Witness Name: Ian Hooper
Statement No.: 1
Exhibits: IH/1-IH/57
Dated: 07 January 2025

UK COVID-19 INQUIRY

WITNESS STATEMENT OF IAN HOOPER ON BEHALF OF CAMBRIDGE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST

I, Ian Hooper, will say as follows: -

1. I provide this statement to the UK Covid-19 Inquiry in response to a Request for Evidence dated 5 June 2024.

2. As Director of Procurement and Supply Chain, reporting directly to the Chief Financial Officer, my key responsibility is the provision of procurement and supply chain services across clinical and non-clinical functions to enable the efficient and effective delivery of front-line patient care at Cambridge University Hospitals NHS Foundation Trust (CUH/the Trust). Throughout the pandemic, I acted as the Primary Approver. This meant I managed offers from prospective Personal Protective Equipment (PPE) suppliers, and coordinated regional colleagues to establish shared procurement routes.

PPE supplied by the UK Government/Department of Health and Social Care

3. NHS Supply Chain (NHSSC), as controlled by Supply Chain Coordination Limited (SCCL), was responsible for PPE provision from the earliest stages (late January 2020) up to the rolling out of Pandemic Influenza Preparedness Programme (PIPP) stock and the dedicated PPE supply channel from 1 April 2020.

4. In January and February 2020, our experience was that NHSSC was struggling with the coordination of orders, even for the relatively small volumes of PPE we were requesting at the time (IH/1-INQ000516750). There also did not appear to be collaboration with those issuing guidance in order to ensure clarity, and NHSSC were

unable to articulate which product lines would be most appropriate (IH/2-INQ000516766).

5. As demand increased during March 2020, the service rapidly deteriorated, with numerous occasions of PPE lines in particular, but also regular stock lines, being found missing from deliveries (IH/3-INQ000516785). This culminated in multiple days' worth of orders for both PPE and everyday consumables being cancelled completely around 20 March 2020 (IH/4-INQ000516809).

6. In the following week, the national team established by the Department of Health and Social Care (DHSC) and NHS England (NHSE) to manage procurement and distribution of PPE, began rollouts of "push" deliveries from PIPP stockpiles (IH/5-INQ000516824), and established the dedicated supply channel on 1 April 2020 (IH/6-INQ000516837). The East of England region had multiple issues with these early push deliveries (IH/7-INQ000516838), with some stock being delivered to the incorrect NHS trusts, while other trusts (including CUH) were allocated nothing in over a week (IH/8-INQ000516839), despite escalations through the regional team and NHSSC (IH/9-INQ000516840). As a result, CUH necessarily had to utilise a delivery which had been marked up for King's Lynn Hospital in order to guarantee supply (IH/10-INQ000516751).

7. Typically manifests for deliveries were released in the late afternoon the day before the delivery was due (IH/11-INQ000516752). This limited and late visibility made forward planning very difficult, and meant that CUH had limited time to react if expected product lines were missing or at an insufficient level.

8. Additionally, there were quality issues relating to FFP3 masks received. Some PIPP stock was being delivered which was either out of date, or which had the expiry date relabelled. In response, a letter was issued by NHSE and DHSC indicating that a testing process had been followed and that the masks were still suitable for use, but this still caused some concern among our front-line staff (IH/12-INQ000516754).

9. Another key issue was the product mix, given the need for staff to be fit tested to specific FFP3 products. Early delivery manifests did not specify which brand(s) of FFP3 mask would be included in deliveries. Staff in critical care also raised concerns relating to severe discomfort and overheating arising from the use of non-valved FFP3 masks for extended periods (IH/13-INQ000516757), and expressed a strong

preference for valved models (such as the 3M 8833). In early April 2020, we had no influence on what we received, but as the month progressed we were able to establish a dialogue via the Clinical Procurement Lead - Product Assurance & Quality Control, National PPE Team, who was able, to an extent, to help shape allocations based on demand (IH/14-INQ000516758).

10. As the pandemic spread, demand once again started to outstrip supply, leading to a number of occasions of critically low stocks (under two days) of both fluid resistant surgical masks (FRSMs) and FFP3 masks between mid-April and mid-May 2020 (IH/15-INQ000516759). Fortunately, we were able to utilise the National Supply Disruption Response (NSDR) system (IH/16-INQ000516760) and mutual aid (IH/17-INQ000516761) to prevent stock being completely exhausted. The NSDR team themselves were helpful, although operating under the same national constraints as the rest of us, and therefore were frequently unable to offer more than a temporary resolution by facilitating either an emergency delivery or mutual aid.

11. CUH was able to directly procure modest numbers of good quality FRSMs at this stage, allowing us to maintain supply despite the changing guidance and rapidly increasing prevalence of mask usage.

