹²⁷
 - d. Tiger goggles: these were from the PIPP stockpile and procured in 2009. They were recalled in May 2020 after a complaint about them being loose fitting, with insufficient facial coverage for Covid-19; see Mr Marron at para 605, or [INQ000529298].
70. Overall, it would be wrong to suggest that the quality of PPE supplies was "woefully inadequate" (as the BMA suggested in Opening) – this implies a wholesale lack of care or proper checks, which is neither fair nor accurate. Documents show conscientious consideration of safety issues in a collaborative process involving stakeholders including the DHSC, the HSE and the MHRA; and responses to concerns or feedback.

(4) Diversity of FFP3 Supply

71. The particular issue around diversity of supply relates essentially to the supply of FFP3 masks. This is primarily a matter for PHE (UKHSA) and/or DHSC to address, given the responsibility for the PIPP stockpile in particular. However, the evidence supports the following findings of fact and conclusions:
- a. NHS England has not seen, in this Inquiry, an exploration of the knowledge of the need for diversity, or the attention given to this issue, when the stockpile was first

¹²⁴ [INQ000330795], [INQ000339268_0016], [INQ000533226].

¹²⁵ See the witness statement of Richard Brunt (HSE) [INQ000560897] at paras 87 - 88.

¹²⁶ 'Important Consumer Alert', see [INQ000529480]

¹²⁷ [INQ000529317]; witness statement of Richard Brunt (HSE) [INQ000560897] at para 88; [INQ000529480_002].

procured after the swine 'flu pandemic (2009); or any analysis of how the make-up was determined and/or altered thereafter.

- b. The need for diversity in the stockpile was noted during the planning of the re-procurement exercise in 2015. That is, in its Module 3 submissions, NHS England noted that when re-procurement proposals were developed for the PIPP stockpile in 2015, there was a requirement for diverse masks to be supplied. NHS England noted its understanding that "the re-procurement exercise did not take place; but the Business Case for the planned replacement in 2016 (dated 28/10/2015)¹²⁸ includes the provision that suppliers "*would be required to bid with a range of shape/style/size/fit ... that it can demonstrate (in accordance with good industry practice) will fit the maximum possible face shapes*".¹²⁹
- c. Leaving aside the potential impact of any re-procurement exercise (which might have changed the stock held), it seems likely that experiences during the pandemic also reflected the limited need for, and use of, FFP3 masks prior to the pandemic by specialist healthcare teams only; see the evidence of Professor Susan Hopkins in Module 3.¹³⁰ The scale of their use beyond specialist teams in the pandemic was unprecedented. In addition, knowledge of the preferred type of FFP3 masks – for those small numbers staff who had actually required to be and been fit-tested before the pandemic – was held at Trust level. Furthermore, NHS England observes that, unlike (say) gloves and aprons, masks do not come in different sizes. Although evidence has referred to "size" of masks, it is not the case that each brand or model of face mask has several different fits (i.e., S/M/L, like gloves). Rather, each model has one fit only and the fit test is therefore to check which model represents the best fit for an individual staff member. Again, fit-testing was required only for the limited numbers of staff who required FFP3s prior to the pandemic.
- d. The result was that at the outbreak of the pandemic there were finite supplies of FFP3 masks, mostly a number of models made by the manufacturer 3M, held in the PIPP stockpile and limited practical experience of how those would fit the much wider group of staff who needed them, as a result of the pandemic. That said, the PHE model or plans for the deployment of the stockpile included plans to roll out of fit-testing on a large and unprecedented scale: see Section 13 of Mr Marron's statement for details of the actions taken during Wave 1 of the pandemic.¹³¹
- e. The 'Just in Time' contracts for FFP3s had failed by the end of February 2020.

¹²⁸ See [INQ000101067] from Module 1

¹²⁹ Para 130 of NHS England's Module 3 submissions, together with footnote 223 of the same.

