Witness Name: North Cumbria Integrated Care NHS Foundation trust Statement No.: M3/CINC/01 Exhibits:

Dated: 12 April 2024

## **UK COVID-19 INQUIRY**

#### WITNESS STATEMENT ON BEHALF OF CUMBERLAND INFIRMARY CARLISLE

#### **Our response**

1. The North Cumbria Integrated Care NHS Foundation Trust (NCIC) provides this response in respect of the Cumberland Infirmary Carlisle. It relates to events through the relevant period 1<sup>st</sup> March 2020 to 28<sup>th</sup> June 2022. The Medical Director at the Trust during the large part of this period was Dr Rod Harpin who is now retired and living overseas. Other senior decision makers at the Trust during this period have since left the organisation. Consequently, it has not been possible to provide a single response from a senior clinical leader who was at the Trust at the time, as originally requested by the Inquiry. In agreement with the Inquiry Team, we therefore compiled this response with the assistance of a number of colleagues who were present and active in the Trust through the relevant period. The response has been collated by Steve Park Director of Communication and Name Redacted Assistant to the CEO/Head of Assurance. We have identified contributors throughout the document and limited any editing to the absolute minimum so our evidence reflects the first person accounts of those directly involved, as far as is possible. Our Chief Executive Officer Lyn Simpson provides a statement of truth, and our current Executive Medical Director Adrian Clements has provided clinical oversight of this submission.

### **Background information on the Trust**

- The Cumberland Infirmary Carlisle (CIC) is a district general hospital serving a population of approximately 274,000 residents primarily across the north, east and west of Cumbria. The hospital also provides some services for residents in south Cumbria, Northumberland and Dumfries & Galloway.
- 3. With the exception of Carlisle, the community served by CIC is spread over a large geographical area. Around 50 per cent of communities served by the Trust live in rural settings with over-65s making up a larger proportion of the population than the national average. Deprivation is similar to the England average and approximately 11,700 children (14.5%) live in poverty. In the population served by the Trust, 5.6 per cent of children come from an ethnic minority background according to the school census (2021).
- 4. Services provided by the Cumberland Infirmary include:
  - Accident and emergency (A&E),
  - Cardiology,
  - Children's & Adolescent Services,
  - Diabetic Medicine,
  - Ear, Nose & Throat,
  - Endocrinology and Metabolic Medicine,
  - High Dependency Unit and Intensive Care,
  - Gastrointestinal and Liver services,
  - General Medicine,
  - General Surgery,
  - Geriatric Medicine,
  - Gynaecology,
  - Haematology,
  - Infectious Diseases,
  - Nephrology,
  - Ophthalmology,
  - Maternity,
  - Special Care Bay Unit,
  - Orthopaedics,
  - Oral and Maxillofacial Surgery,
  - Rehabilitation,

- Respiratory Medicine,
- Rheumatology,
- Sleep Medicine,
- Stroke,
- Urology
- Vascular surgery.

In March 2020 at the Cumberland Infirmary, there were 214 medical beds, 114 surgical beds, 9 critical care beds, 32 Children's beds and 23 maternity beds. There were 25 wards in total: 14 medical, six surgical plus a day case unit, a critical care unit, three children's wards including a Special Care Baby Unit (SCBU), and a maternity ward. The trust employed a total headcount of 8,037 as of 1 March 2020. Many of our staff work across multiple locations so it is not possible to provide a breakdown of staff working solely at the Cumberland Infirmary.

## Recruitment and workforce supply

- 5. Our Human Resources team<sup>1</sup> report that NCIC was experiencing a high number of vacancies before the pandemic in several professional groups and specialities. Specialities with particular recruitment challenges prior to the pandemic included anaesthesia/ICU, stroke, General medicine, Elderly Care and our Emergency Department. Nursing vacancies were particularly high prior to the pandemic, and the Trust was heavily reliant on agency nurses to provide safe staffing-levels. The Trust did not have any difficulties filling Healthcare Assistant vacancies either pre or during Covid, with many local applicants for vacancies.
- 6. Ioannis Michalakis, a breast surgeon, led the tactical response group during the pandemic in his role as Associate Medical Director. He told us: "During the first wave of the pandemic, any medical staffing capacity concerns were promptly reported to the Clinical Directors (CD) group and the Medical Director's office. Prompt measures were implemented for trainee doctors by the team of Dr Louise Buchanan, Professor Matt Phillips, and Professor Sam Dearman, while the appropriate Clinical Directors addressed matters related to the remaining medical staff. Nursing and management staff issues followed the usual escalation process. In subsequent waves, the Trust maintained a similar response structure with the addition of a central point of contact within the workforce cell during tactical and strategic meetings. Despite increased absences among medical and nursing staff

<sup>&</sup>lt;sup>1</sup> Amanda Dunkley – Assistant Director People Services

due to the pandemic, which often presented daily challenges in maintaining safe staffing levels. To my best recollection; there was no noticeable direct negative impact on the quality of patient care delivered."

- 7. The experience of a senior clinician in a key department during the pandemic was that the Trust was able to recruit, despite some specialisms being in high demand nationally. This, together with support from experienced clinicians from other disciplines and effective use of a composite workforce utilising Advanced Critical Care Practitioners to support rotas, meant the Trust was able to cover key areas safely.
- 8. Jon Sturman, consultant anaesthetist and Clinical Director for Critical Care during the relevant period told us:

"Regarding medical staffing, I do not believe there was a particularly unusual shortage at the onset of the pandemic. I was supported in my role as CD through the recruitment of doctors in Anaesthesia and Intensive Care Medicine at consultant, middle grade and trainee level. This was against a background of national shortages in these areas. In addition, we had five Advanced Critical Care Practitioners who were a great help in filling expanded rotas. Doctors with a main bias in theatres were made available, and volunteered their services in ICU where appropriate. Volunteers from a semi-retired and non-anaesthetic background also came forward and received re-orientation.

