

Witness Name: Professor Alistair Chesser

Statement No: 1

Exhibits:

Dated: 12 April 2024

UK COVID-19 INQUIRY

DRAFT WITNESS STATEMENT OF PROFESSOR ALISTAIR CHESSER, GROUP CHIEF MEDICAL OFFICER, BARTS HEALTH NHS TRUST

1. I, Professor Alistair Chesser, make this statement in response to the UK Covid-19 Inquiry's ("the Inquiry") Rule 9 request dated 13 December 2023 to The Royal London Hospital of Barts Health NHS Trust for evidence in relation to Module 3 of the Inquiry's work.
2. I am the Group Chief Medical Officer for Barts Health NHS Trust and I have been in this role since 2016. I am a Consultant Nephrologist and my qualifications are MB, BChjr PhD FRCP. I have worked in the Trust since 2003 as a consultant in a range of medical leadership roles and before this, trained in nephrology and general internal medicine in North East London and Scotland.
3. As Group Chief Medical Officer my role during the pandemic was to oversee, in collaboration with the Group Chief Nurse, the clinical services in the Trust, including infection control practice, clinical guidelines, distribution of staff, visiting rules for loved ones and professional support for staff. I chaired the Clinical Advisory Group, which was composed of the senior clinicians in the organisation and advised the executive on all clinical matters, and which met up to twice a week during the peaks of the pandemic. As a member of the Group Executive team and the Trust Board, I shared responsibility for the decisions made by the Board and executive team. I was a member of the London Clinical Advisory Group which met once a week or more during the peaks of the pandemic.
4. While each of the four Barts Health hospitals was run on a daily basis by the devolved hospital management teams, all decisions on policy, guidelines and the strategic distribution of services and staff were made at Group level during the peaks of the pandemic. For some matters, this extended to Homerton Healthcare Trust and Barking, Havering and Redbridge University Hospitals NHS Trust, the other acute providers in North East London.

5. The Covid-19 pandemic was a novel phenomenon for the NHS, with its lasting impact still felt today. Like most acute care settings in the United Kingdom, we were working under unprecedented environmental conditions in which decisions sometimes were needed quickly, with limited available information and resources.
6. I have a recollection of many of the matters subject to the Inquiry's Rule 9 Request and have also drawn upon the input of leaders overseeing the respective areas outlined in the Rule 9 Request. In preparing this witness statement, I have also had the opportunity to review documents, that were created at the time of the events, to assist my recollection. Throughout this statement I refer to wave 1 and wave 2. For the avoidance of doubt, wave 1 was March – June 2020 and wave 2 was December 2020 to February 2021.

Introduction

7. Barts Health is one of the largest acute NHS Trusts in the country, serving a population of over 2.5 million people across the London boroughs of Newham, Tower Hamlets, and Waltham Forest, East London and beyond. We operate from four major hospital sites (Newham, The Royal London, St Bartholomew's, and Whipps Cross Hospitals) and a number of community locations including Mile End Hospital. Barts Health operates as a Group of hospitals with a body of executive directors overseeing the Trust, with each hospital having its own executive leadership team. Much of the decision making is undertaken as a Trust and so, some responses within this statement are from a Group perspective.
8. There were significant changes to Barts Health's role during the pandemic and we played a key role in the wider London and national response to Covid-19. In March 2020, the Trust Board agreed to a request from NHS England (NHSE) to set up and operationally manage the NHS Nightingale Hospital London, as part of the Barts Health Group. Barts Health worked closely with NHS England, the armed forces and other partner organisations to set up and operate the Nightingale Hospital at the ExCel exhibition centre in Newham at exceptional speed.
9. A first wave mass vaccination centre was set up by the Trust and operated at the ExCel centre from January 2021, offering Covid-19 vaccination to the local population and staff and providing outreach services to hard-to-reach groups.
10. Barts Health commissioned and operated the Queen Elizabeth critical care unit at Royal London Hospital with equipment for 176 beds which ultimately provided approximately 150 critical care

beds for North East London and beyond, helping to avoid a requirement to reopen the Nightingale hospital after the first wave of the pandemic.

The Royal London Hospital

11. The hospital is a District General hospital for the London Borough of Tower Hamlets in East London, which forms part of Inner London. In addition the hospital provides tertiary specialist care to North East London (NEL) and beyond. This is an area covering the London Boroughs of City of London and Hackney, Tower Hamlets, Newham and Waltham Forest through to the outer Northeast London boroughs of Barking and Dagenham, Havering and Redbridge. The census of 2021 estimated the total resident population of NEL at 2 million people. The hospital is a key member of the Northeast London and Essex Trauma Network, catering for an overall population of over 5 million people.
12. The Office for National Statistics (ONS) confirms the age Groups of the usual residents of Tower Hamlets to be in the following percentage range:
 - i. 0 – 15 years: 17.5%
 - ii. 16 – 64 years: 76.9%
 - iii. 65 & above: 5.6%
13. Within Tower Hamlets, the Royal London Hospital caters to an ethnically diverse population with the largest group being of Asian origin at 44.4%. According to the ONS, in 2021 the ethnic groups of the usual residents in Tower Hamlets is in the following percentage range:
 - i. Asian, Asian British or Asian Welsh: 44.4%
 - ii. White 39.4%
 - iii. Black, Black British, Black Welsh, Caribbean or African 7.3%
 - iv. Mixed or Multiple ethnic groups 5%
 - v. Other ethnic groups 3.9%
14. With respect to the socio-economic picture of Tower Hamlets, the organisation called '*Trust for London*' has produced some key indicator rankings. It reports that, relative to London overall, the average neighbourhood in Tower Hamlets borough was 2.03 times as income-deprived than the average in London in 2019. Among other findings:
 - a. In 2021/22, 39% of people in the borough lived in households with an income of less than 60% the UK median after housing costs have been subtracted.

- b. 48% of children in the borough lived in households with an income of less than 60% the UK median after housing costs have been subtracted in 2021/22.
 - c. 12.2% of residents were estimated to be earning below the Living Wage in 2022.

- 15. The Royal London Hospital is an 800-bedded general teaching hospital located in the London Borough of Tower Hamlets in East London. It serves Tower Hamlets which has a population of 312,273 (Census 2021), the most densely populated local authority across England. Services provided by the hospital includes:
 - a. Renal and Urology (including transplant services)
 - b. Tertiary surgeries including Neurosurgery; Vascular surgery; Gynecology surgery; Gynae-Oncology; Plastic Surgery, Orthopaedics, Trauma, Hepato-Pancreato-Biliary (HPB) surgery, Colorectal surgery, Dental surgery, Ear Nose & Throat (ENT); Maxillofacial surgery; Paediatric surgery; Ophthalmology; Interventional Radiology, renal medicine (including dialysis and transplantation) and hepatology.
 - c. The major Trauma centre for Northeast London and Essex. It is the home of the London Air Ambulance.
 - d. A large, 100-bedded, children's hospital.
 - e. A tertiary centre for maternity care and maternal medicine.
 - f. A comprehensive stroke centre with all modalities (methods of treatment) offered.
 - g. An Infectious Diseases team.
 - h. The hospital now has a 56-bed Critical Care Unit (44 beds in February before the pandemic began) and another 44 enhanced care beds. Enhanced Care is an intermediate level of care where a higher level of monitoring and interventions can be provided than on a general ward, but not requiring high dependency care/organ support. At RLH, these beds are spread within the clinical specialties including Neurology, Renal and Respiratory medicine.
 - i. The Royal London Hospital has an Emergency Department which sees over 200,000 patients per year with a 24/7 Consultant presence.

- 16. The hospital currently has a workforce of 6,669 WTE with 7,295 staff employed. In March 2020, however, the WTE was 5,794 and 6,319 in total. It has 33 wards, but during the period of the pandemic an additional 4 Critical Care wards with 30 beds each were opened. The additional wards are now closed.

Staffing during the pandemic

17. In March and then April 2020, admissions to critical care grew rapidly with Covid-19 as the diagnosis. Staffing for critical care was the biggest challenge: the number of critical care trained and experienced nurses in the Trust was limited and there was no time to train more, so innovation was required.
18. The role of a Covid-19 Critical care nurse was developed and clinical staff from other areas in the hospital were redeployed into the critical care area, undertaking specialist training in caring for Covid-19 patients in critical care specifically; this was referred to as “upskilling”. Staff shortages were far-reaching and felt across all staff groups. The impact of this however was more prevalent in clinical roles resulting in absences on the ground due to shielding, self-isolating or Covid-19 infections. Those non-clinical and a few clinical staff that could work at home did. Instead of the usual 1-1 ratio of critical care nurses to ventilated patients, the experienced nurses were responsible for 2,3 or 4 patients; working with redeployed nurses and clinical staff from other parts of the hospital.
19. On the medical side, Anaesthetists were redeployed from theatres to the critical care area to enable the expansion to be made, working alongside regular critical care doctors. On the non-critical care wards, Covid-19 patients were prevalent, and many surgical wards were converted to medical wards to provide the necessary capacity. Medical consultants stopped or significantly reduced their outpatient activity and were redeployed when possible to medical wards, along with junior doctors. Shift systems were devised for medical wards to ensure round the clock support and expertise was available when needed, with wards buddying up to provide mutual support and resilience.
20. As a result of the above, non-urgent surgery was halted during the peaks of the pandemic; theatre nurses and anaesthetists having been redeployed.
21. There was a notable decrease in attendances and admissions of patients who did not have Covid-19, which picked up again between the first and second peaks and then decreased again during the second peak of early 2021.
22. Some surgery including cardiac surgery continued at the Trust (at St Bartholomew’s hospital) with cancer surgery and surgeons redeployed to work in private hospitals where it was possible to run Covid-19-free theatres and wards.

23. An expansion of medical and critical care numbers was also seen at the other Barts Health hospitals. However, at Newham and Whipps Cross the configuration of the wards and infrastructure prevented significant expansion of critical care, with the Royal London absorbing excess patients.
24. The major trauma service, stroke service, renal service and other acute tertiary services remained open and functioning throughout the pandemic, as did the maternity unit. Staffing levels were centrally monitored daily. Sickness and self-isolation in staff could not be predicted, and so daily adjustments were required. As the numbers of admission rose during both peaks there was obvious concern about the ability to have enough staff to deploy. Staffing models were adjusted in critical care and on medical wards to cope with the particular demands of covid patients, and also to enable the expanded bed base in these areas to be served by the necessary expertise and support.
25. Usually, these modified staffing models were adhered to; however, there were a few occasions in Critical Care when the already modified nurse to patient ratio of 1:2, 3 or 4 (1 fully trained critical care nurse to 2, 3 or 4 patients) was increased to 1:5. Our review demonstrates that this only occurred on 4 occasions during night shifts at the peak of the 2nd wave. I hereby exhibit an infographic reflecting the response of the RLH's Critical Care specialty to the pandemic – as **AC/01 [INQ000471166]**.
26. Although it is to be expected that the modified staffing model put additional pressure on the nurses, there is nothing to suggest that it had a notable adverse impact on patient care and treatment. There were mitigations in place; including the redeployment of non-critical care nurses and other clinical staff to assist the trained nurses in the ICU. Additionally, any dilution of the already modified nurse to patient ratio would have been restricted to only a few Critical Care regions across the hospital and it would not have affected all the patients within that region. Crucially, it would have only applied to a few lower acuity patients, while the more unwell patients retained a higher ratio of care.
27. Prior to the pandemic, there were significant challenges with recruitment and retention at the hospital, stretching back for multiple years. The overall vacancy rate in February 2020 was 6% and higher for nurses. The pre-existing challenges meant that we entered the pandemic with a reduced workforce and further workforce shortages resulting from the pandemic created challenges.