12. Direct purchases of FFP3 masks were generally unavailable at this point, while reuseable masks, respiratory hoods, and filters for both, were also hard to come by. It was only later in the year that FFP3 masks started to become more readily available, and CUH was able to purchase a sizeable quantity of FSM14 and FSM18 masks from Full Support Healthcare in order to diversify from 3M stock and provide extra resilience.

13. Non-sterile gowns proved to be one of the more challenging PPE categories nationally, particularly given that their usage pre-pandemic was typically very low (e.g. used as isolation gowns for norovirus outbreaks). The problem was so acute regionally that a daily stock position was mandated by NHSE in late April 2020 (IH/18-INQ000516762), so that supplies could be allocated appropriately. The situation was alleviated only by the arrival of the first batches of directly purchased gowns in May 2020, and the rollout of regional shared deliveries in June 2020.

14. In July 2020, the rollout of the NHS Foundry began. This had some teething issues but once established led to a much more efficient way of handling push stocks. This

provided us with visibility of upcoming deliveries, which in turn allowed us to anticipate problems in advance and try to take preventative action, rather than being left to react at short notice. Additionally, visibility of stock across the region allowed much more targeted requests for mutual aid when required with good effect (IH/19-INQ000516765).

15. All donations and directly-purchased stock were checked by our Clinical Engineering, Infection Control and Procurement teams, initially on a 'when necessary' basis, with a formalised process introduced on 14 May 2020 (IH/20-INQ000516768). This included physical examination of products, scrutiny of CE certificates and declarations of conformity, and test reports as applicable.

16. An assumption was made that items provided by the national push deliveries had gone through a similar process, and were therefore accepted automatically. However, in some cases, quality issues were apparent, with problems escalated via the national helpline (IH/21-INQ000516769) and the Medicines and Healthcare products Regulatory Agency (MHRA) yellow card scheme. In some cases these resulted in a product recall, most notably with Fang Tian FFP3 masks (IH/22-INQ000516771) which had a clearly counterfeit CE mark, but in other cases there was a less satisfactory response. An example was the case of Shangdong Zhusi FFP3 masks where the manufacturer confirmed the existence of problems to MHRA investigators but CUH nevertheless continued to receive deliveries of this model (IH/23-INQ000516772).

17. By the end of the pandemic, a volume of excess PPE was held by the Trust (IH/24-INQ000516773). This was all received via the national push, and the Trust was unable to utilise this because quality fell below expected standards for non-emergency use (IH/25-INQ000516774), products were not to UK specifications or the fit test pass rate was very low.

Procurement by the Trust and supply chains

18. Due to the fragmentation of the market, criticality of demand and competition within the market, the Trust almost exclusively utilised direct contract awards as relevant frameworks or dynamic purchasing systems were unavailable.

19. Via this route, the Trust awarded contracts for PPE to the following suppliers:

Supplier	Type	Qty (units)	Total Value	Contract Performed
Alexandra Workwear Plc	Aprons	1,002,000	£80,160.00	Yes
Alexandra Workwear Plc	Non-Sterile Gowns	405,000	£3,676,750.00	Partially - changed to inferior, non-waterproof product partway through fulfilment. Disputed with the supplier and further deliveries/payments halted. Total payments were circa £2.4m. We were unable to recover costs for the inadequate gowns we did receive; this stock was repurposed as isolation/barrier gowns only.
Anchor Safety	FFP3 - Reuseable filters	6,000	£39,600.00	Yes
Bates Office Services	FFP3	200,000	£1,200,000.00	No – the delivery never materialised and no payments were made
Centrado Trading Limited	FRSM	6,060,000	£3,638,400.00	Yes
CKF Ltd	Aprons	500,000	£150,000.00	No – very low quality. Fully refunded.

Full Support Healthcare Ltd	FFP3	33,800	£137,606.00	Yes
Full Support Healthcare Ltd	FFP3 - Reuseable Filters	1,000	£22,230.00	Yes
Full Support Healthcare Ltd	Hoods	432	£368,076.00	Yes
Full Support Healthcare Ltd	Hoods - accessories	335	£23,420.00	Yes
Full Support Healthcare Ltd	Hoods - filters	880	£63,600.00	Yes
Full Support Healthcare Ltd	Non-Sterile Gowns	1,770,000	£1,570,000.00	Yes
Guardian	Sterile Gowns	51,223	£176,241.52	Yes
JSP Limited	FFP3 - Reuseable	1,228	£11,496.30	Yes
JSP Limited	FFP3 - Reuseable - filters	4,240	£14,858.60	Yes
L.J.A. Miers & Co Ltd	Eye Protection	199,230	£257,006.70	Yes
L.J.A. Miers & Co Ltd	FRSM - Clear	200	£448.00	Yes
Pharmed UK	Eye Protection	10,000	£40,000.00	Yes
Specialist Door	Non-sterile Gowns	80,000	£760,000.00	Yes