- 9. "In terms of nurse staffing, outline approval for additional nurse staffing for the Intensive Care Unit at CIC (one extra staffed bed) had Executive approval since 2018, after a particularly heavy admission profile to ICU in 2016-17, however the business case had stalled. In hindsight, the additional five whole time equivalent nurses would have been useful in the pandemic and increased capacity and surge capacity.
- 10. "It should be recognised that recruitment on both sites<sup>2</sup> always was, and always will be a continual process of gain and loss, with the added impact of maternity and sickness leave. I do not believe in that sense the pre pandemic period was unusual compared with any other time. At the CIC site, with the limitations to the estate, expansion of nursing numbers would soon run into constraints caused by actual

<sup>&</sup>lt;sup>2</sup> The Cumberland Infirmary Carlisle and the West Cumberland Hospital in Whitehaven

physical bed availability, so there was also a limitation there without a major estates revamp. During the pandemic there was considerable nursing help on both sites (CIC and WCH) from day surgery nursing, theatre and specialist nurses with prior ICU experience, considering the pressures meantime of running normal services in particular elective and emergency surgery."

- 11. "In conclusion there were no major changes, in either medical or nursing workforce, during the pandemic, nor any realistic possibility of changes in recruitment strategy."
- 12. This final point was confirmed by Maggie Johnson, Head of Medical Director Support Service, who told us:

"I was not aware of any constraints on the ability of the hospital to increase the medical staff capacity through usual recruitment and bank/agency processes."

13. However, our HR team did report some challenges with recruitment – principally linked to a shortage of qualified staff nationally. The team highlighted issues as well as positive responses to the pandemic from some suppliers. This included some suppliers whose service to the Trust appeared to be reduced due to support required for the mobilisation of Nightingale Hospitals. Amanda Dunkley, Assistant Director of People Services also told us:

"The Trust experienced some issues with some (not all) staffing agencies who attempted to increase prices for agency staff during the period. The agencies concerned backed down after intervention by the in-house team, with the support of the Chief Nurse. The team also had to deal with a big increase in FOIs during Covid, many clearly from commercial suppliers. This was a significant burden on the team at a busy time."

#### Workforce deployment

14. The impact of Covid itself on our workforce was significant. 10,040 Full Time equivalent days were lost because of staff isolating having tested positive for Covid. A further 1092 FTE days were lost through staff shielding because of a recognised vulnerability<sup>3</sup>. Amanda Dunkley, Assistant Director of People Services , told us: "Staffing unavailability was captured daily throughout the relevant period. At the start, there was high level of absence due to suspected Covid. Once testing became available, there was a high level of absence through confirmed Covid or living in the

<sup>&</sup>lt;sup>3</sup> Source – Amanda Dunkley - Assistant Director People Services

same house as someone with Covid. Once IT/laptops were more common it did mean that people with Covid could work in other ways if unable to be physically present at work. The temporary register was a great help and enabled us to recruit and deploy qualified staff quickly."

15. Jen McCall, a manager in the Trust's e-rostering team, established the Covid Workforce Hub to ensure staff who were well enough to work whilst shielding or isolating were usefully deployed. She said:

"The hub was designed to form registers of staff who were available to redeploy and those who were shielding and further develop risk registers of staff. This meant that all staff were utilised whether shielding at home or redeployed elsewhere due to BAU activity being stood down. Those who were shielding at home received home delivered laptops and mobile phones and worked under the workforce hub on various projects to help the Trust in other ways such as wellbeing and welfare checks."

16. Amanda Dunkley, Assistant Director of People Services added:

"At the onset of Covid there was not enough IT equipment in the organisation to allow back office staff to work from home. This caused upset and confusion, particularly when the Prime Minister announced that if you could work from home, you should. The Trust had to work at speed to access laptops (as was the case in the rest of the country) to enable home working. If Covid or similar was to happen again then the majority of NCIC's staff now have laptops and remote access, so this would be easier and less problematic."

- 17. The Trust established a Medical Workforce Hub<sup>4</sup> to support and deploy medical staff groups including Consultants, Locum Consultants, Locally Employed Doctors (LEDs) Staff Grade & Associate Specialist (SAS), Locum Doctors, Advanced Clinical Practitioners (ACPs), Physician Associates (PA) who were on medical rotas, and Doctors in Training (DITs) on placements.
- 18. The medical workforce hubs (MWH) took a daily morning register of all staff on duty on medical rotas across the hospitals, and identified on a daily basis wards and areas that were short-staffed or were experiencing temporary staff shortages. As part of the MWH, the clinical leads or site lead for each area also did a review at handover, based on safe staffing levels and patient acuity. They then sent a summary

<sup>&</sup>lt;sup>4</sup> Information about the Medical Workforce Hub is provided by Maggie Johnson Head of Medical Director Support Service

update and any requests for additional medical staff to the MWH. The summaries were used to identify staffing across sites to cover any gaps.<sup>5</sup>