28. A small number of our staff were considered clinically vulnerable and practised shielding in line with national guidance. Those shielding who could be re-deployed were, and this impacted on staffing levels. As it became known what the risk factors for Covid-19 were, all staff conducted a risk assessment and those at higher risk were not deployed to Covid-19 areas. At the beginning of the pandemic, in March 2020, this knowledge was not in place and so redeployment was less refined.
29. Throughout the pandemic, many of our staff acquired Covid-19 or had come into contact with a Covid-19 positive patient requiring them to self-isolate in line with guidance. This impact on staff capacity was most marked during periods where there was a high prevalence of Covid-19 in London, and it exacerbated the ongoing staffing challenges being experienced on the ground. The requirement to self-isolate, as well as time to recover, impacted on service delivery.
30. There were two key periods where absences were at their height and sickness levels peaked. The first was at the start of the pandemic in March 2020 and the second period was in December 2020 continuing into January 2021.
31. Some shortage across the hospital was also caused by necessary staff redeployment from the non-critical care or acute areas, into critical care and acute areas to increase capacity.
32. Covid-19 routine testing for staff was introduced in August 2020 and this provided clarity in relation to staff who were required to isolate. In the initial stages, the requirement to attend centralised and remote testing sites was a challenge, but the ramping up of capacity for testing eased this. This had an initial positive impact on staff absences as staff were quickly able to access their Covid-19 status and attend work if they received a negative result. It is however noted that from October 2020, there was an increase in staff absence related to non Covid-19 sickness.
33. On one occasion NHS England (London) instructions were to test the entire clinical workforce for Covid-19 antibodies over a 48-hour period. This was carried out at speed and hospital staff were informed of their antibody status. This, however, had little effect on the workforce capacity as there was no further guidance received subsequent to the results being available.
34. There were major national efforts to increase capacity through bringing new and retired staff into the Hospital including people admitted onto temporary registers. However, this had a marginal effect compared to the size of the existing workforce many of whom worked additional hours above a full time week over an extended period .

35. The main constraint we faced in relation to increasing staffing capacity was the lack of available, ready to recruit clinical staff with experience working in specialist areas such as critical care. Most staff with specialised training were already working substantively at other hospitals nationally and many of those that were available to return into clinical practice required refresher training. There were challenges and delays with organising the hospital site and IT access for staff. These processes were all required even in the high demand areas, and they caused additional capacity bottlenecks in many areas. However, we implemented a revised recruitment process with relaxed rules on face-to-face checks and improved turnaround timeframes for DBS checks (48 hours) which led to speedier recruitment.
36. A further area of unavoidable challenge was the reduction in staff capacity caused by potential Covid-19 infections and the requirement to self-isolate and shield in line with national guidance. However, this constraint lessened as time went on; particularly when testing became widely available and national guidance changed to reflect that only those that tested positive had to isolate.

The Redeployment of staff to high demand areas

37. At the start of the Pandemic, the main response to reactively address and alleviate staffing shortages was by way of redeployment. This was the most impactful measure we had available to us and was largely Trust and hospital led. Staff were asked to move to new and different departments, sites and teams as the Trust worked out how to respond to changing patient needs and shortages within specific critical departments. We recognised the importance of supporting our existing workforce and taxis, hotels, free food and drink offerings were made available for those who needed it to remain in work; this offering was well used.
38. Redeployment was therefore the hospital's most effective way of increasing staffing capacity, but this came with its own constraints. There were practical limitations to this, including the impact of the reduced public transport system and childcare issues. Whilst childcare provision was re-opened for "key-workers" during the pandemic, many of our staff on the ground were reliant on friends and family to assist with round the clock childcare. Due to social distancing measures in place at different times throughout the pandemic, this created a challenge for staff. Working parents and carers would have been disproportionately affected as a result of this, due to start and end times of shifts.

39. Another issue touching on redeployment was that the period of redeployment was open-ended with no sense of how long it would be for. The redeployment pandemic policy made clear that staff could not unreasonably refuse redeployment, but the grounds on what was reasonable or unreasonable required individual judgements to be made by managers. Redeployment was in effect challenging to enforce, as in some cases staff were reluctant to volunteer to be redeployed even if it was practical and possible. We relied upon the goodwill of staff and it was important, but sometimes challenging, to strike the balance between supporting staff wellbeing and redeploying those who were needed to staff clinical areas with shortages. Efforts were made to redeploy non-clinical staff into clinical areas on a voluntary basis, but this had limited success.
40. There was a sense of nervousness around working in areas such as critical care for those that had not previously done so, particularly with the ever-changing guidance and media attention in relation to the risks of treating Covid-19 patients and the availability of Personal Protective Equipment (PPE).
41. We tried to redeploy staff from local private providers but due to the lack of availability, the impact of this on the workforce was very limited.
42. Local and national guidance on redeployment was followed. From a regional perspective, there was a pan-London Memorandum of Understanding (MOU) developed to allow the easy movement of people from other London trusts in an attempt to alleviate staffing shortages. Significant efforts were made across London to identify people and redeploy them to higher demand areas (such as critical care). However, the outcomes of these efforts were limited due to the shortage of available clinical staff which, as touched on above, was a pre-existing challenge for both the Trust and other hospitals in London.
43. Responses and measures taken to address or alleviate staff shortages by NHS England were often limited and belated because those measures, which had a good effect, were led and managed in-house by the Trust, and regionally by NEL. For example, there was NHSE's Bringing Back Staff (BBS) programme; despite the expression of interest by mainly retired staff it did not amount to much, from the perspective of the hospital and Trust, because it did not deliver suitable candidates at the pace needed. We had more success onboarding our own volunteers internally, such as students. Ultimately, the main successful measure taken to alleviate staff shortage was the re-deployment of permanent members of the workforce; a measure implemented from a local and regional approach.

The practical effects of Redeployment

44. As touched on earlier, the ability to redeploy our staff internally within the hospital and across the Trust was one of the most effective resources available to us. This ability allowed us to manage and divert capacity where it was needed the most at fast pace to support patient safety and safe staffing levels, in so far as we were able. Details of hospital staff who had a redeployment skill were logged. More generally, "Upskilling training" was in place to ensure that staff were sufficiently skilled to work in the roles into which they were redeployed.
45. It was a challenge to staff our hospital and the other hospitals within the Trust and so redeployment to other Trusts would have only been at the request of staff for practical reasons such as working closer to home.
46. Some of our hospital staff across the Trust volunteered for redeployment to the Nightingale Hospital. 183 clinical staff were redeployed to the Nightingale London hospital from across the Trust. Staff redeployed to the Nightingale were assessed as to their skill set in order to place them into roles that they were sufficiently skilled in; they then underwent specialist training provided by the Nightingale ahead of undertaking shifts.
47. The Trust continuously reflected on the events of the pandemic as an ongoing process to inform its approach to different areas of practice; including redeployment. In May 2020, it was agreed that work would be undertaken to capture the learning and experience of Trust staff through the peak of the pandemic. Feedback was collated through the use of an app (ImproveWell), focus groups, and individual interviews. The feedback, from a proportion of Trust staff, reflected the feelings and views of their experience of the pandemic and how the Trust collectively responded. This piece of work was the *Harvesting the Learning from Covid* programmed; part of which reviewed the feedback from the first wave. I hereby exhibit document AC/01a [INQ000417103].
48. The redeployment framework was Trust wide as opposed to hospital specific. From a Trust perspective, the feedback obtained demonstrated that redeployment had an adverse impact on staff morale and wellbeing. There were concerns about decisions made around redeployment with staff reporting a lack of clarity, communication and consultation about redeployment. Some staff felt compelled to comply with redeployment and considered there was a lack of structure in the process itself; opining that there were inconsistent and differential approaches to redeployment across the Trust. Although risk assessments were undertaken once the methodology was developed, regrettably there was a lack of full understanding of the risks for

some groups until later into the pandemic. There was no central record of who had moved where with reliance placed on local knowledge, volunteers and 'call outs' to inform who was redeployed.

49. Some redeployed members of staff felt isolated or cut off from their 'home' team and not fully supported by the new team. Others felt they missed out on key education and training opportunities, including not being properly trained on local operating procedures. The lessons learnt in this regard in the first wave were responded to in the later waves. The Trust introduced "Redeployment principles" touching on health and wellbeing by way of pastoral care and access to support. Staff psychology support was introduced with wellbeing hubs created on site to manage the increased risk of burnout.
50. The Harvesting the Learning Programme identified learning in relation to redeployment from the first wave which was utilised further into the pandemic. Key lessons included the need for an open equitable process of selection of staff for re-deployment; utilising the Covid-19 risk assessment process; formal notification of redeployment to be addressed to the member of staff directly and in a timely manner; and the importance of induction into new departments/teams.

Long Covid

51. Data has been obtained from the Trust's health roster, which collates data on staff absences. The data captures 28 members of RLH staff recorded as absent for more than 28 days with Covid-19-related illness during the relevant period; however, we have not been able to ascertain whether their conditions have been definitively confirmed as Long Covid. Unfortunately, the health roster does not have Long Covid as a category for referral. In retrospect, we should have created a category or another way to log this centrally to capture all long Covid cases.
52. Hospital employment records indicate that the longest period of Covid-19-related absence for one staff member, was from February 2021 to May 2023. Our records indicate that the aggregate number of days for 6 members of staff, who were absent for Covid-19-related illness in the relevant period, was 1,274 days. We can deduce that the cumulative loss of available workforce as a result of long covid is likely to have been significant.

The death of colleagues at the RLH

53. The hospital sadly lost four members of staff to Covid-19. These colleagues held the following roles:

- a. Health Care Support Worker
- b. Ambulance Care Assistant
- c. Hospital Administrator (Clerical)
- d. Senior Health Advisor

54. The Trust made efforts to provide support to staff at this difficult time. An avenue was set up for memorial wall messages; there was support provided from Psychologists by way of the Psychology Support Service; there were arrangements for compassionate conversations, listening, and talking circles.
55. The deaths of these colleagues affected us all, especially those who worked closely with them.
56. For many staff, especially in the early phases of the pandemic, there was considerable fear that they may personally contract Covid-19; conceivably, that they may not survive; and /or that they may pass it on to vulnerable family members. For many, such fears were not expressed openly as staff members saw it as their professional duty to do what they could to provide care for those who so desperately needed it. My perception is that these anxieties were lessened by the time of the second peak as there was less concern about access to PPE; more was known about how the disease was transmitted; and it was felt that vaccination (and for some, prior infection) afforded protection from the disease. We recognise the bravery and devotion to patient care shown by thousands of staff members at a time of personal danger.

Covid-19 vaccination as a condition of deployment

57. The proposed vaccination as a condition of deployment (VCOD) regulations had a negative impact on some staff at a time when the goodwill of staff was most needed. Essentially, staff who were unwilling through personal choice to be vaccinated felt that they may lose their employment. The conflicting priorities for hospital management, between supporting our diverse workforce and increasing vaccine uptake, were handled as sensitively as possible; but there was significant discontent experienced by some at the prospect of such a policy.
58. As of 27 June 2022, the vaccine uptake position for the RLH workforce was as follows: 89% of staff had taken the first dose; 86% had taken the second dose; and 66% had taken the booster dose. We do not have definitive data on the number of staff who may left their role if a VCOD policy had been introduced.

59. The Trust made significant efforts to maximise the voluntary uptake of the vaccine to support the protection and safety for all staff. Around January 2022, a local Trust Policy was being formulated in relation to this, but we had concerns about any move which would imply coercion to be vaccinated, there being considerable vaccine hesitancy in some groups of staff. A working group was established to identify the impact of VCOD on workforce capacity, but when the government reversed the regulation in March 2022, this work ceased and our approach to staff vaccination remained one of sharing information and encouraging those who were eligible to put themselves forward for vaccination. As a result, we were unable to definitively assess the impact of the regulation on staff capacity.
60. The impact of a compulsory vaccination policy on staff morale and relations could have been significant and long-lasting. This is partly related to the significant levels of ethnic diversity at the Hospital. Around 58% of the workforce at RLH is from a Black, Asian or minority ethnic background and there were strong differences in vaccination uptake for different ethnic groups. The legacy impact on the historic testing of vaccines on African communities, and disproportionate impact of Covid-19 on Black and minority ethnic communities all contributed to a high-level vaccine-hesitancy for the Trust. Vaccination uptake was lowest for colleagues of African and Caribbean origin.
61. Following the government's withdrawal of a VCOD policy for healthcare workers, the Trust's local VCOD policy was not implemented. Staff members were not prevented from working if they were not compliant with the rules; however, the programme to increase vaccination uptake and individual conversations with staff that were not compliant continued as an ongoing process to explore individual options and implications.