Solutions Ltd				
STERIS Solutions Ltd	Eye Protection	1,000	£3,058.80	Yes
Synectics Medical Ltd	FRSM	180,000	£168,480.00	Yes
Unisurge International Limited	Non-sterile Gowns	208,295	£1,074,885.00	Yes
Unisurge International Limited	Sterile Gowns	170,546	£965,335.10	Yes

20. All PPE sourced was used by the Trust unless stated otherwise below.

21. The Procurement team were responsible for direct sourcing of PPE, and reported to the PPE Bronze group and the Respiratory Protective Equipment (RPE) Taskforce. Technical approval of supplies was undertaken by the Procurement, Infection Control and Clinical Engineering teams; while financial approval was via the Gold Command structure (practically this was often the Chief Financial Officer).

22. The three primary decision makers within Procurement were:

- Myself. An industry qualified procurement and supply chain professional with 30 years' experience across the Ministry of Defence and NHS. My Ministry of Defence career included a number of senior commercial roles within the Harrier Integrated Project Team, focused on strategic partnering arrangements with BAE Systems and Rolls-Royce. I joined the NHS in 2008 and held a number of positions within the East of England NHS Collaborative Procurement Hub (latterly as Assistant Director of Procurement) until 2014 when joining Cambridge University Hospitals NHS Foundation Trust as Director of Procurement and Supply Chain, where key responsibilities include: the provision of procurement and supply chain services across clinical and non-clinical functions to enable the efficient and effective delivery of front-line patient care. I acted as the Primary Approver, managed offers

from prospective PPE suppliers, and coordinated regional colleagues to establish shared procurement routes.

- NR MCIPS, Senior Procurement Manager. She has 14 years' experience in public sector procurement, including 11 years in the NHS, during which time she has taken on responsibility as senior procurement manager covering all clinical divisions. During the pandemic NR primarily took responsibility for theatres and critical care, and also led the team in evaluating PPE supply offers.
- Name Redacted Senior Procurement Systems and BI Manager. Though his role is not directly commercial in nature, he has been providing technical and administrative support to the procurement function for over 10 years. Additionally, having previously worked in Clinical Engineering, he is adept at dealing with complex technical specifications. NR established the central PPE store, coordinated monitoring of PPE usage and availability, and was the primary point of contact for escalations and reporting.

23. As part of the PPE Bronze and RPE Taskforce workgroups, Procurement staff were in direct contact with the Trust's senior management and were able to rely on their assistance for escalation where required. Similarly this was able to be requested via the Trust's Silver and Gold commands as necessary.

24. Valuable logistical support in reconfiguring our goods-in store was provided by the army following a MACA (Military Aid to the Civilian Authorities) request in April 2020 (IH/26-INQ000516775), in addition to later being able to utilise the army reserve centre in Cherry Hinton, Cambridge to create an off-site PPE store to provide extra resilience. Additional offsite storage would later be provided by Marshalls Group in Cambridge, to whom we are also very grateful. Credit should also be given to the University of Cambridge which offered donations of excess PPE, contact with local manufacturers, and support in storing and triaging further donations (IH/27-INQ000516776).

25. Setting aside the early confusion in terms of which products would fulfil the guidance of the time, as soon as demand began to increase in mid-March 2020 it was evident that NHSSC were unable to cope with the spike, despite having built up contingency stocks in preparation for a no-deal EU Exit. Fulfilment and timeliness of deliveries became increasingly irregular throughout March 2020, culminating in the cancellation of several days' deliveries so they could catch up. This caused CUH significant

operational difficulties at a time when we were already very busy dealing with internal reconfiguration and the establishment of a centralised PPE store.

26. Following the handover of PPE to Clipper Logistics, there were significant teething issues for the first couple of weeks, with deliveries frequently not being allocated or being delivered to the wrong locations. An additional issue was that allocation of FFP3 masks was initially based on a consolidated stock holding and burn rate across all models, whereas practically different models were definitively not equivalent on account of the need for staff to be fit tested. Fortunately the situation started to stabilise as the process was bedded in, but maintaining supply remained difficult as demand increased exponentially as case rates soared, and the Trust was only able to meet demand via a combination of mutual aid, repeated NSDR requests, and direct procurement.