- 19. The Clinical Decision Makers (senior medical leaders) present at MWH, reviewed the requests for additional staff, risks and prioritised the areas based on this information. They sought further clarification, as necessary, either in person or via phone. They then identified the appropriate grade of medical staff who could move from one area to another to cover these shortages/gaps and mitigate risks. This process included looking at competency, experience and confidence of the available medical staff, and communicating directly with the identified staff, before discussing and communicating to clinical leads for all the areas affected, and safely supporting the move.
- 20. A key component of the MWH was a health and wellbeing check, and immediate psychological support from senior medical leaders as required in the moment, plus signposting, and escalation to psychological support if indicated/required. The signposting to the health and wellbeing psychological support was available in leaflets/posters at the MWH.
- 21. The hub was also able to support clinicians with additional training requirements. Online Clinical Training /education was available from Health Education England North East (HEENE) e-learning for health (e-lfh) and the medical education simulation team offered simulated scenarios in various departments including ED and theatres as required. Other topics included Covid-19 – patient risk stratification and treatment escalation, palliative care and breaking bad news and self-care and resilience.
- 22. To support doctors in training, additional trainee Covid-19 forums were set up weekly and facilitated by the guardian of safe working, the Director of Medical Education (DME), and Associate Directors of Medical Education (ADMEs). The forums offered an opportunity for trainees to ask questions, seek clarifications and share anxieties and as a way to consult with trainees on their ideas for problem solving such as rotas and support solutions. <sup>6</sup>
- 23. Health Education England North East had guidance/criteria for moving doctors in training based on their competency, experience and confidence. For example if a doctor in training was on a medical placement (ward or unit) then the MWH would only move them, with their consent, to another medical placement (ward or unit). This

⁵ lbid

<sup>&</sup>lt;sup>6</sup> Ibid

practice maintained and supported their health, wellbeing, and training placement experience for progression through their training programme.<sup>7</sup>

- 24. The Trust worked at speed to identify how volunteers could support the Covid effort<sup>8</sup>. Unfortunately, many of the existing Trust volunteers were elderly and considered high risk, with many needing to shield. To address, this a re-deployed senior manager undertook a volunteer recruitment drive, and this workforce was heavily used as 'runners' in the hospital taking personal belongings to loved ones via sterile routes.
- 25. Regional bodies did provide lists of clinical returners; however, this was not particularly effective for NCIC as many of those who registered were geographically remote from the Trust. The Trust was able to bring more people back into the workforce through its own processes and connections. Individuals who lived in Cumbria preferred to contact the Trust directly via open adverts with easy to reach numbers, rather than navigating through regional or national bodies.
- 26. Training and re-orientation was available for returning retiree volunteers. Our HR team<sup>9</sup> reported that there was a significant increase in the number of unqualified people wanting to work and/or volunteer with the Trust. There were delays in some candidates being 'work ready' because of training constraints. Whilst face to face clinical training continued, capacity was restricted due to social distancing requirements, which halved the number of staff who could be accommodated at each training session.
- 27. Management of the nursing workforce was greatly assisted by the e-rostering system, which was in place for in-patient departments<sup>10</sup>. The e-roster team worked with the Nurse Lead to reassign clinical teams/individuals in to in-patient units based on patient need. The rosters were rebuilt to reflect the reconfiguration of the hospital such as the creation of 'red' and other zones on the site. Nurses, Health Care Assistants and Allied Health Practitioners could be redeployed in 'real-time' by the matron or site co-ordinator as staff availability and patient acuity could be identified through the e-roster, simplifying the task of reassigning staff to where they were most needed. Up to date information on the electronic system facilitated any further re-deployment in real time. Training prior to joining these new teams took place. The
- <sup>7</sup> Ibid

- <sup>9</sup> lbid
- 10 Ibid

<sup>&</sup>lt;sup>8</sup> Source Amanda Dunkley – Assistant Director of People Services

Practice Education Team provided 'up-skilling' for Corporate Nurses and nurses being re-deployed whose patient facing skills were 'rusty'. This increased the pool of nurses available to care for patients.<sup>11</sup>

28. No NCIC staff were redeployed to other hospitals or Nightingales.

### The impact of Long Covid

- 29. The national workforce system/data items did not allow for the recording of long Covid during the relevant period, and has not yet been updated to reflect the condition. However, based on long term Covid absence between 01/03/2020 and 28/06/2022, there were 173 staff absent for a period of 28 days or more.<sup>12</sup>
- 30. Colleagues continue to be impacted by the condition, and many require reasonable adjustments to help them to continue to work effectively. Our occupational health team report that they have supported 132 colleagues referred to them with long Covid related conditions.<sup>13</sup>

#### Staff deaths

- 31. Tragically, seven NCIC colleagues<sup>14</sup> lost their lives because of Covid. The colleagues we lost were: an electrician; an admin and clerical manager, two healthcare assistants, a domestic assistant, and two agency staff nurses.
- 32. Any death in service has a huge impact on our workforce. The impact of these deaths at a time of unprecedented pressures and high emotions was devastating.
  Our colleagues are remembered in a memorial garden on the Cumberland Infirmary site. <sup>15</sup>
- 33. The Occupational Health Team contacted all departments when there was a death and attended in person to support colleagues. The Trust regularly promoted wellbeing phone lines and other assistance, which all staff (including bank) could access. Information was communicated through a variety of channels including email, face to face, team meetings, posters etc.<sup>16</sup>

<sup>11</sup> Ibid

<sup>12</sup> Ibid

<sup>&</sup>lt;sup>13</sup> Source Name Redacted Head of Occupational Health

<sup>&</sup>lt;sup>14</sup> Source Amanda Dunkley - Assistant Director People Services