¹³⁰ On 18 September 2024, Professor Hopkins gave evidence that: "*The second point was that FFP3s were not routinely used in healthcare, apart from specialist teams, such as teams I've worked on, because we manage infectious diseases regularly and, therefore, that healthcare workers weren't fit tested and therefore could not have been rolled out at speed or at scale. It would have taken many, many, many months to do that everywhere Not just enough FFP3, enough people to train people, enough people to test people, enough different types of masks and also whether that risk was proportionate to the benefit of doing it.*" (18/9/24: 91: 7 – 25).

¹³¹ [INQ000528391] and specifically paras 716 – 719.

- f. This, then was the situation ‘inherited’ by the Supply Chain Cell and staff including Dame Emily, when she became involved from 10 March 2020 onwards. As a result of the failure of the JIT contracts, new purchases had to be made from ‘scratch’. But FFP3s were very hard to procure, not least as the NHS’s use of FFP3s was not the norm – most countries, including the US, specified FFP2s, which were more likely to be made, both as there was a wider market for them but also because they did not require an additional layer of fabric. In the UK, the HSE approved the use of FFP2s as an alternative, but the barriers to their deployment can be seen from the evidence of University Hospital Birmingham NHS Foundation Trust, which records how it destroyed a batch of FFP2s that were sent to it from the ‘push’ stocks (not because they were faulty but because they were not regarded as appropriate equipment, despite this easement).¹³²
- g. During Wave 1, the PPE supply cell ‘bought everything it could’, in terms of FFP3 masks. This was the clear evidence of Dame Emily Lawson – “*We bought everything we could buy in end of March and April of FFP3s, along with everything else*”.¹³³ The question of whether the “NHS specifications” were, at that point, sufficiently cognisant of the need for a diverse range of masks is, at that point, a red herring – every mask that could be procured was ordered (provided that it met quality standards). That said, NHS England observes that it was never its role to determine, or endorse specifications or standards for PPE.¹³⁴
- h. It was in May 2020 that the issue of needing a more diverse range of masks came to the fore. Initially, the issue was the fact that Trusts were receiving a range of masks, which meant that time had to be spent fit-testing the new ranges.¹³⁵ On further investigation and in the course of the month,¹³⁶ it became clearer that there was also a problem that some staff members could not readily find a mask that fitted them.
- i. There was, it is submitted, an energetic and thorough response:
 - i. In the first instance (in May 2020), Major Ed Bowden worked to create an “ideal pick list” for each Trust, analysing the preferences of each Trust – “working with them, obviously – and testing their staff to link that to our stock and then we created the pick list which we then used subsequently.”¹³⁷

¹³² [INQ000506809]: document recording “PPE not used”, at line 7.

¹³³ 11/3/25: 81:10 – 15. See also 89: 3 – 7, on the limitations of stock availability in March, April and quite a lot of May – June 2020.

¹³⁴ See statement of Julian Kelly [INQ000528525] at paragraph 196; this is an aspect of the limits of NHS England’s role and functions in this field.

¹³⁵ 11/3/25: 81:16.

¹³⁶ See for example [INQ000474997_0001], email dated 23 May 2020 from Niall Dickson of the NHS Confederation to Dame Emily, which refers to his members’ concerns to “ensuring that we have appropriate sized masks and gowns available to female and BAME staff in particular” – further discussions had been agreed.

¹³⁷ 11/3/25: 67:19 – 68:3; also 78:25 – 80:3 and 86:20 – 87:4 (further detail).