27. Sourcing of PPE was made significantly harder by the state of the market in general, as recognised supply routes broke down and other companies, often with no direct PPE or healthcare experience, stepped into the gap. Prices often reflected the extreme levels of demand and were highly inflated, and the supply chain frequently lacked transparency, with it being apparent that UK-based suppliers were relying on a chain of third parties, often based abroad, and thereby running into logistical issues relating to international freight. In many cases it also proved extremely difficult to obtain valid technical specifications and certifications as part of our due diligence. Fortunately our internal approval process, working in conjunction with our Clinical Engineering department, was able to eliminate the majority of fraudulent or counterfeit products, with our primary dispute arising from the supplier changing to a different, non-compliant type of non-sterile gown partway through fulfilment of a bulk order. There were, however, some examples of counterfeit or low quality goods being delivered via the national push model, which we had excluded from our internal approval process as it was assumed that the national team would have similar, if not superior, levels of due diligence and technical approval to ourselves. Queries were raised with the national team, and on occasion with the MHRA, when these issues were detected.

28. For the most part, we had limited contact with local manufacturers. One notable exception was a collaboration with LJA Miers of St Neots, who initially manufactured face shields based on a CUH design (IH/28-INQ000516783), and later worked with

our Clinical Engineering team to design a clear face mask to facilitate lip reading and other speech and language related therapy (IH/29-INQ000516784).

29. The national approvals process for clear masks proved lengthy and difficult, with the technical requirements changing repeatedly, a number of delays to the procurement process, and little visibility on progress. The design had originally achieved CE mark certification in April 2021 (IH/30-INQ000516787), but was only formally approved by the Four Nations Review Panel in July 2022 (IH/31-INQ000516794). The reasons for the delay were not clearly communicated (IH/32-INQ000516795).

30. Receipt and storage of PPE proved problematic throughout the pandemic, as volumes were significantly higher than normal, and we required a mechanism for managing internal distribution and reacting at short notice to ward reconfigurations (IH/33-INQ000516797). We had set up a central contingency store, initially embedded in another storeroom (IH/34-INQ000516798), but later relocated to our goods-in area due to the volumes we were dealing with. This loss of space had a knock-on effect to our ability to handle goods, in particular while maintaining social distancing. Our space problems were partially mitigated later when space was made available for off-site storage at a local Army Reserve Centre and at a facility owned by Marshalls Group next to Cambridge airport. Even so, where large volumes had been directly purchased, we established a call-off arrangement with the supplier so that ring-fenced stock could be delivered on a schedule and/or requested as required.

31. Initial modelling of volumes of PPE required was based on estimates developed by our modelling group, based on a set of broad assumptions of usage in various scenarios (IH/35-INQ000516799). Naturally this was extremely sensitive to variations in case growth and changes in national guidance.

32. Logistically, to minimise foot traffic to goods-in (particularly to and from areas with known Covid-19 patients), Procurement staff initiated a system of internal 'push' deliveries, in which appropriate quantities of PPE agreed with clinical staff were distributed daily to wards and clinics (IH/36-INQ000516801). Once universal masking was introduced in NHS hospitals, surgical masks were also distributed to the Trust's security team in order to top up dispensers at the hospital entrances.

33. Quantities were refined over time based on actual demand of items being issued from the PPE store, combined with estimates of the impact from changes in guidance. This

eventually formed the baseline of the 'burn rates' reported through NHS Foundry, with the goal typically being to maintain 14 days' worth of stock where possible. Earlier iterations of Foundry-driven pushes resulted in occasional but significant spikes over the weekend because stock was allocated based on stock counts submitted Monday to Friday (IH/37-INQ000516803), while weekend deliveries were generated based on the Thursday afternoon position. The later iteration where deliveries were based on a weekly stock count and generated on a Wednesday tended to be more even.

Procurement of PPE

34. In addition to ad hoc instances of mutual aid facilitated by the regional procurement cell, the Trust was able to establish a shared purchasing route for both FRSMs and non-sterile gowns. This was agreed with the NHSE lead for the East of England, who in turn had clearance from the Chief Operating Officer for NHS England (IH/38-INQ000516804).

35. Except where suppliers were already established at CUH, typically suppliers would approach us. The Procurement team would then triage the offer to determine whether pricing was appropriate in the circumstances and volumes were sufficient to be worthwhile. For those offers which appeared to be credible, we would then reach out to establish relevant technical documentation, such as CE marking, test certification, etc. and also to request samples if possible (IH/39-INQ000516805). These would then be passed to the Infection Control and Clinical Engineering teams for evaluation (IH/40-INQ000516810). Once fully signed off in relation to the technical compliance elements, the purchase was then approved by the PPE Bronze cell (IH/41-INQ000516812), and a purchase order was raised using a CUH Covid-19 Cost Centre.