Capacity in the Intensive Care Unit

62. The national discharge policy published on 17 March 2020 did not appear to have the initial impact that may have been expected. This is in part due to the discharge teams and hospital staff being unsure how systems were going to work to support the changes. It took a number of weeks to embed and put the necessary systems and processes in place. The hospital worked in collaboration with our community partners, East London NHS Foundation Trust, to develop an integrated discharge hub and this took a number of weeks to become fully functional.
63. We did see an increase in discharges and bed occupancy mainly because patients were themselves pushing for earlier discharge and, on some occasions, electing to self-discharge. By

19 March 2020 all elective activity was stopped unless clinically urgent e.g. trauma and other emergency surgery. Bed occupancy therefore dropped from 90% on 17 March to 80% for general acute beds by the end of March. On 17 March 2020 the maximum critical care bed availability was 44 beds, with 42 beds in use; thereby equating to 95% bed occupancy. Action was taken to expand Critical Care by opening up the Recovery unit as a surge area and placing additional beds in the critical care bays. By 31 March 2020, the maximum critical care bed capacity was 73 beds, with 54 of them in use; thereby equating to 74% bed occupancy.

64. The discharge policy did not have any direct impact on occupancy in critical care as the demand for this unit continued to rise. It is instructive to note that on 17 March 2020, Covid positive patients occupied 8 critical care beds. This figure increased to 48 beds occupied by Covid patients by 31 March 2020.
65. With respect to Paediatrics, as the pandemic progressed and our partner hospital at Newham showed significant signs of challenges in dealing with adult Covid-19 demand, the decision was made to suspend Paediatric in-patient care at this other site and aggregate the service at the RLH. This was to allow the available facilities and staff at the hospital to focus on dealing with adult Covid-19 demands. The decision to suspend inpatient paediatric services at Newham hospital was taken at the height of the 2nd wave. The hospital's paediatric ward, Rainbow, was closed to paediatrics in-patients on 26 December 2020 and reopened on 15 February 2021. During this period all paediatric in-patient care was managed at RLH, including any paediatric in-patient psychiatric treatment.
66. Psychiatric care for Trust patients is provided by the following organisations independent of the Trust: Child and Adolescent Mental Health Services (CAMHS), East London Foundation Trust (ELFT), and North East London Foundation Trust (NELFT). However, children presenting to hospital with a mental health component to their illness will often require medical/surgical interventions, along with those patients who present solely with mental health needs and admitted from the Emergency Department. There are also situations where there is a shortage of inpatient mental health beds in the community, resulting in children staying in hospital until a bed becomes available in the mental health setting.
67. It is my understanding that there was a record number of Children and Young People's Mental Health (CYPMH) presentations at Newham hospital in January 2021; however, we have not been able to identify any significant impact of the suspension of inpatient paediatric care on the

patients. It would be fair to surmise that a potential impact on patients and their family would be the issue of proximity for patients who could not gain admission to their local hospital.

68. There was no early indication of what critical care bed capacity would be required until March 2020 when there was an initial directive to at least double the hospital's critical care capacity. Our critical care team developed local plans which included increasing the bed base within our current critical care footprint; that is, putting 6 patients in 4-bedded bays.
69. One of our theatre recovery areas was converted to a critical care unit for non-Covid-19 patients. Following this, the paediatric ICU (PICU) and the paediatric recovery areas were repurposed to expand the adult Covid-19 critical care capacity. The renal high dependency unit was the final area that we converted for Covid-19 critical care patients.
70. During the peak of the first wave, we were commissioned to refurbish 2 unused floors (6 wards with a total capacity of 176 critical care beds) of the RLH. After a 6-week development process, the Queen Elizabeth Unit was opened with the first patients admitted on 5 May 2020. Over the next 2 weeks, most of the Covid-19 positive patients were moved to this new unit at the end of the first peak in the pandemic. These wards were opened in sequence, as required, although the main challenge was maintaining an acceptable level of safe staffing. This was because over half of those working there were redeployed from elsewhere within Barts Health and most had little or no previous critical care experience.
71. In total, over the various waves of the pandemic period, we increased our critical care bed base from 44 adult bed base to a total potential capacity of 220 beds (including 176 in the new Queen Elizabeth Unit). We peaked at 156 patients in critical care beds in January 2021 at the RLH. It should be noted that the main reason the remaining beds could not be opened was that, even with robust internal Trust plans to support and redeploy staff, the offer of staff from across London did not transpire as all other critical care units also experienced a huge increase in demand.
72. During the peak we had a maximum of 136 patients on ventilators when our usual capacity would be a maximum of up to 22 patients. However, at no point was admission to critical care, for patients for whom it was felt to be the most appropriate clinical decision, restricted due to lack of critical care resources. We managed patients who required non-invasive ventilation (NIV) outside of the critical care areas.

73. A pan London Critical Care Network was established and this group co-ordinated the distribution of additional vital equipment, including ventilators, to those hospitals with the greatest need. Given the remit and development of the Queen Elizabeth unit to provide London-wide support, the hospital was prioritised for the allocation of ventilators. However, many different models of ventilators were supplied, which increased the demands on staff who needed to familiarise themselves with the new equipment.
74. There was a high incidence of renal failure associated with Covid-19 and we had a significant number of patients requiring continuous renal replacement therapy. This added an increased demand for specialised 'filter' machines, and, on occasion, we were left with no option but to rotate the machines every 12 hours - which is not standard practice. In normal times, the hospital would have up to 5 patients in critical care requiring renal replacement therapy; however, during the peak periods, this increased to 36 patients at one time. Staff were redeployed from other departments at RLH to provide support. Also, staff were moved from critical care units at other Barts Health hospitals to support the bed expansion at RLH.
75. The additional 2 floors (6 wards) were commissioned both to provide additional capacity for RLH patients but also for patients across the North East network and beyond. The RLH opened critical care beds as staff numbers permitted, which required the diluting of critical care nurses by increasing the ratio of patients to critical care nurse. Staff were redeployed from other departments or moved from other sites to facilitate this, and a number of additional supportive roles were developed. Staff were also deployed from the Army and St John Ambulance. Also brought in as "medical support workers" were medical students, student nurses and doctors from abroad.
76. With a facility for 176 beds having been developed, we never reached full physical capacity. However, as set out elsewhere in my statement, it was significantly challenging to ensure safe staffing with appropriate equipment and consumables. Each additional increment of bed capacity required stringent planning and implementation. The site did have 156 beds opened at the peak of the pandemic, but the remaining beds were not opened. The subsequent reduction in demand meant that we never needed to go any further than this. In essence, we had the ability to open more beds if we could staff them; however, there were daily challenges to ensure we had enough staff rostered to cover the occupied beds, let alone open more staffed beds. A pressure levels capacity plan was developed with escalated actions as the hospital, and the Trust, moved from 'rising pressure' through to 'very high pressure' status.

77. Bed pressure levels are determined by the number of hospital beds occupied in relation to the number of available beds. Action must be taken when hospital bed-occupancy is higher than the recommended level, or when there is a risk that it would be. Levels are considered to be at Rising Pressure when bed occupancy is at 80% of the available beds; at Medium Pressure when it is at 85%; at High Pressure when it is at 90%; and at Very High Pressure when bed occupancy is at 95% and above.
78. Exhibit **AC/01b** **[INQ000471167]** are a pair of graphs showing Critical Care and General and Acute (G&A) bed occupancy during the pandemic, set against pressure levels. The following narrative will focus on pressure levels in Critical Care on some dates during the peak periods of the first two waves.
- On 2 March 2020, with 44 available beds and 95.5% bed occupancy, Critical Care was at 'Very High Pressure' status.
 - By 29 March 2020, with an increase in bed capacity, the unit was at 84.1% occupancy and at 'Rising Pressure' status.
 - On 13 April 2020, bed occupancy was 92.1% and at 'High Pressure' status.
 - By 25 April 2020, bed occupancy was at 79.3% and, for the most part, remained under 'High Pressure' status until mid-July 2020.
 - Between July and October 2020, with under 50 available beds in Critical Care, bed occupancy was predominantly in 'High' and 'Very High Pressure' status.
 - By 24 December 2020, with an increase in bed capacity/availability, there was 98.2% occupancy and the unit remained in 'Very High Pressure' status for much of the time until late in January 2021.
 - In February and March 2021, with the unit maintaining an increased bed capacity and barring a few intermittent spikes, the pressure levels remained within 'Rising, Medium and High'.
79. Ahead of the 2nd wave, and in anticipation of a 3rd wave, escalation actions were developed and described across clinical services to respond to each step up in demand; defined in relation to both critical care bed capacity and general acute beds. I hereby exhibit 'Surge' plans for the second and third waves as **AC/01c** **[INQ000471162]** and **AC/01d** **[INQ000471168]**.
80. The critical care team regularly raised concerns about the ability of staff to safely run the number of beds needed to meet the demand for critical care and open beds in the new facility. There was a massive redeployment of nursing staff who were given rapid enhanced training in intensive care

and worked alongside the trained staff to expand the bed capacity as quickly as was feasible. This led to a major dilution of trained staff (traditionally 1:1 nurse patient ratio to 1:4 ratio and at peak 1:5 critical care nurse to patient ratio) and put significant additional pressure on the trained staff.

81. The same challenge was faced by the medical staff (trainees and consultants) who worked alongside redeployed staff with varying levels of experience in critical care. Each consultant in Intensive Care looked after 30 patients at a time as opposed to an average of 10 patients during normal times, and they were assisted by non-critical care doctors from all specialties including anaesthetists, surgeons and physicians who worked in both trainee and consultant roles. Additional roles were created to support critical care staff including 'turning teams' for putting patients in the prone position, which requires 8 people per turn.
82. There was constant pressure to open more beds as the demand rose across London and this had to be balanced daily against the staff numbers and ratios of trained to untrained staff. There were virtual meetings across Barts Health and NEL three times a day so that patients and resources were moved across the region to provide the safest solution. There were regular reviews of resources including PPE, and many patients were managed at the ward level where additional therapies were offered which would normally be undertaken in critical care.
83. The RLH transferred a small number of patients to other critical care units when there was insufficient capacity to deal with the demand internally. 20 patients were transferred out for specialist treatment ECMO (Extra Corporeal Membrane Oxygenation) which is not provided at the hospital. However, because of the rapid expansion in the critical care capacity in the Royal London bed base including the new enlarged unit we were a net importer of critical care patients over the various waves of the pandemic. Over 309 patients were transferred into the RLH for Covid-19 critical care. In total we treated 650 patients at the Royal London hospital which was just under 2% of those admitted to critical nationally. 55% of these were admitted from other hospitals.
84. Large scale redeployment of staff from across the RLH site and other hospitals in Barts Health was necessary in order to staff the increasing numbers of critical care beds on the site, as described earlier in my statement.
85. Before COVID-19 the hospital was part of the North London Critical Care Network. During COVID-19 the NEL Critical Care Cell was established which then became the North East London Operational Delivery Network.

86. The data period in the table below is from 14 April 2020 to 30 June 2022 as the network does not have a record of transfers that took place prior to this time. There was a total of 309 critical care transfers to the Royal London Hospital in this period. The table below provides a breakdown of the transfer types that took place. 296 of these transfers were from hospitals within our network, and 13 were from other networks.

Transfer type	Originating network		Grand Total
	North East London	Other network	
Royal London	296	13	309
Decompression	118	4	122
Other	42		42
Repatriation	18	1	19
Retrieval	72	8	80
Not recorded	46		46
Grand Total	296	13	309

87. There was a total of 159 critical care transfers from the Royal London Hospital in this period. The table below provides a breakdown of the transfer types that took place. 120 of these transfers were to hospitals within our network, and 39 were to other networks.