- ii. In June, a comprehensive research project, headed by the Deputy Chief Nursing Officer (DCNO) Sue Tranka was initiated, which fit-tested over 5500 members of staff with various masks, giving a detailed profile of fit across a range of ethnicities and gender.¹³⁸
 - iii. Purchases of powered hoods were also made, when available, and sent out to staff.
 - j. By late 2020, the result was that the range of masks was increased to a total of 12.¹³⁹
 - k. In addition, from 2023 the results of fit-tests have been recorded on each member of staff's Electronic Staff Record (ESR) which means that data on needs is more immediately available. This was the foundation of Dame Emily's comment that she would "also expect that to be built into a very tailored distribution system that would better connect individual staff needs to the overall supply", in the future.¹⁴⁰
72. It acknowledged that a more diverse PIPP stockpile of FFP3 masks, available from the outset of Wave 1 of the pandemic, may have mitigated the pressures experienced by staff (depending, that is, on its exact composition and size). But it is submitted that the response by the Parallel Supply Chain, from the situation in which the DHSC/NHS found itself in at the beginning of the pandemic, was as energetic, responsive and effective as it could reasonably have been, given the circumstances. It would be unfair to characterise a response of this scale, including the work done from May 2020 onwards, as – merely – a "reactive" one.
73. The Inquiry has in its possession various documents evidencing the work done by the DCNO's team, and its results. Professor Moonesinghe's statement also highlights research on this issue of respirator fit (see para 180), stating "*While not conclusive evidence, this does raise a concern that staff from ethnic minority backgrounds may have been at higher risk of contracting Covid if the RPE was not suitably fitted.*"¹⁴¹ The mention of those from ethnic minorities (alone) may be a reflection of the question asked; it is important to note that the research flagged associations between fitting failures and women (or those with small faces) as well. It is important to bear in mind that the diversity needs encompassed the size of faces (including the needs of women) and catering for beards (and spectacles).

¹³⁸ 11/3/25:80:4 – 15; see also the CW statement of Mr Kelly [INQ000528525] at paras 246 – 249, and exhibits; and paras 718 - 719 of Mr Marron, who explains how in June 2020 a FFP3 respirator mask fit testing project was launched across 47 Trusts, collected data from 5,500 diverse participants. DHSC added a further 8 masks to the 4 that were previously available – from late 2020, 12 different models were available. Mr Marron noted how government also recruited and trained over 220 fit testers to HSE standards, from Nov 2020 and that data is now being captured in NHS Electronic Staff Record. The work was also briefly referred to Dame Ruth May's Module 3 statement: INQ000479043/16-17 and /57 (see NHS England's Closing Submissions M3, para 131).

¹³⁹ See previous footnote.

¹⁴⁰ 11/3/25: 89:15 – 18.

¹⁴¹ [INQ000518349_0043 – 44], see also para 183.

74. For the future, Mr Kelly noted “*And the research, that I cannot remember if it is planned or already under way, to look at what alternatives are there for individuals where an FFP3 mask might never work, for example the use of powered hoods and other bits of equipment.*”¹⁴² See, again, the Module 3 Closing Submissions from NHS England, which highlighted the need for effective research into alternatives (paras 9, 135, 149).

(5) The High Priority Lane

75. NHS England is of course aware of the High Court judgments considering the legality of the High Priority Lane (HPL) and issues of procurement law compliance during the pandemic more generally.¹⁴³ Nothing in these submissions seeks to question those judgments and the need, in any future pandemic, to ensure that an emergency system of procurement complies with the law. It is of course the case that the judgments did not determine the effect or causative impact of the HPL system on the contracts awarded – indeed in *Pestfix*, Mrs Justice O’Farrell concluded that the contracts to PestFix and Ayanda that were under challenge would have been awarded to them in any event.¹⁴⁴ In this Inquiry, the Cabinet Office and its staff have put in evidence the results of their examination of this topic, and NHS England does not offer any submissions on this issue.
76. The comments below focus on the issue of how systems might be improved in the future.
77. Dame Emily explained the work that she had tasked Hannah Bolton, from the Cabinet Office, to do over the weekend of 21 – 22 March 2020; this was to triage offers “and to find the ones that were actually real, technically qualified and deliverable.”¹⁴⁵ The other need was to “*get back to people and to run a professional organisation, because that was essential to [the] confidence of ministers, but more importantly, confidence of the public and confidence of staff to show up at work every day.*”¹⁴⁶ Looking at the matter now and in retrospect, she considered that the two needs ultimately became elided.¹⁴⁷ It not something that she was aware of at the time.¹⁴⁸
78. The source of the need to provide assurance was firmly located by Dame Emily in the public interest, and the need for frontline staff, in particular, to know that serious and professional work was being done to secure PPE. NHS England submits that in a world in which Ministers (for example) were answering questions on a daily basis about PPE shortages and supplies, and were dealing with those who were seeking to offer supplies – often with the best of intentions – it would not be helpful to build a system in which they

¹⁴² 11/3/25: 174: 3 – 8.