36. It was necessary to have such a system in place due to the rapid proliferation of suppliers offering PPE, many of whom had not previously had experience of the PPE or healthcare markets. Many were reliant on long or complex supply chains, so there was a higher risk of non-fulfilment of orders, whether due to legitimate issues with the supply chain, or the presence of those acting in bad faith. There was also a prevalence of internationally-sourced PPE, where local standards may have differed from UK regulatory requirements. Sadly counterfeit products were also in circulation, but the approval process for the most part was able to intercept these prior to purchase (IH/42-INQ000516813). Typically before the pandemic, supply of PPE was via NHSSC as

national distributor, where the clinical and technical assurance would have presumably been completed centrally, alleviating the need to carry this out locally.

37. The shared agreements were made available to all trusts in the East of England region, namely:

- North West Anglia NHS Foundation Trust
- Royal Papworth Hospital NHS Foundation Trust
- Cambridgeshire Community Services NHS Trust
- Cambridgeshire and Peterborough NHS Foundation Trust
- Basildon and Thurrock University Hospitals NHS Foundation Trust
- Mid Essex Hospital Services NHS Trust
- Southend University Hospital NHS Foundation Trust
- Essex Partnership University NHS Foundation Trust
- James Paget University Hospitals NHS Foundation Trust
- Norfolk and Norwich University Hospitals NHS Foundation Trust
- Norfolk Community Health and Care NHS Trust
- The Queen Elizabeth Hospital King's Lynn NHS Foundation Trust
- Norfolk and Suffolk NHS Foundation Trust
- East Suffolk and North Essex Hospital NHS Trust
- West Suffolk NHS Foundation Trust
- North East Essex Clinical Commissioning Group
- Bedfordshire Hospitals NHS Foundation Trust
- The Princess Alexandra Hospital NHS Trust
- West Hertfordshire Teaching Hospitals NHS Trust
- Hertfordshire Partnership University NHS Foundation Trust
- Hertfordshire Community NHS Trust
- East and North Hertfordshire NHS Trust

- East of England Ambulance Service NHS Trust

38. Logistically, this was initially based on a 'push' model directly from the supplier, with initial quantities informed by self-reported burn rates (IH/43-INQ000516815), and agreed with the relevant trusts (IH/44-INQ000516817). Further tranches of products were delivered centrally to the Army Reserve Centre in Cherry Hinton, with onward distribution facilitated by CUH couriers.

39. The system worked well, and enabled NHS trusts and foundation trusts in the East of England to supplement their stocks of gowns and masks at a time when the national push system was struggling to reliably meet demand. The prices were high compared to business as usual, but for the time they were competitive, as confirmed by NHSE category leads for masks and gowns.

40. First deliveries went to the region around 12 June 2020, and the final shipment was received on 1 December 2020.

41. DHSC provided various routes for funding directly-procured PPE throughout the pandemic. These can be summarised as follows:

    - **2019/20 Q4 – January 2020 – March 2020**

      Funding for the expenditure incurred for PPE purchases was provided through NHSE. This required the submission of a Covid Cost Return to NHSE for review and validation prior to funding being confirmed.

    - **2020/21 – April 2020 – March 2021**

      Funding for the expenditure incurred for PPE purchases was provided through NHSE in addition to DHSC-donated PPE. During this phase of the pandemic the funding stream supporting these costs was titled Covid-19 'True up' funding for the first half of the year.

      This required the Trust to submit details of the expenditure incurred via the monthly Covid Cost Collection templates contained within the Provider Finance Return (PFR) for review and validation prior to funding being confirmed.

      In the second half of the year funding for these costs was provided through a block Covid funding allocation. This required the Trust to submit details of the expenditure incurred via the monthly Covid Cost Collection templates contained within the PFR but this did not influence funding.

- **2021/22 – April 2021 – March 2022**

  Funding for the expenditure incurred for PPE purchases was provided through NHSE in addition to DHSC-donated PPE. During this phase of the pandemic the funding stream supporting these costs was a block Covid funding allocation. This required the Trust to submit details of the expenditure incurred via the monthly Covid cost collection templates contained within the PFR but this did not influence funding.

- **2022/23 Q1 – April 2022 – June 2022**

  Funding for the expenditure incurred for PPE purchases was provided through NHSE in addition to DHSC-donated PPE. During this phase of the pandemic the funding stream supporting these costs was a block Covid funding allocation.

  This required CUH to submit details of the expenditure incurred via the monthly Covid cost collection templates contained within the PFR but this did not influence funding.