Transfer type	Receiving network		Grand total
	North East London	Other network	
Royal London	120	39	159
Decompression	5	5	10
Other	24	6	30
Repatriation	33	19	52
Retrieval	36	7	43

Not recorded	22	2	24
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Equipment and Consumables in the Intensive Care Unit

88. Like most other hospitals across the nation, we experienced unprecedented demands for mechanical ventilators, respirators, and continuous positive airway pressure (CPAP) breathing support machines. The procurement of CPAP machines and ventilators was undertaken at a Trust level, in accordance with the national mandate, to allocate equipment according to need. Renal replacement therapy machines were acquired via the NHS supply chain (NHSSC.)
89. Wave 1 was a challenge. As a result of the domestic and global demand for these devices, and supply-chain constraints, manufacturer lead times were lengthy; going from 2 weeks (pre-pandemic) to 3 months (during the pandemic) for mechanical ventilators. The NHS Supply Chain was unable to provide the required quantity of mechanical ventilators to the hospital during wave 1 (March - April 2020); therefore, there was a real risk that we would struggle to provide intense respiratory support for all of our patients. Ventilators were allocated from NHSE London. In the beginning of the pandemic, in recognition of shortages, clinical subject matters experts converted anaesthetic machines into mechanical ventilators as a temporary solution to support patient care. Senior clinicians did not feel the use of anaesthetic machines for this purpose was optimal but in the face of no alternative, did their best to make this as safe and effective as possible.
90. Prior to an upgrade completed in June 2022, the oxygen flow rate capacity of the Vacuum Insulated Evaporator (VIE) at RLH was 6000 litres per minute. This device is a storage vessel for bulk medical oxygen supply. In January 2021, there was an increase in the demand for high flow oxygen which exceeded the capacity of the VIE to deliver 6000 litres per minute – which was its limit. Therefore, there was a limit to the volume of high flow oxygen which could be delivered into the hospital. A significant causal factor in the high increase in demand was the commissioning of 176 new critical care bed spaces on the 14th & 15th floor of the hospital during the first wave.
91. The oxygen usage for RLH exceeded the theoretical recommended maximum in the period of January 2021, during the second wave. In the short-term, it was not possible to increase the capacity of the VIE to deliver more than 6000 litres without an upgrade. A longer-term solution, by way of an upgrade, was commissioned for sign off at the regional level with NEL. As an immediate response to the issue, the hospital managed the situation by daily monitoring of oxygen usage; this was led by the Trust's Estates professionals who reported to the Medical Director. We

also relied on the back-up cylinders held in storage. As a result all patients received the prescribed dose of oxygen at all times. In June 2022 the hospital's VIE plant was upgraded to deliver 8000 litres per minute.

92. In the first wave, we were not aware of the impact of Covid-19 and no one could predict the demand for renal replacement machines that would be required; it was only as time went on that we recognised this. Before the second wave, specifically in October 2020, the hospital required 8 additional renal replacement therapy machines to accommodate the significant increase in Covid-19 patients requiring this type of treatment.
93. There was a high incidence of renal failure associated with Covid-19 and therefore a significant number of patients requiring continuous renal replacement therapy. This added to the demand for specialised “filter” machines and, on occasions, we were left with no option but to rotate the machines every 12 hours which is not standard practice. Normally, we would have up to 5 patients on critical care requiring renal replacement therapy but during the peak, this increased to 36 patients at one time.
94. All required medical equipment was delivered after the first wave of the pandemic and installed prior to wave 2 in late 2020, thereby placing the Trust in a position of strength ahead of the wave.
95. Touching on the matter of medications, the unprecedented influx of severely ill patients, who required critical medications, resulted in a significant surge in the demand for these drugs. This, in turn, resulted in shortages in certain medications across the Trust from March 2020 to June 2022. There were issues with the procurement of key critical medicines, with demand exceeding supply. There was also an unparalleled demand for ready-to-administer injectable critical medicines, leading to shortages.
96. The table below outlines some of the key medication classes, and the actual drugs, affected by the shortages.

Medication Class	Examples
Neuromuscular Blocking Agents Injection	Atracurium 500mg in 50ml, Rocuronium 500mg in 50ml
Sedative/Anaesthetic	Propofol 1%, Midazolam 50mg in 50ml, Fentanyl Injections [All Strengths], Alfentanil Injections [All Strengths]

Other Treatment	Lorazepam Injection 4mg/ml
Palliative Care Treatments	Midazolam 10mg/2ml Injections, Haloperidol 5mg/ml Injection, Glycopyrronium 200 mcg per 1 ml
Renal Replacement Therapy	Renal replacement Fluids
COVID-19 Therapies	Tocilizumab Injection [All strengths] Remdesivir Injection [All strengths]

97. The Trust made significant efforts to address this issue head-on by adapting and adopting key initiatives to mitigate the impact of these medicine shortages on clinical outcomes. Some of the measures taken are as follows:

- a. Alternative therapy choices: It was necessary to consider the use of alternative treatment options to help ease the pressure on some of the first-line medication like sedative/ anaesthetic agents, neuromuscular blocking agents, etc. To ensure equity of access, a Trust COVID drug panel was established to support the safe use of key critical medicines enabling parity of access.
- b. Increase in Pharmacy staff: The size of the Trust's Pharmacy procurement department was increased to manage the high demand for medicines and to assist in finding alternative supplies during shortages.
- c. Enhanced stock control management systems: To ensure maximum efficiency in the use of all procured stock, the Pharmacy department implemented stringent stock control measures with daily physical stock counts of critical medicines. This supported the distribution of medications across the Trust.
- d. Implementation of Model 3.10: The high patient numbers and the shortage of ready-to-administer (RTA) injectable critical medicines identified a safety issue. In the absence of RTA medicine, the nurses would normally manually prepare injections; however, they were overwhelmed by the demands at the time, coupled with the challenges of operating in PPE and the reduction in the critical care workforce composition. To address this safety issue, a novel solution called 'Model 3.10' was implemented at the Trust in collaboration with key colleagues from the NHS Specialist Pharmacy Service. The framework provided an alternative, safe mechanism to prepare small batches of RTA medicines, which helped reduce the error risk (e.g. mis-selection risk) caused by the shortages. This ensured the safe delivery of care for our patients while also minimising the wastage of critical medicines.

98. The actions taken to address the issues raised by medicine shortages were Trust-led but supported by regional and national guidance, including guidance by the Royal College of Anaesthetists, NHSE, NICE and the Specialist Pharmacy Service. Guidance from all of these bodies was essential in steering local practice during the pandemic.
99. All non-urgent elective activity ceased on the Royal London site on 19 March 2020. All cancer services moved to either University College London Hospitals or private healthcare providers. We did not need to support the movement of cancer activity to other sites with staffing other than the operating consultant and some anaesthetic consultants. All of our theatre staff were part of the redeployment plans to increase critical care capacity so could not be redeployed elsewhere outside of the Trust. The hospital has 18 adult theatres in total. For the majority of both waves, we closed 14 adult theatres, and, on some occasions, there were as many as 16 theatres closed with 2 of the 3 children's theatres closed. However, the emergency and urgent theatre capacity remained.
100. In response to the NHS England commissioning capacity in the independent sector, Barts Health and the wider North East London network effectively utilised the availability within the independent sector to ensure that patients requiring elective care were provided with time-critical treatment across a range of specialties wherever we could. However, we had stopped almost all outpatient and dental hospital activity by 1 April 2020 and only maintained face to face activity for urgent or cancer pathway patients. All staff that were released from outpatient activity were part of the hospital's redeployment plan to increase critical care capacity or support gaps in the workforce in other critical parts of the hospital. The Dental hospital, in particular, suffered significant loss of activity and this was further compounded when we began the recovery phase because of the stringent infection control required for this service.
101. I have addressed earlier in my statement the procurement process for medical equipment.

Guidance on Infection Prevention and Control (IPC)

102. In order to robustly respond to the Inquiry's request for information on Infection prevention and control (IPC), I have sought and relied upon input from the Trust's Clinical Director of Infection Prevention & Control.

103. The hospital and the Trust were acutely aware of the risk of a significant proportion of the respective leadership teams being off sick with Covid-19 simultaneously. Whilst we acknowledged the importance of visible leadership, this was carefully balanced with the requirement to ensure continuity of service. Most meetings were held virtually and larger gatherings were cancelled.
104. The hospital followed all escalations of national guidance on IPC. In response to NHSE Infection Prevention and Control Board Assurance Framework (IPC BAF), the Trust completed a self-assessment - exhibited as **AC/02 [INQ000417104]**.
105. Where IPC practices were stepped down nationally, the hospital sometimes adopted a more gradual response so that a higher level of protection was kept in place for our staff and patients. For example, early in the pandemic, national guidance did not necessitate negative tests before discharging patients to care homes; however, there were times when care homes refused to receive their residents from the hospital until a negative test was confirmed. In this scenario, we had no choice but to maintain more stringent processes than required by national guidelines.

Disseminating and Implementing IPC Guidance

106. There was a central Covid-19 infection control working group in the Trust which discussed and agreed amendments to the IPC processes as national updated guidance was received. Any guidance that required immediate implementation was actioned, and this was formally ratified at the next Covid-19 working group. The group membership comprised clinical leaders from all the hospitals in the Trust and a small group of specialists with expertise in the relevant areas including the communications team. The group initially met 3 times a week and when appropriate, stepped down to 2 times per week and then once a week.).
107. Updated guidelines were rapidly signed off by this group and swiftly disseminated via email to an agreed list of staff including the Senior Leadership teams, Divisional leadership teams and Department leads. Updated guidance was promptly published on the Trust intranet, disseminated verbally at the daily huddles and sent via email to our staff. The IPC teams cascaded changes to ward / department leads / managers at the safety huddles who then discussed these updates at their ward briefings. To support the ward staff, the IPC Team performed daily walk rounds, providing feedback and guidance on the correct use of PPE, ensuring staff had a good understanding of implementing the guidance.

108. We introduced an immediate response cascade via hospital safety huddles and via managers across the hospital who disseminated information and easy to use steps which were shared using Standard Operating Procedures (SOP).
109. We took practical steps to implement IPC measures for the protection of patients and staff. An example is with the setup of decontamination stations to hand-sanitise and change face masks at all entry points to the hospital and the wards. Another example would be with respect to IPC measures on transporting patients, the hospital provides its own in-house transport service for patients who require the service. To minimise the risk of infection, we implemented several safety measures alongside the appropriate and proportionate use of PPE. The interiors of all vehicles were cleaned and decontaminated after each journey; and then deep-cleaned daily. As a further safety measure for staff, vehicles were fitted with temporary bulkheads, allowing for the physical separation of patients and driver during a journey.
110. Early on, the hospital recognised the challenge of ensuring the effective communication of key messages to staff who work across a 24/7 rota, and that digital communication of the sometimes rapidly changing guidance may not reach all staff. It was recognised that busy patient-facing clinical staff may not always have the capacity to log on to a computer or access their emails and may rely on managers and team leaders to brief them on important updates. The hospital's team managers ensured consistent messages and briefings were shared with colleagues on the wards who were working at different times, and that those staff were also given the opportunity to ask questions and escalate issues.
111. There were occasions where media channels announced changes in guidance ahead of the guidance being provided by the Department of Health and Social Care (DHSC). This caused confusion and uncertainty for our staff.
112. There were instances where national IPC guidance was issued late on Friday afternoons, often after 5pm. The hospital would have received notice that changes were coming but would have little awareness of what the changes were. There was a sense of anxiety about the unknown changes and this was often experienced by all staff groups across the hospital. This was challenging in terms of dissemination, given the often-reduced workforce going into the weekend.
113. Whenever this happened, the information was reviewed upon receipt and any urgent changes to hospital guidance agreed by core members of the team. Staff would then work out of hours and over the weekend to push the guidance forward. Where an immediate response to a change in

practice was viewed as critical, the IPC Team produced easy to understand SOPs which were then urgently distributed to staff. Changes were then disseminated as set out above with an emphasis on ensuring that key staff would receive updates in advance of the weekend. This was particularly important in the Emergency Department.