<sup>15</sup> Ibid

<sup>16</sup> Ibid

34. Where families had given permission, the Trust paid its respects to the colleagues who lost their lives publicly through the media, and within the organisation through internal communication channels. Books of condolence and memories were shared. Our chaplaincy team played a key role in marking these moments and supporting colleagues through difficult times. <sup>17</sup>

### Vaccination as a conditioned deployment (VCOD)

- 35. The Trust set up a Vaccination Cell to provide a vaccination programme and implement VCOD. The Executive Chief Nurse, who acted as SRO for the vaccination programme, ran this meeting. The meeting was minuted, recorded and met weekly, bi weekly and ultimately monthly.<sup>18</sup>
- 36. In respect of VCOD, A report outlining the then new legislation was submitted to Trust Executives outlining the approach. The work was initially limited to Trust staff who worked within healthcare settings in Care Homes, rather than the wider Trust, as that was what the legislation was limited to at that time (time frame August to December 2021). Staff from the Trust who worked in Care Homes were identified, as was their vaccination status. Staff who were unvaccinated and working in this setting had their roles assessed by their managers to establish if they could be redeployed into roles that did not require them to work in a Care Home. Redeployment processes were initiated for three staff in line with the Trust policy on redeployment, and the VCOD SOP. The notice was rescinded once the Secretary of State withdrew the proposed all-staff legislation.<sup>19</sup>
- 37. Initial work in the Trust was limited to staff working in a Care Home setting (Phase 1 of VCOD). Phase 2 (all staff) was cancelled on the 31/01/2022 by the then Secretary of State for Health.
- 38. David Allen, Assistant Director of People Services, oversaw the implementation of VCOD. He told us: "The process was difficult and caused significant tensions between the Trust and some staff, who had very strong views on vaccination. Whilst the Trust had stated that no staff would be dismissed as part of Phase 1 of VCOD, it placed the Trust in a position where it had to assess staff, some of whom had worked

<sup>17</sup> Ibid

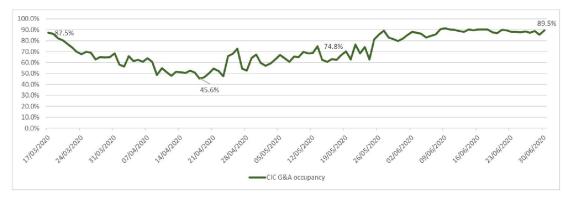
<sup>&</sup>lt;sup>18</sup> Information on vaccination and VCOD was provided by David Allen - Assistant Director of People Services <sup>19</sup> Ibid

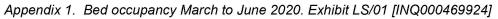
for it for years, potentially requiring them to be re-deployed. At that time, as part of the first round of vaccinations, over 90% of Trust staff were vaccinated. As such, [our judgement] was that there was no requirement to mandate the vaccination status of staff'.

**39.** The Trust followed the approach set out by the law and NHSE in respect of VCOD. NHSE and lawyers acting on their behalf provided various inputs. The Trust implemented a VCOD SOP based on the legislation for Phase 1 (which came in to effect in November 2021). In this respect, the Trust followed legal guidance and adhered to its own organisational change and disciplinary processes. The Trust's approach followed a regional and national approach. Retaining staff, and encouraging unvaccinated staff to become vaccinated, ahead of any legal deadline mandating such, was the Trusts primary response. The Trust worked closely with managers, staff and staff side organisations in this respect. Numbers affected by Phase 1 of VCOD were minimal (three Health Care Support Workers).<sup>20</sup>

#### **Critical care**

40. As the chart below<sup>21</sup> indicates General & Acute bed occupancy (Adult and Paediatric beds) reduced significantly at the start of the pandemic, reaching roughly half the occupancy seen in March 2020 by mid-April 2020. By the end of the "first wave" occupancy had returned to pre-pandemic levels



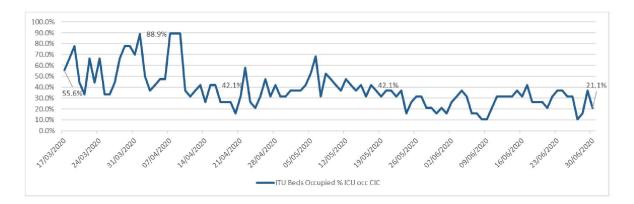


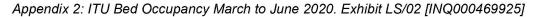
41. Intensive Care bed occupancy (Adult beds) decreased during the first wave pandemic. Additional capacity was in place from early April 2020, increasing ICU capacity at the Cumberland Infirmary from 9 to 19 beds.<sup>22</sup>

20 Ibid

<sup>&</sup>lt;sup>21</sup> Source NCIC information team

<sup>&</sup>lt;sup>22</sup> Source NCIC Information team





42. NCIC did not experience difficulties with ICU discharge before or after the introduction of the NHSE/I discharge policy on 17 March 2020. Jon Sturman, Clinical Director for Critical care said:

"ICU occupancy by elective activity in North Cumbria is low (10% or less of beds in CIC, nil in WCH) so we were admitting and discharging almost as usual. We were not encountering ward ready bed blocking. We did plan for ICU surge into recovery areas in line with our standard winter plan. We considered a 100% increase in capacity to be realistic, bearing in mind the needs of other areas.