42. Though we had received offers, at no stage did the Trust make use of homemade PPE. There were periods where the Trust utilised donated stock, subject to technical and clinical approval, which lightened the load sufficiently on usage of 'regular' stock such that we were able to avoid being completely out of stock at any point. The receipt of donations was managed by the University of Cambridge and stock was stored at Homerton College pending approval as per CUH's evaluation process (IH/45-INQ000516819).

43. Including the stock purchased for the region, CUH acquired circa 11 million individual pieces of PPE between February 2020 and June 2022 (IH/46-INQ000516820), compared with around 15 million pieces of PPE which were delivered via the push model during the same period (IH/47-INQ000516821).

44. In terms of PPE availability, the Trust made no distinction between permanent staff, temporary or locum staff, and external contractors. Appropriate PPE for the relevant clinical areas was provided in 'donning areas' at entrances to clinical areas, for the use of all staff and contractors as required by the policies and guidance of the time. This included CUH services temporarily relocated to operate with the assistance of the private sector, who would provide their expected demand in advance (IH/48-INQ000516822).

45. The PPE store was managed within our inventory management system, GHX Powergate, with generic product codes created to cover the variety of models being received and used by the Trust, while specific models of FFP3 had their own coding (IH/49-INQ000516823). A daily stock count was carried out at the start of each day, with the resulting stock on hand value fed into a Qlikview report displaying a consolidated view of stocks, with a figure for expected days' worth of stock based on an estimated burn rate. This report was emailed to key stakeholders including Procurement and PPE Bronze, Silver and Gold teams daily, highlighting relevant updates (IH/50-INQ000516825).

46. One limitation was that this was based explicitly on stock on hand in the central store and we lacked full visibility of stock which had been issued to wards which was held as "working stock" in donning areas, etc. If stock levels of a particular product line became critically low, the Procurement team would work with operational colleagues to visit areas and determine what extra stock was available throughout the Trust, so that it could be reallocated as required. Expiry date management was not formally recorded, but the Procurement team examined expiry dates upon goods receipt and prior to issuing stock, so that (with the exception of the PIPP stock FFP3 masks cleared for use by the DHSC in 2020) short dated or expired stock could be identified and dealt with appropriately.

47. Finally, while the Trust was not directed to provide support to the care sector, we made available donated stock which had not passed NHS technical requirements, primarily of facemasks equivalent to Type I, in an effort to assist. This was largely coordinated by Cambridge Community Services NHS Trust.

Fit Testing

48. At the start of the pandemic, the Trust had in place a programme of fit testing for all staff required to wear Respiratory Protective Equipment (RPE), primarily FFP3 masks. The Trust sought to expand its fit testing programme in the initial phase of the pandemic, training additional staff to undertake fit testing and purchasing two additional PortaCount machines (increasing the number from four to six). However, in the early weeks of the first Covid-19 wave, it became increasingly difficult to sustain the programme of fit testing given the limited amount of specialist fit testing consumables available to the Trust and, more significantly, the lack of consistency in the NHSSC for FFP3 masks as referenced above.

49. Some of the significant challenges that the Trust faced at that time are outlined below:

- The 'push' model adopted by NHSSC to secure a continuous and regular supply resulted in a very significant variation in PPE being delivered.
- In April 2020, we understood that there were 15 types of FFP3 and FFP2 masks being held by NHSSC and deliveries did not take account of what type of mask was delivered previously to the Trust.
- In April 2020, five different types of FFP3 mask were in use at CUH, with supplies being delivered in relatively small batches and of varying brands.
- The hospital had hundreds of staff who needed to wear FFP3 masks as part of the care they were delivering to patients.
- Repeated fit testing used large amounts of a scarce resource as, once used for fit testing, the FFP3 mask could not be used in the clinical environment.
- There was a national shortage of consumables required for our fit testing machines.

50. Following careful consideration and consultation internally and discussion with colleagues in other major teaching hospitals, the Executive Team concluded on 26 March 2020 that fit testing had become impossible to deliver safely or consistently. The Trust's risk assessment concluded that fit checking was a safer and a more sustainable way to proceed in the prevailing environment (IH/51-INQ000516827). The Trust's position was set out in a letter which was sent to the Health and Safety Executive on 14 April 2020 (IH/52-INQ000516828). The letter emphasised that it remained the Trust's intention to reinstate the fit testing programme as soon as it was possible to obtain appropriate certainty and consistency of supply of FFP3 masks and testing consumables.

51. The safety and welfare of staff was of the utmost importance to the Trust as we provided a clear message to all staff who did not pass a fit check that they should not undertake a high risk procedure or work in a high-risk clinical area. We made available a wide range of information to our staff, including videos, on the appropriate processes for fit checking. The data from sickness absences and staff testing indicated that this approach worked well, with lower-than-average hospital transmission.