114. The exhibited "*Harvesting the Learning from Covid*" review, found that the daily operational huddles worked well. It also found that communications did not always reach all staff members and were not delivered quickly enough to all staff right through the organisation; with some staff reporting unclear communication on procedures and processes including a lack of version control. It was recognised that the need for speed initially hindered optimal communication.
115. In recognition of the findings of this review, and ahead of the second wave, we worked to ensure that all staff were reached through a range of tools both in person and remotely, we ensured consistent information was disseminated to all staff groups at the same time, and we refined and streamlined the number of communication tools available for staff.
116. An initial rapid increase of patients meant that any IPC implementation measures were reactive. However, as the time went on, difficulties were identified and addressed as part of the hospital's daily operations.
117. As the COVID-19 pandemic unfolded, guidance frequently emerged from DHSC. Although the guidance was welcomed, it was not always clear. There were occasions when there were gaps in the guidance emerging from PHE and these gaps were highlighted in guidance issued by the professional bodies. An example is when guidance on *Nasal endoscopy and laryngoscopy examination of ENT patients* (see Exhibit AC/02a [INQ000471163]) was issued by the Royal College of Surgeons. The professional guidance stated that "*Everybody performing ENT endoscopy knows this can cause droplet spread and aerosol generation due to sneezing and coughing despite Public Health England (PHE) not listing flexible or rigid endoscopy as an Aerosol Generating Procedure (AGP)*". We have not been able to ascertain whether PHE sought to align itself to, or comment on the guidance issued by the professional body. These considerations are relevant because the discrepancies caused confusion and resulted in staff mistrust in the guidance.
118. Additionally, the abundance of COVID-19-specific guidance threatened to overload and confuse staff. An example is in the release of multiple versions of guidance produced by PHE, on the Government website, during the course of April 2020. In one such situation, there were two

different versions of advice to home care services. One version did not touch on PPE requirements for staff visiting patients in their own homes, while the other which was published a few weeks later stated the need to wear masks and other protective clothes; this, again, caused confusion.

119. A specific challenge was the issue of FFP3 respirators with out-of-date 'use by/expiration' dates, received via the NHSE national PPE supply route. These were delivered to many Trusts without an explanation of why they had two or more recent stickers over the original expiry date (of 2012); or assurance that the protective equipment had been tested and were safe to use. This caused staff to lose confidence. The hospital's Clinical Director for Infection Prevention & Control had urgent discussions with NHSE to obtain reassurance that the products were safe to use; and communication from NHSE was disseminated to staff to allay fears.

Exhibit **AC/03 [INQ000417105]** is an incident report submitted by a member of Trust staff on 3 May 2020 evidencing the distress, fear and mistrust experienced by the individual. I also exhibit correspondence from the Trust's IPC lead on 4 May 2020, providing assurance that the out-of-date PPE is safe to use - **AC/04 [INQ000417102]**.

Exhibits **AC/04a [INQ000471164]** and **AC/04b [INQ000471165]** are respective communications from Public Health England and NHS England/Improvement touching on the shelf life of PPE items and their being safe to use having passed stringent tests.

120. We experienced issues with the make and model of FFP3 respirators delivered. These changed frequently (until the UK respirators were available) and staff had to be fit tested on each respirator using the limited stock available; this was very time-consuming at a time where resources and capacity was limited. At the beginning of the pandemic, the FFP testing kit chemicals were in short supply. Given that Fit Testing is a statutory requirement for the use of an FFP3 mask, as a Trust, we took the decision to contract Sunbelt Rentals – our Fit Testing partner (an accredited Fit2Fit provider) to operate our testing service. Our IPC Guidance in relation to fit testing is in line with the requirements of DHSC and the Health and Safety Executive (HSE) which stipulates that staff are required to be re-tested every 2 years, or if you change the make / model of the mask used. This approach ensured both on-going personal protection and resilience for the organisation but was challenging and delayed roll out of the FFP3 respirators.
121. Fit testing was a problem during wave 1 of the pandemic. A large number of staff who, during the pandemic, needed to use FFP3 masks had not had a Fit test in the preceding 2 years. We did

not have the equipment to institute scaled up fit testing and could not obtain it. We therefore took the decision that it was necessary for some staff to work in FFP3 masks despite not having an up-to-date Fit test. We mitigated this by providing comprehensive training in the donning and doffing of PPE. The inability to provide Fit testing was escalated to the regional team, as this went against regional and national guidance - which at that time was not deliverable in our circumstances.

122. In the early stages (March and April 2020) national and regional guidance tended to lag behind practice on the ground. This was the case on rules around mask wearing. The use of FFP3 masks in all wards with Covid-19 patients was an example. Many of our staff felt that FFP3 masks were needed for safety when this was not yet under national guidance. In reality, there were concerns that allowing access to FFP3 masks outside of national guidance provisions would result in running out of supply. We tried to navigate this by not stopping the use of the masks even if it was over and above national and local guidelines at the time, as we recognised that confidence in their own personal safety was essential for staff.
123. At the onset of the pandemic, a specific committee was tasked with pathway management and hospital flow. Initially, it was straightforward to manage as the majority of patients at the hospital were Covid-19-infected. To prevent the risk of spread, the emergency department (ED) was redesigned from an open plan assessment area to isolated cubicles. The hospital was a designated receiver of Covid-19 patients; therefore, we had to increase the number of rooms with negative pressure. This was a significant challenge as a full redesign of the department was needed at the same time as managing Covid-19 patients.
124. During the early days of the 2nd wave, segregation was harder because lockdown had been lifted and we were beginning to see a similar level of activity as prior to the pandemic; particularly given that elective recovery had commenced. Challenges were experienced in relation to waiting for testing results, but we had the advantage of having a good capacity for side rooms, to reduce the risk of spread, whilst waiting for a pathway decision.
125. It was, at times, difficult to separate Covid-19 and non-Covid-19 patients with a view to minimising the spread of infection. The hospital design and layout made the setting up of patient care pathways complicated as the hospital had key specialties which cared for Covid-19 and non-Covid-19 patients respectively. Staffing the two areas and following the national IPC guidance required clear guidance for staff; some of whom were required to move between areas.

126. The hospital comprises of 3 towers with many entrances. To align with national guidance, we created different pathways into the hospital for patients, and the allocation of specific lifts dependent on the pathway. This was especially difficult during the first two waves but, where time was available, a more planned approach was put in place which included a specific door management team which checked staff and patients entering the hospital and provided directional advice.
127. Individual requirements for patient isolation were managed on a case-by-case basis with advice from the IPC team, site managers and the on-call microbiologist. Cohorts and side rooms were utilised to safely manage the isolation requirements of patients. The RLH has a good provision of side rooms. We have additional side rooms in women and paediatrics sections, but these were used for their own service.
128. The RLH is a recent build; therefore, the bed spacing in self-contained bays and the ventilation of the wards supported good IPC. We did experience a challenge when we built and commissioned the Queen Elizabeth Unit as the hospital struggled to get the correct air changes for a critical care area. It was recognised that the ventilation was below the recommended requirements but, given the requirement to expand the critical care Covid-19 capacity, this was felt by the clinical and project delivery team to be an acceptable risk. Staff health became a high priority within this clinical area. All members of staff working within the unit had enhanced PPE on at all times, and it was ensured that they had regular downtime, access to refreshments and the breakout areas, and additional breaks to access drinks for hydration.
129. The hospital's restart strategy for elective surgery and outpatients was established to help keep patients and staff safe during the continuing Covid-19 pandemic. This included making changes to the services and focusing resources on the right way to manage both our Covid-19 and non-Covid-19 patient pathways. Each service had completed a restart framework which was tested by the Group executives and relevant lead clinicians for each pathway prior to sign-off.
130. As part of the hospital's restart strategy for elective surgery, zones were created as follows:
- The green Zone: In line with NHSE guidance a 14-day isolation period and testing was required before routine elective surgery. A screening pathway was established for staff caring for these patients and this was updated as the guidance changed. We set up testing hubs to support this process.

- The Amber Zone: These were patients with an unknown level of risk, they were often non-elective but urgent. They would be tested on arrival and kept separate from other patients until the test results became available. In line with Trust policy, weekly testing was undertaken on all inpatients.
- The Blue Zone: These patients were known COVID-19 positive and were kept separate from other patients. They had separate staff caring for them.

131. As part of the restart of services, guidance as part of Trust policy was produced which each hospital had to follow. Each service completed an assurance framework which was tested in a restart oversight meeting with the hospital and Group executives and specialist advisors. Pathways were walked through by the hospital IPC leads.

Covid-19 testing as an IPC measure

132. The hospital introduced PCR and lateral flow Covid-19 testing for asymptomatic staff and patients in November 2020, in accordance with national guidelines.

133. The hospital first started testing symptomatic patients for Covid-19 in February 2020. During the first wave, there were shortages of test kits, reagents and other testing supplies but these pressures eased as time went on.

134. During the early days of the pandemic, the clinical suspicion of COVID-19 for symptomatic patients was informative enough to diagnose COVID-19; therefore delays of test results being available to clinical teams was not a significant issue. The main issue that led to significant transmission was due to the novelty of the disease, a lack of understanding of the virus itself and its routes of transmission, and a lack of understanding about the risks of asymptomatic carriage. Early on in the pandemic, there were delays in receiving test results due to the tests being undertaken externally at Public Health England (PHE). The PHE assay tests used during the early stage of the pandemic, between February and March 2020, were understood to have a high false negative rate which may have caused misdiagnosis and may have led to potential for transmission; however, there is no definitive data to support this. National guidance was always followed by the Trust.

135. As testing became available, front-line staff working in the Emergency Department, the critical care, and the COVID-19 wards were prioritised for testing. Immunocompromised patients were also prioritized. The frequency of the testing varied significantly amongst groups of patients and

staff and changed over time, in line with the national guidance. The testing for patients and staff were carried out in line with NHS England guidance. Specifically for staff, the guidance was for twice weekly testing to fit with work shift patterns and leave requirements.

Nosocomial outbreaks of Covid-19 infection

136. Where transmission of Covid-19 was identified at the hospital, national guidance was followed in addressing it. In the period under review, we identified 12 patient outbreaks and 6 staff clusters. When an outbreak was declared, the hospital held meetings and reported the outbreak on the national database, to PHE (now known as the UK Health Security Agency) (UKHSA) and to local NHS commissioners. In situations where we identified the presence of staff clusters in clinical areas at the same time as Covid-19-positive patients, review meetings were held and the learning shared between clinical areas. Where there were two or more staff members in an area reporting sickness with Covid-19 symptoms within 14 days of each other, this was followed up by the employee wellbeing service. Calls were made to the staff involved to confirm if they had undergone testing and to confirm the results.
137. During the pandemic there were processes in place to deal with positive results for both patients and staff. For patients, the results were reported by the hospital's Infection Prevention Control team, advice given to clinical areas, the positive case isolated, other patient contacts identified and monitored, and the patient records updated. For staff members, the Employment Wellbeing Service (EWS) informed the staff member and ensured they followed the advice on self-isolation in line with national guidance.
138. When the national track and trace system was implemented, these two processes were reviewed and merged. The identification and reporting of results for staff and patients continued through a daily call where these were risk assessed and discussed. In addition, any result received by government testing was raised and risk assessed. This call was attended by the EWS, the IPC team and the Director of people services. If a member of staff was identified as Covid-19-positive, a risk assessment was sent to the manager to ask for assurance about IPC behaviours and practices. These would include social distancing of staff within clinical areas and the wearing of face masks when this is not possible.
139. Where clusters of patient cases were reported within clinical areas a review was carried out and, if required, an outbreak meeting called. This was documented and the local health protection

team notified and updated. These calls occurred 7 days a week with notes taken and disseminated across the Group. All processes followed the guidance set out by PHE.