- 43. "We planned for up to seven beds in theatres recovery at CIC and up to 10 in WCH. This took into consideration the fact that, despite being the larger site, all emergency surgery still had to happen at CIC and more cubicle capacity existed at WCH. We also considered that, as two small units, HDU/ICU flexibility of all the beds makes occupancy a more tricky calculation. This was further hampered by the surge area in WCH being very remote from the ICU
- **44.** The Inquiry has asked us to explain what action was taken at each stage when ICU capacity reached occupancy of 85%, 92% and 100%. In small ICU's these thresholds are less meaningful as relatively small increases in occupancy can quickly move capacity above or below these thresholds as Jon Sturman explained: *"I am not sure there is much to be gained by such precise thresholds of occupancy due to both ICUs*<sup>23</sup> *being small. In mathematical terms if, for example, we admit one patient to CIC our occupancy goes up de facto 12%. As small units, we are well versed in approaching and going over capacity, seeking mutual aid from each other. Where necessary, as happened with previous winter surges including H1N1, we were*

<sup>&</sup>lt;sup>23</sup> The Cumberland Infirmary Carlisle and the West Cumberland Hospital in Whitehaven

already in the practice of seeking mutual aid from the North of England Critical Care Network (NOECCN)

- 45. "Of course, no one wants to exceed national standards as a benchmark of safety, which is why we have the Faculty of Intensive Care Medicine's guidance on nurse staffing on ICU (1:1 for level 3, 1:2 for level 2). However, reaching or exceeding capacity is not a new problem. Where we planned and executed differently for the pandemic was that we adapted to stretched ratios in non-critical care areas for much longer periods, adapting clinical practice to make handling patients with predominantly one disease very efficient and protocolised.
- 46. "This was the basis of frequent contact with the NOECCN, often daily, at least weekly, with the help of the ICU transfer service (NECTAR). As Cumbria was particularly hit during phases of the pandemic (elderly population, high R number) with relatively few ICU beds, of course we became a net exporter of a considerable number of patients to ensure parity of resources (nursing, equipment, bed space) with our networked ICUs".
- 47. Approximately 50 patients were transferred out of NCIC to networked ICUs through the NEOCCN process. We do not believe that there were any patients transferred in because of bed pressures elsewhere.<sup>24</sup>

## The availability of medical equipment and medicines

- 48. From the beginning of the pandemic medical equipment became very difficult to come by, with the demand far outweighing the national, and at times international, resources available to us.<sup>25</sup> Lead times for all equipment including life critical kit had jumped from weeks to months due to a number of factors affecting global production of key electrical components.
- 49. At the start of the pandemic, the Trust had already agreed a business case for a complete overhaul of ventilation equipment. A purchase order had been issued and, with existing orders being fulfilled at that time, the Trust benefitted from the delivery of 10 Philips V60 machines. This allowed for additional CPAP capacity within our

<sup>&</sup>lt;sup>24</sup> Source Jon Sturman Clinical Director Critical Care

<sup>&</sup>lt;sup>25</sup> Information on medical equipment provided by Name Redacted Head of Decontamination, Sterile Services, MDSO & QM (Medical Engineering) and Name Redacted Medical Engineering Team Leader

wards to lend support to ITU should the need arise - as it did when the rate of COVID infections surged.<sup>26</sup>

- 50. The organisation and the Medical Devices Committee took full advantage of the Governments National Equipment Programme in the initial few months of the pandemic. This allowed for a major overhaul of our entire patient monitoring in high dependency areas, as well as Theatres at CIC. We were able to bring forward the plans to encourage standardisation of all medical equipment across the organisation a key focus of the medical devices team.<sup>27</sup>
- 51. Although the Trust wanted to maintain a standardised equipment inventory there was limited availability of certain assets in the National Programme hence we were required to take receipt of a number of Boeing VG70 ventilators as a back-up should we need them. These machines came with a number of drawbacks, however dynamic and clinical risk assessments were carried out when there was a need to move the VG70 vents into clinical use. Drawbacks included, but were not limited to, staff training/awareness of the machines, and the effective decontamination of the reusable expiration valves.<sup>28</sup>
- 52. Early on in the COVID pandemic, the importance of High Flow oxygen in the management of patients became apparent<sup>29</sup>. The Trusts two Acute hospital sites at West Cumberland Hospital and the Cumberland Infirmary had robust systems for medical gas pipeline systems with primary and secondary VIE provision. An established Medical Gas Group reporting to Executives via the Medicines Management Group and chaired by the Chief Pharmacist was already in place at the outbreak of the pandemic.<sup>30</sup>
- 53. Although the existing provision of piped medical oxygen was sufficient to meet demand, there was a known risk at the Cumberland Infirmary as the primary and back-up VIE were adjacent to each other and fed into the same feeding ring. The back-up VIE was also insufficient should there be a delay in obtaining additional supplies of liquid oxygen. A funded programme of work had already been approved ahead of the pandemic and additional funds were identified to progress the

<sup>26</sup> Ibid

<sup>27</sup> Ibid

<sup>28</sup> Ibid

 $<sup>^{\</sup>rm 29}$  Information on gases and medicines provided by Paul Fieldhouse, Chief Pharmacist  $^{\rm 30}$  Ibid

installation of a larger new VIE and back-up VIE with dual feeding rings to increase resilience.<sup>31</sup>