¹⁴³ (1) *R (Good Law Project & others) v Secretary of State for Health and Social Care* [2022] EWHC 46 (TCC) (*Pestfix*); (2) *R (Good Law Project & others) v Secretary of State for Health and Social Care* [2021] EWHC 346 (Admin) (late notices); (3) *R (The Good Law Project) v Minister for the Cabinet Office & Anor* [2021] EWHC 1569 (TCC) (the ‘Public First’ case: bias of decision maker; overturned in the Court of Appeal: [2022] EWCA Civ 21).

¹⁴⁴ With permission to appeal this issue being refused to the Good Law Project by the CA on 29 April 2022.

¹⁴⁵ 11/3/25: 39:22 – 25.

¹⁴⁶ 11/3/25 39:25 – 40:4. See also 46:7 – 12.

¹⁴⁷ 11/3/25: 40:22 – 41:03.

¹⁴⁸ 11/3/25: 41:20 – 42:3.

did not receive prompt and accurate information about what was happening to offers referred into the system. A system of (for example) automated responses alone would not have sufficed. That does not mean, of course, that all those who made offers should not also have been informed of progress, as best as possible. But there should be recognition of the need to respond to the questions of Ministers, as one important source of enabling reassurance to the public, and that this was a legitimate need.¹⁴⁹

79. However, NHS England also suggests that Dame Emily's focus on the appropriate and effective tools to enable this to happen more smoothly, without diversion of time and resources, was right. She noted the importance of a proper CRM (i.e., Customer Relationship Management) system – which the team did not have.¹⁵⁰
80. In addition, in relation to the challenge of triaging offers automatically: given time, and the *“five years of further development of artificial intelligence and large language models, you might have been able to quickly write an algorithm that would have been able to do at least some of the screening. Although I also think that there are challenges with that technology, we know it trains quickly and can be biased....”*¹⁵¹ It would be wrong to assume that there would be easy alternatives, even now, some 5 years later.

The present day, and recommendations, including the impact of the proposed abolition of NHS England on its participation in this Inquiry

81. The Inquiry has heard evidence of changes or developments since the end of its Relevant Period. Some of this has been covered above, but where relevant we have included reference to further material as part of the discussion of recommendations, below.
- (1) The implications of the plan to abolish NHS England
82. First, we have considered what difference the proposed abolition of NHS England makes to any observations that we may make on recommendations, and offer these submissions.
83. The Inquiry will be aware that on Thursday 13 March 2025, the Prime Minister announced the abolition of NHS England. Further details were set out by the Secretary of State for Health and Social Care in a statement to Parliament on the same day. From 1 April 2025, Sir James Mackey, Transition CEO of NHS England, has been heading the transformation team to implement these reforms. The NHS England witnesses from whom the Inquiry heard in this module (Dame Emily Lawson, Julian Kelly) have stepped down, as has Amanda Pritchard; and Professor Sir Stephen Powis (whose evidence the Inquiry also heard in Module 3) will be retiring in the summer of 2025. It seems right, in this Written Closing, to address the implications of these changes for the Inquiry's work.

¹⁴⁹ See also 11/3/25: 48:16 – 21.

¹⁵⁰ 11/3/25: 43:16 – 17.

¹⁵¹ 11/3/25: 45:4 – 12.