PPE Procurement

140. There was significant change to standard practice given severe supply shortages and unprecedented demand during the relevant period. The hospital and Trust established a dedicated PPE sourcing team, put in place due diligence processes to verify the financial stability of suppliers, and ensure clinical approval of product specifications. Innovative measures were implemented to obtain PPE, in particular gowns inside Procedure Packs, and by utilising supplier storage.
141. Mutual aid networks were established nationally and across London. There was close working with NEL peers and proactive involvement with the London Supplies network with daily calls taking place. The preferred supplier, the NHS Supply Chain, was unable to cope with the unprecedented demand. The Trust had to act in accordance with Cabinet Office guidance on Public Contracts Regulations, Reg 32, 2015 (UK) which permitted, under extreme emergency situations of which a pandemic allows, to secure supplies and equipment to protect staff and treat patients in NEL.
142. The Trust sourced privately where required, through external non-NHS suppliers and this required its own processes to ensure the items were safe and effective. We turned down the majority of requests, from private individuals or from newly formed companies, to provide PPE. Instead, we utilised established UK-based suppliers for PPE and RPE that met the guidelines. Direct sourcing from known established private suppliers was necessary prior to the central DHSC supply route being established.
143. Once the national DHSC supply route was established, all requests for PPE & RPE were made via this route on the portal. Only ad hoc or specialist items, which could not be obtained via this route, were sourced directly. There were challenges in the initial period of its establishment as it was unreliable with very limited visibility of what stock was arriving and when it would arrive.
144. Delivery lead times were unpredictable, with no clarity on stock arrival date or time. Essentially, stock was delivered without prior warning or communication and often out of hours. Lead times

could vary from days to weeks depending on item availability. There were many instances of stock not arriving at all and volumes of stock supplied would often be insufficient to meet demand. A dedicated PPE Supply Chain Team had to be established to complete daily stock counts and to inform requests via the DHSC route. With the exception of FFP3 masks, clinical preference was not available via the DHSC route, and, in some cases, quality was compromised.

145. The Emergency Request System was used on a number of occasions and this was more so during the first wave. Emergency requests were made via an online system or via a direct phone call to designated contacts. Any feedback on the fulfilment of an emergency request was provided via telephone calls in most cases. Using the system to request emergency stock was somewhat challenging as it was often ineffective in terms of obtaining urgently required items.
146. The hospital had cause to contend with unsuitable PPE and RPE on a number of occasions. There were issues touching on out-of-date stock (masks) provided which had labels placed over the original expiry dates; there were issues of gowns with unsuitable sizing and issues with products not approved via the Trust's internal IPC Team. There were also a number of safety notices/product recalls subsequent to receipt of the PPE where the hospital was asked to quarantine and discard items which were deemed unsafe or unfit for purpose. All of these presented a risk to supply chain continuity and, ultimately, to patient and staff safety. They would all be reported via the requested routes of communication; be that locally, regionally or nationally. To mitigate this risk, requests for mutual aid or direct sourcing took place.

Fit testing of PPE for healthcare workers

147. Initially, at the beginning of the pandemic we were unable to conduct Fit testing due to lack of reagents and a limited supply of face masks as described earlier in my statement. The first recorded tests for FFP3 masks, by the Trust's Education Academy, were undertaken on 17th March 2020.
148. For those staff who were unable to be tested as a result of wearing a beard for cultural, religious or health reasons, Powered Air Purifying Respirator were issued via the Sunbelt testers who provided support to staff on the use and maintenance of these hoods.
149. During the pandemic several challenges arose:
- a. There were supply chain issues. The supply of disposable masks through the NHS push stock approach was erratic and limited initially in the size of masks available; specifically,

there was a limited availability of large and small masks. Staff would be tested on a specific mask only for the Trust to be told that this mask was no longer being supplied. This necessitated staff having to be re-tested on a different model. Mutual aid was attempted to address supply problems but, in order to mitigate this issue, the Trust invested in re-usable masks for staff, which were not available through the NHS push approach.

- b. Initially when the Trust was rolling out internal testing using qualitative methods, there were significant issues with the Fit testing solution which became difficult to obtain. However, with the transition to an external provider, we moved from qualitative testing to solely using quantitative testing via a Portacount machine which does not require the use of a solution, consequently addressing this supply issue.
- c. There were some issues with the masks irritating the skin of the wearers. Dermatological support was put in place for these staff.
- d. Some concern was raised by a few staff members who wore head scarves, regarding the need to don a mask under the scarf. A review was undertaken to consider whether FFP3 masks worn could be worn over head coverings. The outcome of tests undertaken was that there was a reduction in the fit factor when they were worn over a head scarf. Therefore, FFP3 masks would remain only fitted under head scarves.

The impact of PPE and RPE shortages

- 150. PPE & RPE shortages had a significant impact on staff well-being. Anxiety in relation to safety at work was particularly prevalent for clinical staff delivering care on the front lines in the response to the pandemic. This was also the case for non-clinical staff based at hospital sites and involved with the delivery of PPE & RPE into clinical areas. Many colleagues will count COVID-19 as the most stressful period in which they have worked for the NHS. The pressure on staff was unprecedented, as was the workload; and there was heightened anxiety all round about being able to deliver the PPE & RPE needed for staff and patient safety. Even staff members working remotely and not involved in clinical roles, faced a significant amount of stress during this time.
- 151. Procuring items in high demand was a source of anxiety due to their limited availability. The well-being of on-site staff was a primary concern, and every effort was made to safeguard frontline workers. This period was marked by tough and challenging moments, with one notable instance being the unsettling notification that the hospital was exhausting its supply of body bags for the deceased - though fortunately this never led to the supply fully running out..

152. There were times where we were close to running out of PPE and RPE and would have struggled if the next delivery did not arrive on time. Staff were understandably worried about the supply of PPE and RPE across all levels of seniority. We take pride in the knowledge that the significant efforts we made ensured that the hospital did not run out of any PPE item (or a safe alternative) during Covid-19; and that the safety of our staff was not compromised by this lack. This is testament to the hard work, dedication, and commitment of hospital staff.

Visiting the hospital during the pandemic

153. Prior to the pandemic, the Trust had an operational visiting group that produced guidance to assist the wards to consider when visitors should be allowed. NHS England issued visiting guidance on 16 March 2020; and local visiting guidance was updated in line with these national guidelines.
154. The hospital considered that a compassionate approach was essential, given the importance of close family members being able to visit their sick relatives, and the dying patient being able to spend precious time with their family. This had to be balanced with the need to manage the risk of infection and maintain the safety of the visitors, staff and other patients. Significant efforts were made to ensure continued access for patients and their loved ones, and the visiting group produced guidance on virtual visiting in April 2020 and a further document on the use of devices to facilitate virtual visiting in May 2020.

Please find exhibited document: Standard Operating Procedure on Virtual Visiting – Exhibit **AC/05 [INQ000417106]**.

155. Special provisions were put in place for patients who lacked capacity, patients with dementia, patients with a learning disability, and those patients who require long term care or have suffered a life-changing traumatic brain injury. For this group of patients, one visitor at a time was allowed, with access support provided by hospital volunteers and the Chaplaincy.
156. When the hospital permitted family members to visit patients in hospital, particularly those who were approaching the end of life, the following steps would be taken:
- a. There would be communication with families to guide patients and their loved ones in making the decision whether to visit or stay at home. The use of technology would be encouraged to help maintain contact and safety.
 - b. Visitors would then be permitted, only after a discussion with the ward manager/nurse in charge about the risks and how these were to be mitigated.

c. The length of the visit would be agreed upon by the ward manager/nurse in charge.

157. In applying strict visiting guidance, it was recognised that the number of visitors on the ward at any given time had to be managed to reduce the risk of transmission. Therefore, only a maximum of 1 or 2 visitors were allowed on the ward at a time; and this had to be approved by the ward manager. All visitors were expected to abide by the existing infection prevention and control requirements, including handwashing and wearing the appropriate PPE.
158. In order to minimise contact with other people and meet the requirements for social distancing, visitors were asked to come directly to the ward and not to visit other areas in the Trust; they were not to have any contact with other patients on the ward; and they were asked to travel to the hospital in their own transport where possible. In order to minimise the risk of exposure to others, visitors were asked to bring as few personal belongings as possible with them and to remove their outer coat and roll up their sleeves on arrival to the ward.
159. To facilitate communication with families, there were iPads available on every ward. For patients who did not have English as a first language, we equipped our in-house advocacy department and interpreting team with smart phones which were able to make video conference calls. These phone numbers were circulated to all clinical areas so that interpreters could be contacted directly. The usual pre-booking arrangements, for the interpreting service, remained in place to support family/clinician meetings where necessary.
160. A specific supporting arrangement was set up with the hospital's emergency department (ED) with a process whereby they had a particular Bengali advocate allocated solely to them; this is because Bengali is the top spoken language in the communities around the hospital. This process was successfully piloted at the Emergency Department at the RLH.

The impact of visiting restrictions

161. In the period since the onset of the pandemic, the impact of strict visiting restrictions has been widely publicised. To provide a hospital perspective, I have drawn heavily upon the valuable input and personal experience of the hospital's lead Chaplain, who worked on the wards with clinical staff throughout the pandemic with the Chaplaincy team.
162. As with other areas where hospital Chaplaincy was at the forefront of supporting many patients, the Chaplaincy prayed with and for patients across all the hospitals including the Nightingale

Hospital. The team facilitated video calls with families, sometimes just to see their loved one and to communicate with hand gestures. When there was a patient at the end of life, the hospital Chaplaincy would facilitate prayers with sometimes over 50 people joining. Their contribution at this time cannot be underestimated. If the Inquiry would permit me to submit the personal reflection of the hospital's lead Chaplain as exhibit **AC/06 [INQ000417107]**.

163. For a more objective overview, we undertook a review of a number of complaints and concerns received during the period of March 2020 to March 2021. We identified 141 records of complaints and concerns relating to the visiting restrictions. There were concerns touching on the lack of access to patients on special occasions such as birthdays; and in relation to patients who were unable to contact family without assistance. This is evidence that patients and family members' experiences were negatively affected by the visiting restrictions.
164. At the time, the need to prevent the rising tide of admissions to the hospitals with Covid-19, and to critical care, was of paramount importance - nationally and in our hospital. We had a genuine and well-placed fear that we would run out of equipment and/ or staff and that patients would not be able to access the treatment they needed. We did not know when the numbers would peak and, in the early stages of the pandemic we did not understand as well as we do now, the risks of transmission, and the value of PPE. We did not have the ability to test staff and visitors for Covid-19. Given this, it was felt to be necessary to restrict visiting as much as possible.
165. Set against this, we know from what we have been told by our patients, their loved ones, and by our own staff, how difficult it was when people were suffering and sometimes dying in hospital without the presence of their loved ones. The opportunity to be there at the time of death cannot be replayed, and we all wish such scenarios had never arisen.
166. In hindsight, it would have been ideal to permit some visitors for all patients - albeit tightly controlled and carefully managed. However, had the hospitals been overwhelmed to the point that we could not treat patients, I expect we would now be saying that restrictions could have been even tighter. For the future, with better knowledge of the virus and better experience of infection control and personal protection, and better point of care testing for Covid-19, one would hope that more provision will be possible to enable visitors to see their ill loved ones.

Treatment of conditions other than Covid-19

167. I have drawn upon the input provided by the current Medical Director at the hospital and obtained the insight of a senior Consultant Geriatrician and the Clinical Lead for End-of-Life Care and Frailty, who was present throughout the pandemic.
168. The pandemic impacted on the hospital's ability to deliver clinical services in the usual manner.
- a. The referral pathways for Ischaemic Heart Disease were unchanged. Patients with this condition are managed at St Bartholomew's Hospital (SBH) and treatment continued. SBH does not have an emergency department and it was possible to contain Covid-19 patients more easily than in the other hospitals in the Group. SBH was also able to provide a cardiac surgery service for London as a result of its protected status.
 - b. The treatment of Colorectal cancer, and all cancerous conditions requiring surgical procedures, was maintained throughout by making use of the independent sector. This was managed at Group and Integrated Care System (ICS) level.
 - c. The treatment of Hip replacement surgery is performed at the Barts Health Orthopaedic Centre which is based at Newham Hospital. This clinical pathway was largely suspended during the pandemic because the nursing and Anaesthetic staff were redeployed.
169. In line with national guidance, procedures were categorised into 4 levels or priorities. Priority 1 and 2 operating (Emergency or Urgent procedures) continued in the same manner as pre-pandemic with non-urgent procedures being deferred if relevant staff were required to cover the intensive care units. These decisions were taken at Trust level, depending on the demand for critical care, but the hospital also followed national guidance.
170. The main challenge we faced was in delivering non-inpatient care. These were treatments which required virtual appointments or pre-screening for Covid-19 prior to hospital attendance. One area in which major disruption occurred was in the closure of the audiology service, with the long-term effect of subsequent delays in diagnosis and the supply of hearing aids. Renal dialysis and maternity care continued with regular Covid-19 testing and the use of appropriate PPE.
171. Gynaecology services were curtailed, and the care of many women was put on hold for significant periods of time.
172. The main emergency pathways delivered at the hospital are stroke and trauma. These were preserved by the physical separation and the zoning of the Emergency Department and hospital into Covid-19 and non-Covid-19 areas.