- 54. Telemetry was available via the BOC service desk throughout the pandemic but for additional resilience and monitoring the Trust procured the FLEXIM system, which allowed the Trust to monitor oxygen flow from the VIE 24 hours per day. A map of each ward area and an assessment of the maximum flow that could be delivered to each ward area (i.e. number of patients on high flow oxygen) was undertaken to support resilience and planning.<sup>32</sup>
- 55. Oxygen cylinder stock-holding, exchange and monitoring was maintained throughout the pandemic with positive collaboration between teams. In addition, the Trust procured 50 Oxygen concentrators for use in clinical areas away from the main sites for facilitating discharges for patients who need Oxygen should the usual community supplier Air Liquide) not be able to supply for any reason and to supplement our usual supplier.<sup>33</sup>
- 56. The main area of concern in relation to medicine availability related to renal care. Management of renal replacement therapy consumables for acutely ill patients was a challenge throughout the pandemic due to the number of patients requiring treatment and the volumes of fluids required. Main suppliers Baxter and Fresenius maintained services throughout, and there were no occasions when fluids were not available for patients. Weekly and then thrice weekly stock counts were introduced, and storage of fluids was centralised to pharmacy to ensure stock was available for departments /patients as needed. Updated Standard Operating Procedures were introduced for all renal replacement therapy, and processes established to complete the ordering and audit template that was introduced by the regional procurement team to the deadlines required.<sup>34</sup>
- 57. All Acute Trusts in the North East contributed to and funded a medicines procurement team prior to the pandemic. This established team facilitated collaboration and access to treatments throughout the pandemic as mutual aid processes were already established to address acute medicines shortages ahead of the pandemic. North Cumbria Integrated Care NHS FT supported Trusts across the

<sup>&</sup>lt;sup>31</sup> Ibid

<sup>32</sup> Ibid

<sup>33</sup> Ibid

<sup>&</sup>lt;sup>34</sup> Ibid

North East and North West with mutual aid of medicines as required and received reciprocal support from colleagues in the North East.<sup>35</sup>

## Support from the private healthcare sector

- 58. The Trust did not need to approach the private healthcare sector for support with medical equipment, staffing capacity or for medicines<sup>36</sup>.
- 59. NCIC utilised the private sector to maintain elective operating. The Trust worked with private providers in the North West and North East to deliver activity. The activity we delivered included Urology cancer, Breast cancer, Orthopaedics, Ophthalmology and Upper GI. It was predominantly day case activity, with a small number of inpatients. The activity was delivered as NCIC activity by our surgeons, but delivered at the private provider with their theatre team. All national guidance was followed.<sup>37</sup>
- 60. Ioannis Michalakis<sup>38</sup> was one of the surgeons who made use of private facilities to continue to provide elective care:

"Our approach involved utilising the private healthcare sector for conducting elective surgeries off-site. Although we lacked nearby facilities, medical staff, including myself, travelled to locations like Blackburn and the Northeast to ensure the continuation of elective care."

## Infection prevention and control

- 61. From the outset of the pandemic, the Trust worked to ensure national IPC guidance was followed at all times, with oversight provided through the organisation's COVID-19 strategic meetings, and implementation led through the Trust's COVID-19 tactical meetings<sup>39</sup>. National guidance was translated for use into local Trust policies and/or Standard Operating Procedures.<sup>40</sup>
- 62. Changes in national guidance were discussed and agreed at the Trust's COVID-19 strategic meeting, prior to being communicated. Communications was a standing
- 35 Ibid

<sup>&</sup>lt;sup>36</sup> Source Name Redacted Name Redacted and Danny Batten Deputy Chief Operating Officer

<sup>&</sup>lt;sup>37</sup> Source Danny Batten Deputy Chief Operating Officer

<sup>&</sup>lt;sup>38</sup> Consultant breast surgeon and Associate Medical Director

<sup>&</sup>lt;sup>39</sup> Email from Name Redacted Head of Communication: 17.1.24

<sup>&</sup>lt;sup>40</sup> Email from Clive Graham Clinical Director Infection Prevention and Control: 29.1.24

agenda item at these meetings and the actions agreed were communicated in a regular COVID-19 bulletin, which was signed-off by the Trust's strategic commander. This included filmed briefings from the Chief Executive and strategic command group, where the changes were significant. The Trust's COVID-19 bulletin was sent via email to all staff and relevant partners on-site, and placed on the Trust's staff website, where an online COVID hub was established to hold the latest guidance. In addition, screensavers were used to signpost colleagues to information and any significant changes in guidance. The Trust's managers were also encouraged to print off and use COVID-19 bulletin through their team meetings.<sup>41</sup>

- 63. One of the challenges was that changes in guidance were often announced on the national news before the information and details had been received by the Trust.<sup>42</sup> As a result, significant changes led to an increase in volume of enquiries from colleagues often out of hours and created confusion for staff.
- 64. In circumstances where significant national IPC changes were received late on Fridays, or out of hours, this presented particular challenges. The Trust's Infection Prevention Control team worked seven days a week and was therefore in a position to liaise closely with the operational teams on-call over the weekend to ensure no new guidance was implemented over weekends without due diligence and approval from key stakeholders.
- 65. Guidance was reviewed at the next (usually Monday) COVID-19 tactical meeting, approved for implementation and plans agreed how and when any new guidance would be rolled out. Some guidance took longer to initiate depending on the resource required to implement and the impact.<sup>43</sup>
- 66. In these circumstances, the Trust issued communications asking staff to continue adhering to current guidance until an update regarding new guidance was issued.<sup>44</sup>
- 67. The physical layout of the Cumberland Infirmary also presented challenges to the implementation of IPC guidance.
- 68. The Cumberland Infirmary's adult in-patient beds are predominantly located within five Pavilions. Each pavilion has a U-shaped layout/corridor. At the time of the