84. We note that the abolition of NHS England does not change the evidence or the reflections it has given, nor diminish the value of its participation to date in any Module. The evidence has been gathered from extensive records and numerous staff members and was squarely based on the experience of leading the healthcare service's operational response to the pandemic. Nothing about that has changed. Reflections offered by witnesses about 'what next' were also based on both corporate and personal learning and experience. They remain, as they always were, observations for the Inquiry to assess and scrutinise alongside those from all its experienced and learned contributors. If anything, it is now all the more important that NHS England formally documents, through its participation in this Inquiry, the learning from the Relevant Period.
85. The Inquiry will understand from all the evidence heard, particularly in Module 3, that alongside very experienced NHS managers, NHS England employs senior doctors and other clinicians who contribute valuable practical knowledge from the NHS frontline into policy roles – and who will provide corporate memory as well as expert clinical insight throughout the transition. Deploying this insight and memory, alongside ensuring that its Covid records and inputs from those involved in events can be utilised until the Inquiry has completed its work, will remain a focus for NHS England.
86. The implications for any recommendations that the Inquiry might be minded to make are more nuanced. As referred to above, in the pre-abolition period, NHS England retains the records and means to respond to the Inquiry, and will continue to do so, working with those who responded throughout the Relevant Period. This includes in relation to recommendations, by seeking the views of those decision makers who were in the eye of the incident as well as those now leading this Category 1 responder and overseeing SCCL. It is important that NHS England supports the work of the Inquiry as a Core Participant, to harness this for as long as it is legally separate.
87. As a failsafe, the Inquiry will want to ensure that any recommendations it makes and are addressed to NHS England are also noted by the Secretary of State as being for him in the event the relevant functions transfer to him. There are a number of reasons for this.
88. First, and most obviously, there will come a time when NHS England will cease to exist and it is not in the public interest for the Inquiry to make recommendations only to a body which it is understood will at some point in the future cease to exist. Neither is it fair to the Inquiry for it to be in a situation where it is making recommendations that name a body as being responsible for addressing the recommendation which it is told will at some point cease to exist. The Inquiry, and the public, need to have certainty that this Inquiry's recommendations will be addressed.
89. Second, many of the functions which NHS England discharges derive from statutory powers or responsibilities. The Secretary of State has announced that he will seek to legislate to transfer those powers to himself or to others. But the speed of transition, or the order in which it will occur, is presently unclear. Other functions are discharged by NHS England pursuant to its general powers. These again will have to be transferred to the Secretary of State or others. Again, by reason of the timing of the Prime Minister's

announcement, there is presently no timetable or order in which functions will be transferred – save for mention of a longstop period of 2 years. The Inquiry should be supported in the preparation of its report so that it does not need to check which body or person presently has the legal or operational responsibility for the discharge of a function and, therefore, which body or person to whom a recommendation is directed. It should not need to check for regular updates on which functions have been transferred.

90. Third, the Secretary of State will be the party primarily responsible for considering the architecture of the NHS as it will now become. It is foreseeable that some of the Inquiry's recommendations may best be implemented by the NHS at a regional, or more local level (Trusts, ICBs etc). Matters relating to pandemic planning could be one example. There may be a need to consider who would be responsible for implementation or operationalising recommendations, and that will (presumably) no longer be for NHS England.
91. NHS England can assure the Inquiry that it will remain ready and committed to actioning any recommendations directed to it, in any Report issued by the Inquiry in due course, in the period prior to its abolition. The Secretary of State's announcement makes it clear that the abolition will take some time to implement in full, with a two year time period suggested for complete abolition. The work of the committed and dedicated individuals within NHS England, whose evidence the Inquiry has received, continues, with the benefit of closer integration with the Department to enable progress.

Recommendations: (2) Observations on potential lessons learned.

92. SCCL. NHS England is mindful of the evidence that outsourcing a function does not mean that you have outsourced the risk. Risks still need understanding and management. This issue was discussed by Lord Boardman: "There has been a historical drive by the NHS to transfer the risk for quality, delivery and price to their suppliers. As a result, the NHS knowledge level of factory locations, supply chains behind distributors, inherent risk and therefore overall resilience was low."¹⁵²
93. SCCL's ownership was transferred to NHS England on 1 October 2021, but it operates as a separate legal entity.¹⁵³ Mr Kelly's statement at paras 388 – 400 sets out how NHS England and SCCL are now working since the transfer including oversight, business plans, finances and spend controls. It also sets out the planned improvements being made.¹⁵⁴ To highlight:
 - a. There is increased integration and scrutiny of SCCL by NHS England, now that it its ownership has been transferred to NHS England.¹⁵⁵

¹⁵² [INQ00055876_0010]

¹⁵³ CWS para 46.