173. Renal dialysis continued at the hospital throughout the entirety of the pandemic.
174. Local innovations were inevitable if we were to continue the delivery of non-Covid-19 care in a safe manner. These included community emergency medicine with an advice line for ambulance crews; 111 referrals coupled with an emergency response car to visit people at home rather than have them attend hospital. There was the implementation of virtual appointments as a significant step to addressing patient waiting lists and maintaining the treatment of non-Covid-19 conditions across all the clinical services. All suspended clinical services were resumed in incremental stages based on risk and priority for care.
175. There was no interruption to Maternity services which continued operating at the normal volume before, during and after the pandemic. We could not cancel services as this would compromise safety, but we had to adapt service delivery in line with the ongoing situation. This was done by introducing remote consultations with patients; limiting but never stopping visiting; and setting up very frequent and regular service meetings to share learning and innovations.
176. The maternal medicine network took the lead on writing national Covid-19 maternal medicine guidelines for the Royal College of Obstetricians and Gynaecologists (RCOG). Local SOPs were written to ensure care was delivered safely from an IPC point of view.
177. As was the case in other clinical service areas, staffing in maternity was heavily compromised during the pandemic. Consultants in particular switched to day/night shift working on the labour ward in order to maintain resilient rotas. Junior doctors and midwives worked extraordinarily hard with no reduction in workload.
178. The hospital drafted pregnancy Covid-19 guidelines and gave direct care to pregnant Covid-19 women all over the hospital. Many pregnant women were very poorly, and one baby was delivered in the Covid-19 critical care; however, I am pleased to report that none died.

Ambulance handover times

179. Ambulance handover times are measured through a description of 30 and 60 minute breaches. I have available to me the ambulance handover data for the relevant period; please see exhibit **AC/07 [INQ000417108]**. This data has been sourced directly from the London Ambulance Service portal; it has not been validated by the hospital or the Trust. This evidences that handover delays were relatively static in the period between March 2020 and November 2020, after which

time there was intermittent small increases in the handover time until around September 2021. There were significant increases in handover time from October 2021, particularly in relation to 30-minute breaches.

180. There were periods of time throughout the pandemic, particularly towards the end, where the evidence shows that there were times of excessive handover / waiting time for ambulance to admit patients to the hospital. Extended handover times for ambulances to offload into a hospital setting are generally the result of pressures within the hospital setting driven by the volume and acuity of admissions. Another causal factor is the rate at which the hospital is able to discharge patients and, given the increase in the number of Covid-19 patients requiring medical attention, this would have had a knock-on effect on discharge timings. There were additional time pressures as it took longer than usual to cohort or group patients into the appropriate zone; the use of PPE also slowed down the handover.
181. In order to mitigate the risk of incurring excessive delays and reduce handover times as much as possible, the hospital's response focused on de-compressing the emergency department as far as we were able. We did this by creating cohorts away from the ED to ensure the department's space was utilised as best as possible, to allow for increased admissions to the department with onward pathways confirmed swiftly.
182. There was greater cohorting upon entry and a general drive to discharge as quickly as possible where appropriate. Clinical teams would go out to the ambulances and triage the waiting patients, to ensure those that required urgent care were prioritised, and to reduce any risk to patient safety.
183. As explained earlier in my statement, the hospital increased its critical care capacity allowing the facility for those requiring critical care to be swiftly moved from the Emergency Department.
184. The hospital worked with the other hospitals in the Trust as well as with those in the NEL system, with Remote Emergency Access Co-ordination Hub (REACH) (a service designed to support the London Ambulance Services in early identification for alternative pathways for patients that would otherwise be admitted into hospital) and with the London Ambulance Service with regular communications. This network, along with the ability to re-direct ambulances was probably the most effective measure the hospital had at its resource on reducing waiting time for patients. Pressures were assessed as a system and ambulances were directed to different hospitals in consideration of capacity. This allowed capacity in Emergency Departments to be shared as effectively as possible.

185. In addressing this issue there were, at times, London-wide conversations convened by the NHS London regional group. There was at least one national call; however, regional and national input was limited as this was a local issue.

Care Escalation and Do not attempt cardiopulmonary resuscitation (DNACPR) notices

186. We made a conscious decision not to ration clinical care for Covid-19 patients at the hospital, and the clinicians in general did not raise concerns around the absence of a national decision-making tool for rationing care. Any escalation of treatment to critical care was made on the basis of the pre-existing clinical criteria for determining the need for admission to the critical care unit. This was an individualised decision based on the patient, their condition, and any relevant co-morbidities. Given that there was no directive to ration care, there was no involvement of the hospital's ethics panel or committee in formulating a policy for the same.
187. There were no changes or differences in the criteria for the admission of patients to intensive care during the pandemic, from pre-pandemic times. In the early days of the pandemic, there was a Trust-wide discussion around the possible use of a clinical frailty score to "triage" (the sorting or allocation of patients according to the urgency of their need for care) patients to critical care beds. However, the Critical Care team continued to rely upon their existing criteria, which was a case-by-case basis for decisions about critical care admissions.
188. There was no change in the criteria for providing oxygen therapy and national guidance on oxygenation levels for patients was followed at all times.
189. The Royal London Hospital opened extra intensive care wards and commissioned a large number of additional critical care beds, to ensure that there was no rationing of care. Decisions about clinical care were made on a case-by-case basis about the most appropriate treatment therapy for the individual patients. These decisions were not influenced by perceived limits to the availability of certain treatments.
190. The Inquiry wishes to understand whether the hospital relied upon the use of Recommended Summary Plan for Emergency Care and Treatment (ReSPECT) forms in determining whether to escalate care. I can confirm that these forms were not used at the hospital and there was no change to the usual way in which the clinical teams responded to DNACPR notices and Advanced Care directives. Therefore, no additional guidance regarding the effect of DNACPR or advance care planning forms on clinical decisions around escalation of care was formulated.

191. Almost all clinical documentation at the Trust is recorded electronically within an electronic care record system (CRS). Therefore, any DNACPR orders would be recorded electronically in the CRS as was the usual practice pre-pandemic.
192. The hospital is aware that REAL, a local advocacy group, had previously touched on a national concern about DNACPR orders for people with a disability and higher rates of deaths in people with a learning disability. However, I am unaware of any local concerns raised in relation to a potential disproportionate issuing of DNACPR notices to patients with protected characteristics.
193. I am not aware of there being any concerns raised in relation to patients arriving at the hospital with DNACPR notices which did not appear to be clinically appropriate. It would be difficult to provide accurate data on the numbers.
194. Clinical guidance on communicating and explaining DNACPR decisions, among other matters, to patients and their families was crucial during this period. Guidance was developed and implemented by the Trust's Palliative Care team. There was guidance on caring for patients at the end of life; this was based on guidance created regionally (by pan London palliative care groups, as well as nationally), and was adapted as required. Additionally, posters providing guidance on how to communicate compassionately with relatives, were put up in staff offices.

I hereby exhibit the following guidance disseminated to staff:

Covid-19 care, immediately before and after death (AC/08 [INQ000417109])

Breaking difficult news over the telephone (AC/09 [INQ000417110])

Communication during Covid - Guidance for staff (AC/10 [INQ000417111])

The unequal impact of Covid measures on certain patients

195. For many of our population English is a second language. We consider that patients with limited English would have been impacted by their wearing of masks, and by staff wearing masks which made speech less clear. There was a reliance on the hospital's advocacy service; however, there were occasions where urgent decisions had to be made and arranging for an advocate in a timely manner was not feasible.
196. The hospital and the Trust serve some of the most diverse and deprived boroughs in London experiencing significant health inequalities. Measures adopted by the hospital to respond to the

pandemic included suspending elective treatment which in turn led to delays in patients receiving treatment and in the worsening of pre-existing health inequalities. Recognising that health inequalities are systemic and that there are avoidable differences between the health of different groups of people, the Trust set up an Equity Workstream. The aim was to identify inequalities in Trust outpatient care and any risks associated with future service changes, particularly the move to remote outpatient care.

197. The Equity Workstream reviewed a proportion of arranged remote renal outpatient appointments from August to October 2020 which identified significant differences by ethnicity and deprivation in the proportion of attended remote renal appointments. This finding suggested that BAME groups, and patients in more deprived areas, were more likely to attend face-to-face appointments than attend virtual appointments. The review paper is exhibited to this statement as **AC/11 [INQ000417112]**.
198. In October 2020, 92 patients were telephoned to ask for reasons for their non-attendance of video outpatient appointments. The analysis identified that a lack of access to the necessary equipment and a lack of knowledge and confidence were both major issues, particularly in the older age groups. Patients with lower e-literacy, less confidence with digital services, poor access to internet/technology, and with English as a second language were identified as those who found accessing video consultations challenging. Other issues noted included technology failures during the call and privacy concerns; these issues may speak to socioeconomic factors with a higher-than-average proportion of our patient population living in multi-generational households with limited personal space.
199. When vaccination became available, and proof of vaccination status was introduced as a measure, we found that it had an impact on members of the community with vaccine hesitancy; albeit, for different reasons. There were those who were reluctant to take the vaccine for cultural reasons or due to belonging to vaccine-hesitant communities, while some were fearful and untrusting of scientific based medicine. Some community groups were concerned that unregistered migrants would miss out on vaccination, presumably for fear of drawing the attention of the authorities. The Trust's engagement department tried to mitigate this issue by supporting refugee organisations and churches to provide vaccination for their contacts; we built upon our existing relationships with local community and faith groups to educate our population about Covid-19 and to promote vaccine take-up. The Nightingale covid vaccination centre, operated by the Trust in the ExCeL centre, was recognised for its work with hard-to-reach groups.

How the pandemic affected healthcare staff

200. The pandemic was very difficult for staff, not just those in the frontlines of delivering care to sick Covid-19 patients, but also for staff who were caring for non-Covid-19 patients. It was a physically, mentally, and emotionally draining period for our staff. We are aware that the lasting psychological impact of the experience of working through COVID-19 resulted in some healthcare workers retiring earlier than they may have previously intended to; or making the decision to leave the NHS.
201. The table below indicates that after 2020, there was a decline in morale at the Trust which is linked in time to the impact of the pandemic. Morale appeared to be high in the initial stages of the pandemic; this is because staff had what we regard as a 'blitz spirit' response when everyone collectively contributed to saving lives. This was at a time when NHS staff were viewed as the country's heroes; public support was high with measures like the weekly applause and other recognition of the sacrifice that staff were making. It was a highly motivating period for staff.
202. However, as the pandemic progressed into the winter of 2020, the mood declined, and staff became fatigued. This is where we see the matching decline in morale from 2021. The data shows a significant dip in staff morale in the 2021 and 2022 data. There was also a spike in the percentages of people reporting stress-causing ill health. These numbers are only now slowly returning to pre-pandemic levels.