52. In early May 2020, CUH was able to secure access to 600 reusable half-mask respirators which could be used in place of disposable FFP3 masks. In addition, there was by then increasing consistency in the supplies of FFP3 masks being delivered to CUH. As a result of these changes, and based on a constant review of the position, the CUH Executive Team took the decision to restart the Trust's fit testing programme for both reusable respirators and FFP3 masks, in addition to the continued and essential process of fit checking every time an FFP3 mask was put on by a member of staff.

53. The Trust's fit testing programme was overseen by a dedicated RPE Taskforce and required detailed management given the importance of tracking fit testing compliance in the context of continuing issues around continuity of supply of specific makes and models of FFP3 masks being delivered to the Trust. In addition, the Trust experienced low fit testing pass rates for some of the models of FFP3 mask.

54. Where members of staff failed fit testing on FFP3 masks, there was the option of fit testing them for reusable masks where these were in supply. Alternatively, respirator hoods were made available for them to use.

55. In order to utilise reusable masks, the Trust had to arrange the procurement and installation of washer facilities for the reusable masks and a programme to ensure that the masks were washed in accordance with the manufacturer's recommendations.

56. We acquired several hundred Force8 masks from JSP Ltd for dedicated use in theatre and critical care areas, with consumable filters available from the central PPE store. Fit test success rates for the Force8 were good and the availability of filters meant that staff had certainty that respiratory protection would always be available. Both the masks and the filters were subject to the same forces of supply and demand as disposable masks so were only available at inflated prices, but the ability to use a filter for an extended period before changing meant that the "per use" price was significantly lower than a disposable mask. However, there were additional logistical difficulties involved in storing masks between uses and properly disinfecting between uses.

57. Finally, it is relevant to note that at various points the Trust had to train additional staff to undertake fit testing and received external support, including from the local fire service.

Ventilators

58. In relation to the procurement of ventilators, initially all NHS trusts were competing to place orders with medical device manufacturers. Early on in the pandemic, NHSE stated that all orders placed by individual trusts would not be fulfilled and that a national equipment stock would be established. This initially created issues. Much of the equipment obtained centrally was from manufacturers which were not known in the UK. While the purchase of devices was considered, the provision of support, consumables and spare parts to keep these ventilators in use was not sufficiently taken into account.

59. The supply and distribution of the national equipment stock was managed at the start of the pandemic through the Infection Control and Critical Care Cells, often bypassing local Clinical Engineering teams, which caused issues around governance. The local Clinical Engineering teams were not consulted and equipment management in organisations seemed to sit with clinicians. Later in the pandemic, this changed so that clinicians typically went via local Clinical Engineering teams, who then contacted regional and national teams, or went directly to the national equipment reserve. This meant that Clinical Engineering knew what equipment was being requested and when it was going to be received and could ensure that it went through appropriate acceptance testing before being put into clinical use.

60. It took several months for the Government to procure and distribute the national fleet of ventilators. This led to deliveries of ventilators having to be commissioned and put into service all on the same day due to clinical urgency.

Oxygen

61. With regard to the procurement of oxygen and related medical equipment, initially the oxygen cylinder supply from BOC was effective and the Trust at one stage had a surplus stock of CD (460 litre) oxygen bottles. This was reviewed and those stock levels at the time reduced to suit demand and to also make cylinders available back to BOC for wider distribution.

62. When the second lockdown happened, we did however start to experience some supply issues as follows:

    - Delivery times changed from evenings to daytime. During evening deliveries, the load was assigned solely for Addenbrooke's Hospital which also enabled like-for-

like stock replacements as there was capacity with the delivery. With the change to daytime deliveries, there were occasions when we did not get like-for-like deliveries which meant we had to chase up and have extra deliveries provided by BOC to supplement stock levels. This was due to the delivery truck delivering to multiple sites, so they did not have enough space to take away or deliver the quantities needed.

- There were also times when we were limited on stock delivered because the stock in the BOC distribution hub was limited.
- Hoarding on wards was an issue and so we undertook enhanced management of oxygen bottle distribution and collection to control this through the Portering team reviewing and aligning numbers of bottles supplied to the wards with numbers of used bottles removed.
- The national team provided the Mercedes Ventura CPAP device, which was based on a 1980s design of the Whispherflow. Unfortunately, these used drive flows of 120 l/min. As a result of this excessive flow and issues with oxygen supply they were not used clinically.

63. Cylinder stocks were monitored daily with escalation to the Trust Silver Command and to BOC for resolution. Ultimately, we were never in a position that we were not able to meet clinical demand for oxygen. Nationally, BOC were part of an NHSE oxygen management group where concerns over supplies were escalated directly between NHSE and BOC.