¹⁵⁴ See also Julian Kelly's oral evidence at 157:20- 160:11.

¹⁵⁵ CWS para 393.

- b. SCCL has embarked on a transformation programme to upgrade key legacy IT systems to improve resilience, reduce manual work arounds, enable cost savings and reduced risks of error across the organisation.¹⁵⁶
 - c. According to Dame Emily: “the ability to scale the distribution next time is built into the forward planning of SCCL ...”¹⁵⁷ Mr Webster confirmed orally that: “We have the ability to scale up, should we need to reopen, effectively, the Parallel Supply Chain, that kind of thing.”¹⁵⁸ But see the point about exercising, below.
 - d. SCCL has brought the procurement of medical, clinical and consumables, including PPE, in-house;¹⁵⁹
94. Mr Kelly was clear that the capability for surge capacity in the future should rest with SCCL: *“I think in an ideal world, we would plan for that capacity to be within one place, building on an existing infrastructure and system. I think the best place for that actually is SCCL, if properly constituted and set up and with a clear requirement upon them to plan for that eventuality, because it is best if you can surge capacity of an existing system...”*¹⁶⁰
95. He also noted the need for future emergency planning exercises to include SCCL: *“if they are going to be our -- I'm going to call it the provider of last resort, like the platform upon which you would surge capacity, I think there that be a formal part of pandemic exercises in the future, because you really want to exercise your actual physical ability to change, you know, your practice from business as usual into emergency or crisis situations.”*¹⁶¹ NHS England would hope that this would include the exercise planned for this autumn, although this is likely to predate any report and recommendations from the Inquiry.
96. More broadly, emergency planning exercises should consider how arrangements for the procurement and distribution of PPE should be ‘surged’ across the NHS (including arrangements for entities that would usually procure their own PPE / do not use SCCL) and across the social care sector, which raises some of the same issues (and more). As Dame Emily noted, there is a need for a *“distribution system that works for all of the different – well, the 58,000 customers that ended up getting PPE through the parallel supply chain [and] retaining the ability to do that would be hugely important.”*¹⁶²
97. NHS Data Management and Integration. The Federated Data Platform (supplied by Palantir) is now “completely changing” the way NHS data is used, as it is starting to join up fragmented data systems, building up capability “as we go”.¹⁶³

¹⁵⁶ CWS para 392.

¹⁵⁷ 11/3/25 28:13 – 22.

¹⁵⁸ 11/3/:125:17 – 19.

¹⁵⁹ 11/3/25: 128:15 – 129:12. CWS para 394.

¹⁶⁰ 11/3/25 156: 25 – 157:9

¹⁶¹ 11/3/25 160: 4-11.

¹⁶² 11/3/25: 32:10 – 16.

¹⁶³ 11/3/25: 77:20 – 78:9.