Year	Morale Score	Have you felt unwell as a result of work-related stress
2018	5.7	42.8%
2019	5.6	45.6%
2020	5.8	47.8%
2021	5.5	49.1%
2022	5.4	49.2%
2023	5.7	45.3%

203. To support the health and wellbeing of our staff, during the relevant period, we put in place a range of provisions and services both internally within the Hospital and also with external partners and voluntary organisations. The list of services includes:

- a. The Employee Wellbeing Service, which was an existing service that provided support for staff including access to a psychologist. However, during the pandemic, we set up a wellbeing hub and appointed wellbeing leads to ensure the service reached all who required it.
- b. There is a staff advice helpline which offers a counselling service, as well as advice on legal and practical issues.
- c. The Chaplaincy is a key support role and, as I have previously touched on, the impact of the service which the team provided during the pandemic was significant – for patients and staff alike.
- d. There were free sanitary products and dermatology drop-in clinics; the latter to manage issues with the impact of staff wearing PPEs for lengthy periods at a time.
- e. Specifically for psychological support, the hospital made a large investment in a psychological support service available to all staff.
- f. Project Wingman (a well-being charity that supports NHS care workers with their mental health) was present in the hospital and we also worked with partners across North East London through the Keeping Well NEL programme of work.
- g. For staff who were required to shield there was a dedicated shielded network which continued through the period of shielding.
- h. A long Covid-19 clinic was set up by the hospital's in-house physiotherapy service as a pilot, taking on 10 staff members suffering with long covid symptoms around the end of 2020 and the beginning of 2021. However, the clinic was based on a restorative therapy model, with only physiotherapy input. It lacked a multi-disciplinary approach with Occupational Therapists, pain management clinicians and psychologists. 8 sessions were offered to staff but it quickly became apparent that it did not deliver on the model proposed – which was to allow for the reconditioning of staff to full recovery. It, therefore, had limited efficacy and was only used for a short period. Staff are now supported through the NEL pathways including a the Long Covid-19 at Barts Health through a GP referral.
- i. Barts Charity and other local charities provided generous and well targeted support for our staff including upgrading staff rooms, providing cycle storage all the way through to enhancing psychological wellbeing support.

Covid-19 risk assessments

204. When the requirement for Covid-19 risk assessments for staff came into force on 26 June 2020, the hospital implemented a process to manage the findings of these risk assessments (RA) as appropriate. Risk assessments were introduced within the first few weeks using the UKHSA guidance on high-risk areas and exposure. There were several versions of this as developments occurred. The risk assessment process was signed off through the IPC committee and the Chief Medical Officer through the clinical governance group.
205. Risk assessments were initially paper-based and held within the Employee Wellbeing Service (EWS), but when the ALAMA risk assessment was introduced, this was implemented electronically through the Trust's Education Academy. Individual staff members carried out an online risk assessment. If health issues were identified on a completed RA, putting staff members into a high or medium risk category, the system would send a notification to their line manager and the member of staff would be referred to the EWS.
206. Mobilising a risk assessment process for all staff within the timeframe given (within 4 weeks) was extremely challenging. As the exercise had commenced on paper, whilst the electronic version was being developed, it was difficult to track completion effectively as this involved manual collation and reconciliation of electronic staff records. We had to bring in external resources to ensure we were able to provide the assurance needed that all staff were appropriately risk assessed.
207. Once the risk assessment process was electronic, it was included in our staff induction to ensure that all new starters were appropriately risk assessed. Compliance was monitored by the Group Executive Board weekly and also reported to the Trust's People Board. An extensive communications strategy was put in place to ensure everyone was aware of the requirement to complete these. It was management responsibility to ensure completion within their hospital.
208. There were challenges for managers on how to effectively mitigate any risk arising from the risk assessment. Particularly, challenges in consistently and equitably responding to risk assessments, especially where individuals were identified as medium risk. Guidance was provided to managers on how they might apply mitigations consistently, and how we could ensure that we had equitable redeployment across the hospital and more generally, across the Trust. However, it is acknowledged that this had an element of local discretion, and it was challenging to apply the learning in such tight timescales.

209. The RA process did have an impact on staffing capacity and the ability to redeploy staff required in high demand areas. Following the referral of a medium or high-risk member of staff to the EWS, the service would carry out an assessment of the staff member in line with the RA finding. The outcome was often the redeployment of the staff members to green clinical areas – which were non-Covid-19 patient areas. This posed a challenge when these green areas reached capacity for staffing, while the high demand areas required staff cover.
210. The hospital held twice-weekly Covid-19 steering groups chaired with relevant representation from across the Trust. A local clinical risk assessment was initially being relied upon by the clinical divisions until the national risk assessment approach was implemented by the Trust. The local risk assessment was similar to the national risk assessment, taking into account contact with Covid, age, ethnicity, pregnancy and underlying health conditions. The hospital adhered to the UK Health Security Agency (UKHSA) criteria for the shielding of members of staff with high-risk conditions and this had a significant ethnic impact where Black, Asian or minority staff were more likely to be included in these criteria. The criteria for shielding were widened following the second lock down, and pregnant staff were included in this group in line with national guidance.
211. Whilst our policies introduced quickly and reactively did not include formal Equality Impact Assessments (EIA), we were mindful at all times of the need to consider the effects of all decisions on all groups of staff and patients. At the time, in consideration of the welfare of all staff members, we were focused on individual risk assessments which we ensured were completed for all staff. The priority was for managers to fulfil their roles in ensuring individual risk assessments and the appropriate conversations were carried out compassionately with all staff.

The unequal impact of Covid measures on certain members of staff

212. Across the Trust, we found that there were issues identified with the likelihood of redeployment impacting some ethnic groups more than others. In particular, staff from a Filipino background were more likely to be redeployed. Although the same criteria for redeployment was applied to all staff, it was identified that these members of staff were less likely to be resistant to redeployment compared to colleagues of other ethnic backgrounds.
213. I have previously briefly touched on concerns, raised by a few staff members who wore head scarves, in response to the requirement to wear FFP3 masks. The hospital did take steps to consider whether these masks could be worn over head coverings, but the test outcome indicated

a reduction in the fit factor when the masks were worn over a head scarf; which would render the practice unsafe for staff and others.

214. Although the practice of head covering appears in many different cultures and religions, in the UK it is predominant within the Muslim population. Implementing this measure, without giving due consideration to its impact on the affected staff, might have meant that they either had to wear their scarves over the mask, thereby making for a more uncomfortable experience, or go without their wearing a scarf. Strict application of the measure, though crucial to safety, would have had an unequal impact on staff of a certain religion and cultural background. We addressed the issue by circulating and following the advice of the British Islamic Medical Association (BIMA). I hereby exhibit the BIMA recommendations with this statement as **AC/12 [INQ000417113]**. We also provided hoods for those that could not wear FFP3s. No colleague was left in a situation where they were unable to wear their head scarf.
215. There were other concerns like the presence of beards affecting the fit; which affected Sikh colleagues. This was also addressed by carrying out risk assessments, the provision of hoods/powered hoods, and following advice from IPC in line with the policy at the time.

The hospital and the healthcare system

216. We recognised very early on that clear channels of communication had to be established for an effective flow of information from the Trust leadership to staff working on the frontline. The Trust developed a robust communication plan in January 2020. This was to ensure clear, concise, and consistent messaging across all audiences including staff, partners, patients and the public. This plan was continually adapted to changing guidance in relation to healthcare workers, visitors to hospitals, and patient care.
217. Communication materials were developed locally by Barts Health and executed across all hospitals within the Group. We produced guidance, signage, videos, web content across all websites. The information disseminated within all these formats was updated to respond to changing needs; sometimes several times a day. We translated information, released daily briefings during the height of the pandemic for staff, set up two way discussion boards between staff and “management”, produced newsletters for staff and partners, set up messaging for community groups, uploaded social media content, local and national media coverage in print, digital and broadcast. This was largely effective.

218. We undertook a staff survey to assess our performance in relation to communication during the pandemic. The main question to staff was: *have you felt that our Trust communications channels have kept you up to date throughout the pandemic?* The result of the survey is outlined below:

Yes – absolutely: 23%

Yes – mostly: 48%

Sometimes: 26%

Not at all: 3%

219. As the pandemic entered its second wave in November 2020, the NHS was put on the highest level of emergency preparedness and issued a protocol under which the national team took responsibility for all communications. This “command and control” regime was effective for the Nightingale Hospitals, which had their own communication teams with dedicated resources. However, it generated considerable tension with local communication teams like ours; particularly, over the handling of legitimate interest from regional and local media about what was happening in our hospitals.

220. The protocol required us to submit any media activity (including what line to take) to NHSE for approval. There were delays in obtaining responses, and requests to allow local media bids were generally not supported. We did not receive advance notice of national announcements, and often found ourselves been asked for a response to developments by local media when all we knew was what was being reported in the national media.

221. The regime was not relaxed until well after the NHS itself came out of level 4 alert. As the operational focus shifted, the NHS central communications team started actively seeking to promote examples of how the service was managing recovery and gradually allowed greater local discretion and initiative.

Our recommendations to the Inquiry

222. We carried out significant work in relation to learning identified throughout the pandemic, in order to consider how lessons learnt may generally apply in the future, and particularly in response to a future pandemic. The Covid-19 public inquiry team is referred to the following exhibits:
- a. *Harvesting the Learning, Learning from Covid-19, September 2020* - AC/01a
[INQ000417103]
 - b. *Barts Health NHS Trust, Inter-Pandemic Review, 2020 (IPR)* - **AC/13 [INQ000417114]**
 - c. *Post Pandemic Review, 2022* - **AC/14 [INQ000417115]**
223. Whilst collaborative working was in place ahead of the pandemic, this significantly increased as the hospital continued to work within the Barts Health Group of hospitals and with other acute providers in North East London. This enabled a better response to the pandemic and led to tangible benefits being experienced by RLH, its staff and its patients; particularly in relation to critical care capacity. It will be important to ensure that this joined up approach is implemented immediately in the event of a future pandemic, and it is recommended that national decision makers support Trusts to operate under a system approach for areas of risk in any future pandemic.
224. During the pandemic, there was significant streamlining of decision-making both locally and regionally, but processes have now reverted to those in place ahead of the pandemic. There is learning on how we might retain aspects of more agile decision making while recognising the importance of sound governance under business-as-usual conditions.
225. There should be a comprehensive pandemic plan in place for the management and reduction of the impact of a pandemic so that this can be implemented immediately, and outcomes improved. In terms of pandemic planning, this should not be the responsibility of an individual Trust but should be a systems approach; not just locally, but the ability to operate regionally too where necessary.
226. Lessons were learned from the earlier phase of the pandemic in relation to staff wellbeing, dissemination of communications and redeployment. In the event of a future pandemic, it will be crucial that a strong wellbeing offering is prioritised immediately and in place allowing access to appropriate support and resources. We learned the challenge of maintaining staff morale became significantly greater after the first wave as fatigue set in. We learned that wellbeing initiatives need to be sustained.

227. There were initial delays in providing the essential equipment (IT and furniture) required for our staff to work from home in a virtual environment. Post-pandemic, we have seen a sustained shift to agile working, and it is recommended that hospitals have robust processes in place to ensure all staff who are able to work from home, can shift to remote working immediately to allow for service continuity in a future pandemic.
228. Strategies for a redeployment process within a pandemic should be in place in hospitals to ensure that staff are able to be redeployed at pace and safely in future pandemics. A systems approach to this is recommended to establish common data systems, to allow skills and competency mapping, and to enable comprehensive workforce planning at speed with frameworks in place to eradicate any potential inequality.
229. Whilst hospitals operating within their local systems create better resilience than working in silo, national decision makers could consider a regional and national surge capacity plan to speed up readiness in response to any future pandemic. The baseline in critical care capacity in North East London was below what you would expect for our population size and level of health inequalities. The critical care baseline capacity ought to be a key consideration, regionally and nationally, in any contingency planning to ensure adequate preparedness. There is a specific need for plans to rapidly scale up critical care with particular attention to staffing requirements and for improvements as to how we model growth in demand. NHS England estimates of potential critical care requirements at the various Covid-19 peaks were within very wide ranges.
230. It is recommended that scientists and national policy decision makers should work better in partnership to agree actions for the healthcare system and ensure that this is disseminated to healthcare providers ahead of being published in the press. There was significant pressure on NHS Trusts with national guidance changing daily causing confusion, fear and a loss of Trust in the NHS acting in the best interests of staff; this required significant operational planning to address. A more joined up approach initially may have reduced the frequency at which guidance was issued.
231. Following the pandemic, we faced a recruitment challenge with a large number of unfilled job vacancies. It is recommended that national decision makers undertake further work to improve recruitment and reduce workforce shortfalls in line with the national people strategy.
232. It is recommended that there is a national focus on potentially restorative measures put in place to support all undergraduates. The impact on this group was significant and in the event of future

pandemics, there ought to be consideration given to this group in both planning, during and after the pandemic.

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.

Signed:

Personal Data

Dated: 12th April 2024