Testing

64. We did not experience any problems sourcing Lateral Flow Devices (LFDs) for use by Trust staff.

65. The Trust did, however, have significant difficulty sourcing PCR tests for use by Trust staff during the early pandemic. As PCR-based tests were limited only to patients for much of the early pandemic in 2020, a bespoke pathway was required to test staff to ensure the safety of both staff and patients. In collaboration with the University of Cambridge, in March 2020 we developed a first-of-its-kind SARS-CoV-2 screening service, for all staff at CUH.

Diagnostic and other medical equipment

66. Beyond the initial and expected high demand for ventilator/respiratory consumables, there were significant difficulties in accessing a wide range of adjacent supplies throughout 2020 and well into 2021 (IH/53-INQ000516829). These included (but were not limited to):

    a. Tracheostomy consumables

    b. BIPAP and CPAP circuits

    c. Renal / haemodialysis consumables

    d. Alaris giving sets

    e. BD consumables

67. A mandatory twice weekly stocktake was introduced in May 2020 covering key consumables (IH/54-INQ000516830), and remained in place for over a year, with various additions and removals of product lines. This stocktake was used by the DHSC to inform each trust's product allocation.

68. The implementation of demand management controls introduced by NHSSC stabilised the position nationally, but unfortunately caused significant practical issues for Procurement staff who were already struggling at this time. Product allocations were often released last minute and required rapid release of a purchase order to secure the stock (IH/55-INQ000516833). In addition, orders were frequently subject to cancellation or reduction in quantity with little notice or explanation, and frequently required detailed management via daily orders to a central requisition point (IH/56-INQ000516834). This approach to demand management, which required CUH to move away from established inventory management practices (IH/57-INQ000516836), continues to this day.

69. The only recourse where demand was insufficient for clinical need was generally to escalate via both NHSSC and the NSDR team. For some product lines, notably Baxter Colleague admin sets in October/November 2020 and haemodialysis products where the CUH's allocation was insufficient, this escalation path needed to be followed every day over an extended period.

Lessons learned

70. The pandemic, particularly in the earlier stages, provided a number of unprecedented challenges to the Procurement team. Though we were subject to many factors out of our control, there are some lessons learned which may help mitigate the impact of any future crises.

71. Most notably, the team became embedded much more closely within the Trust's operational and incident response structures, facilitating significantly improved communications with clinical colleagues and a feedback loop which allows all parties to adapt to rapidly changing circumstances. This extended also to collaboration with colleagues across the region and the NHS as a whole; there were occasions where the timely receipt of mutual aid prevented critical products going out of stock, which would otherwise have had a direct impact on our ability to provide care and/or protect our staff and patients. Similarly we were often able to reciprocate and assist other trusts, both via mutual aid and our collaborative purchase of PPE.

72. Another important facet was our ability to rapidly create a centralised store for the receipt and distribution of PPE, though this was subject to constraints on space. Holding an increased stock level (where possible) gave us extra time to react to disrupted supply chains and take mitigating actions in a more controlled fashion, rather than scrambling to respond when stock was already critically low. This is opposed to the established financial orthodoxy in which a lean / just-in-time approach was prioritised. Both points of view will be considered and balanced when deciding stock levels in the future.

73. Relatedly, the situation reinforced our belief in taking a data-driven approach to inventory management. In such a rapidly evolving situation, the use of modelling to shape our approach was a boon, and our ability to provide accurate reporting of our stock position helped reassure clinical colleagues. There are, however, limitations on our visibility of stock on hand in working areas (for example PPE held in donning areas), which made it harder to get a holistic view of the Trust's total stock level. We are grateful for the assistance of clinical colleagues in providing a live view of these stocks when required for national reporting of critical products.

74. We have always strongly believed in taking a rigorous approach towards technical assessment and certification, which proved invaluable when assessing the quality and authenticity of offered PPE.

75. A diverse supply base also proved to be important, as unfortunately there were times when NHSSC was not able to meet our requirements. While we recognise the advantages of a centralised and aggregated response, the flexibility to directly contract with third party suppliers (with sufficient oversight from the regional cell) potentially made the difference between having sufficient stock and running out.

76. Taking all things into account, we are proud of the way the team handled events during this period. They were able to adapt to unbelievably challenging circumstances and work together with operational and executive colleagues to weather the storm and provide the PPE and other supplies required to care for our patients. Though there are always lessons to learn, I am confident that the broad strokes of our response were robust and stand up to scrutiny; and would hope that such lessons can be applied within the Trust, across other NHS providers, at NHSSC and other key suppliers, and in central government.

Statement of Truth

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

PD

Signed: IAN HOOPER

Dated: 07 January 2025