98. The evidence on the procurement and roll-out of inventory management systems has already been noted, at para 36 above. But in addition, the CWS (para 369) explains the role of the NHS England's Spend Comparison Service, which is supporting NHS procurement teams to compare price and spend data. Given that nearly all Trusts now submit monthly data in arrears, this should also assist in ensuring that more accurate information is rapidly available than it was in early 2020, in the event of a future emergency,
99. Professional Expertise. Having reflected on the wide range of expertise brought together to build the PPE/Ventilators (etc) response to the pandemic, Dame Emily noted the importance of investing in *"upskilling people to run an operation while simultaneously looking ahead, or at least in training people to set up teams that can do both."* Whilst across the UK public sector there has been a substantial investment in the professionalisation of commercial skills over the last 10 years, more is needed to forecast the skills *"we will need to manage ever more complex programmes and those required to deliver such programmes under intense scrutiny and the pressure of an emergency situation."*¹⁶⁴
100. The CWS gives details of the work already in hand, by NHS England, to strengthen commercial frameworks and expertise across the NHS: see paras 352 – 359; there is already significant work being undertaken to support resilience and to further build commercial expertise.
101. The PPE Stockpile. The Inquiry has received evidence on the current state of the PPE stockpile. Its size and contents are a matter for the DHSC/UKHSA (SCCL holds the stock as an agent of the DHSC) and NHS England does not comment further on these. However, NHS England's EPPR Team have been asked to work with DHSC to update modelling on how many staff there are in each Trust / setting, to support the modelling of need and usage.
102. We have noted the need to plan and exercise for the logistics of its rapid distribution, in the event of an emergency. NHS England staff are working with DHSC on this, including to explore issues with regards to the viability of the current model. This would include consideration and testing of the ability of Trusts and other providers to receive potentially large shipments at short notice.
103. Oxygen and Ventilators. NHS England does not repeat the submissions previously made upon NHS resilience and the NHS estate, although these issues are relevant to the supply of oxygen and the number of critical care beds. They were addressed in Module 3 and also, briefly, at paras 381 – 387 of the CWS.
104. Lessons regarding the infrastructure for securing oxygen supplies to patient beds, and ensuring that that DHSC technical standards are met, should be a matter for Trust Board assurance processes.

¹⁶⁴ Third statement para 207.

105. NHS England highlights to the Inquiry the section entitled “Lessons Learned” in the witness statement of Professor Moonesinghe (para 185 onwards).¹⁶⁵ She reflects on issues such as the development of hibernating research protocols that would assist in dealing with novel threats, in areas such as PPE design and safety, or equipment development, or further stockpiling, e.g., of ventilators and associated hardware (perhaps on a rotating basis, to ensure that machines did not become obsolete and are, ultimately, used).
106. UK Manufacturing Capabilities. Professor Moonesinghe also discusses the merits of reviewing whether manufacturing capability in the UK can be enhanced to increase the capacity to produce medical devices, consumables and medicines, within the UK (para 202). See further the third statement of Dame Emily, which notes the need to retain the learning, experience and skills built up during the pandemic.
107. The Inquiry has heard much about the limits of UK manufacturing capabilities, before the pandemic. In the case of ventilators, for example, none of the specialist ventilators used in English hospitals before the pandemic were made in the UK. This was important context for the Ventilator Challenge. But it was also true of less specialised equipment. Professor Moonesinghe gave the example of supplies for hemofiltration: *“So in intensive care we use a type of dialysis called hemofiltration, I don't want to get too technical, but essentially you wash the patient's blood, and you replace electrolytes, so potassium, sodium and so on. Now, to do that you need various bits of kit but the most essential is just big bags of clean fluid with some potassium and some sodium, and so on. This is not a difficult thing to make. But we didn't have that capability in the UK. And as a result of that, and the supply pressures from the two manufacturers that make those fluids that serviced UK critical care, our clinicians were required to adopt completely different practice to how they managed kidney failure in intensive care. But that was a really good example of something that actually I couldn't quite understand why we couldn't do it ourselves, we couldn't manufacture the fluids ourselves.”*¹⁶⁶
108. Determining whether and where domestic capabilities should be built up is complex, involving examination of the supply chains (including dependencies on raw materials and parts), costs and comparative advantage, and legal requirements, as well as the need to balance resilience in different spheres (not only health, but defence, for example).
109. NHS England considers that, as a result, this is a matter on which Government must lead in settling policy. There should be a risk exercise undertaken by the UK government on a range of critical supply issues which is regularly undated (CWS para 375), as well as risk assessments by healthcare providers (including Trusts) to limit dependence on (for example) single suppliers (CWS para 376). There is also work to be done to encourage the NHS to become more brand agnostic (paras 377, 378) and focussed on the essential elements of a specification (para 379).

¹⁶⁵ [INQ000518349_0047 – 0052].

¹⁶⁶ 17/3/25 162:6 - 163:4.