<sup>&</sup>lt;sup>41</sup> Email from Name Redacted 17.1.24

<sup>42</sup> Ibid

<sup>&</sup>lt;sup>43</sup> Email from Clive Graham with feedback from Name Redacted Lead Nurse : 29.1.24

<sup>&</sup>lt;sup>44</sup> Email from Name Redacted : 17.1.24

pandemic, three to four wards were located within each pavilion. Due to the hospital's design, the wards are not discrete and do not have doors separating them. In addition, a number of facilities, including kitchens, dirty utility, waste hold, and cleaning store areas, are shared and in some cases, there is need to move through one ward to access another.<sup>45</sup>

- 69. Each ward contains a number of four and five bedded bays. In order to mitigate the IPC risks of patients within bays, the Trust reduced occupancy to three beds per bay where possible. Although, as the pandemic progressed, this became increasingly difficult to maintain as bed occupancy increased, staffing ratios were not affected by this reduction in beds per bay. This was due to the creation of an additional ward at the Cumberland Infirmary and the formation of a new nursing team of colleagues no longer required to work on bays with reduced beds.<sup>46</sup>
- 70. In addition, physical alterations were made during the pandemic in several areas to assist in combatting the challenges posed by the pandemic. These included:
  - the creation of additional single rooms on three wards,
  - increased piped oxygen capacity to support the provision of oxygen therapy,
  - the replacement of vacuum-insulated evaporator (VIE) plant,
  - the installation of additional mechanical ventilation on the hospital's respiratory wards,
  - the fitting of doors to some ward areas and ward bays,
  - the conversion of offices to clinical rooms in the Cumberland Infirmary's Emergency Department to increase capacity and support the segregation of patients.<sup>47</sup>
- 71. With the exception of the isolation rooms, the Cumberland Infirmary's ward bedrooms are by design reliant on natural ventilation. Attempts were made to improve the flow of air in these bedrooms, including through the installation of extractor fans under bay windows.<sup>48</sup>
- 72. In February 2021, Cumbria County Council (now Cumberland Council) and the NHS North Cumbria Clinical Commissioning Group (now North East and North Cumbria Integrated Care Board) were reported to have developed plans to utilise the Station Hotel in Carlisle as temporary accommodation for patients who no longer required

<sup>&</sup>lt;sup>45</sup> Email from Clive Graham: 29.1.24

<sup>&</sup>lt;sup>46</sup> Email from Clive Graham with feedback from (1992) 1.24

<sup>&</sup>lt;sup>47</sup> Email from Clive Graham: 29.1.24 Name Redacted

<sup>48</sup> Ibid

hospital care and were awaiting social care support, or were living with vulnerable family members and could not return home until their COVID-19 self-isolation period ended.<sup>49</sup> The Trust understands that this reported local authority and NHS commissioner plan to support people who no longer required hospital care, was used in only a limited number of instances.

#### Testing

- 73. Asymptomatic patient admission screening commenced on the 8th of April 2020. We were asked to systematically record this and submit it from September 2020. Therefore, the Trust commenced recording of asymptomatic testing on 20 September 2020. At that time, we changed our requesting processes so that it was easier to determine which swabs were taken due to symptoms and which were collected from asymptomatic individuals. While there were shortages of kits and consumables, these never affected service provision due to purchase of multiple platforms. In addition, there were no delays to test results being available to clinical teams. Prior to the introduction of lateral flow testing, the Trust's Emergency Departments, Same Day Emergency Care (SDEC) and Acute Medical Unit (AMU) were prioritised for the use of rapid testing devices (Cepheid/SAMBA).<sup>50</sup>
- 74. In addition, laboratory services were increased in capacity to provide a COVID-19 service (including molecular and serology) through the addition of three two-year fixed-term biomedical science (BMS) staff, two bank BMS staff and two two-year fixed-term medical laboratory assistant staff.<sup>51</sup>
- 75. In this phase, only symptomatic individuals were tested initially based on travel history in accordance with PHE guidance.<sup>52</sup>
- 76. We first started testing for COVID-19 on the 7th February 2020 with samples being referred for testing. The Infection Prevention team supported community testing with swabs being done in portacabins within hospital grounds. The first case was detected on a sample taken on the 2nd of March 2020. The first patient was admitted to hospital with COVID-19 on the 12th of March 2020; this first admission had no travel history and was identified because at this stage we tested symptomatic admissions.<sup>53</sup>

<sup>&</sup>lt;sup>49</sup> BBC News website 01 February 2021 'Carlisle hotel stay for recovering hospital patients'

<sup>&</sup>lt;sup>50</sup> Name Redacted Biomedical Scientist Team Manager (Virology)

<sup>51</sup> Ibid

<sup>&</sup>lt;sup>52</sup> Information provided by Clive Graham Clinical Director for Infection Prevention

<sup>53</sup> Ibid

- 77. We started testing in-house on the 16th March 2020. Varieties of platforms for testing were procured so after the first week there was no interruption in in-house testing.<sup>54</sup>
- 78. By mid-April 2020, the laboratory supported care community outbreak management and swabbed both symptomatic and asymptomatic residents of a particular Care Home to try an interrupt transmission of an outbreak. Asymptomatic patient admission screening commenced on the 8th of April 2020.<sup>55</sup>
- 79. Patient contacts were initially just isolated and only tested if symptomatic. As 2020 progressed we felt this strategy could be improved, particularly as such contacts were cohorted and that regular testing (at some stages daily) would allow us to detect cases who we could isolate and interrupt transmission within this cohort.<sup>56</sup>
- 80. The main driver behind asymptomatic patient testing (both contacts and other in-patients) was to detect cases early and reduce the risk of nosocomial infection. At times, we were more cautious than National Guidelines in terms of our testing protocols. The Trust did experience nosocomial outbreaks at the Cumberland Infirmary, impacting both staff and patients. Outbreaks were recorded on the following dates:

Site	Date First Reported
CIC Willow AB RENAL, HAEMATOLOGY & GEN MED	27/06/2020
CIC Willow C Cardiology	03/07/2020
CIC Ophthalmology UNIT	04/07/2020
CIC Acute Medical Unit (staff outbreak)	11/08/2020
CIC Larch C Ward	15/10/2020
CIC Elm C Dementia Ward	31/10/2020
CIC ITU (staff outbreak)	11/11/2020
CIC Maple B/D ORTHOPAEDIC	17/11/2020
CIC Elm A STROKE & REHAB	18/11/2020
CIC ITU (staff outbreak)	20/11/2020
CIC Willow AB Renal & Medicine	06/12/2020
CIC Renal Dialysis Unit	09/12/2020
CIC Beech C Gastroenterology	10/12/2020
CIC Maple B ORTHOPAEDICS	21/12/2020

54 Ibid

<sup>55</sup> Ibid

<sup>56</sup> Ibid

CIC Maple A SURGERY	22/12/2020
CIC Larch C - GEN Medicine	27/12/2020

81. Outbreaks were managed in line with National Guidelines - isolation of cases, enhanced cleaning of clinical areas, "stop and clean", screening of asymptomatic staff and patients, improving ventilation particularly of bays and removal of beds to improve separation of patients. There were regular Outbreak Meetings that oversaw management with involvement of external parties (PHE and Local Authority Public Health colleagues).<sup>57</sup>

## The availability of PPE

- 82. The availability of PPE, and concerns about wearing it, were an issue for a significant number of staff<sup>58</sup>. Our occupational health team received 93 referrals relating to anxiety about PPE during the relevant period. An additional 250 fitness to work queries were dealt with via phone appointments, predominantly with nursing staff concerned about allergic reactions/skin integrity conditions caused by PPE.
- 83. Staff were concerned at the outset of the pandemic about PPE being rationed. Some staff purchased their own equipment. The Trust followed government guidelines throughout and issued PPE to everyone who needed it, in line with government guidelines as they changed. Bank and Agency staff reported to the Agency Team that some HCAs said temporary staff would not receive PPE. The Chief Nurse directly intervened and went on to the ward herself and told everyone they would be treated the same throughout the pandemic. She also regularly drafted comms that we could send out to agencies so that agencies were assured that the Trust was committed to the safety of agency workers. This was further confirmed when agency workers were included in the COVID-19 vaccination programme. Feedback from agencies was that this was not always the case in other Trusts.<sup>59</sup>
- 84. PPE requests to other NHS Trusts were managed through the NCIC command and control structures, which included a specific PPE Cell. In addition, the Local Resilience Forum (LRF) established a PPE Cell where all Health and Care agencies could respond to time critical supply issues where supplies had diminished towards critical levels (24-48 hours of supply remaining). This local shared resilience was key

<sup>57</sup> Ibid

<sup>&</sup>lt;sup>58</sup> Source David Allen – Assistant Director of People Services

<sup>59</sup> Ibid

to a successful avoidance of the impact of delivery delays, allowed for mutual aid, and replenished once stocks were delivered.<sup>60</sup>

- 85. In addition, NCIC has a shared procurement service, which provided opportunities for stock to be shared across the organisation and the University Hospitals of Morecambe Bay NHS Foundation Trust. This allowed greater flexibility and help to ensure that stock was available at all times. Regional requests for support were also available and critical stock levels and usage rates were monitored to ensure an effective safety netting of resource locally and across the region.<sup>61</sup>
- 86. NCIC also requested fit-testing support from the central NHS system and, as a result, two additional trainers were provided and remained in place until 2022.<sup>62</sup>
- 87. Daily requests were made via the central NHS PPE portal. The PPE requirement changed in line with the changing level of demand and the changing patient profile. PPE deliveries timings could take place at any time and, in response, an on-call system was put in place for the Trust's stores managers to enable deliveries to be received whenever they arrived.<sup>63</sup>
- 88. Requests to the central NHS PPE portal were usually responded to within 24 hours (or occasionally 48 hours). Sometimes the amount of PPE requested by the Trust would be reduced by the central NHS system to manage demand. As supply chain pressures grew, and additional procurement contracts were sourced centrally to increase supplies of facemasks and gowns within the NHS, there were some products that were not fit for purpose. Internal processes, already in place at NCIC prior to the pandemic, were followed and the Trust's Health & Safety team would check safety compliance and EN numbers. Non-suitable products were either not utilised or quarantined and the central team advised. The Trust's education & training of NCIC colleagues also reinforced the checking and reporting of any equipment that was damaged.<sup>64</sup>
- 89. For example, there were some instances of facemasks not being suitable as the mask ties were pulling away from the mask, and the EN number or type of mask could not be clearly ascertained. On two occasions, eye protection products/face

<sup>64</sup> Ibid

<sup>&</sup>lt;sup>60</sup> Information provided by Name Redacted Head of Resilience

<sup>61</sup> Ibid

<sup>62</sup> Ibid

<sup>63</sup> Ibid

shields were deemed unsuitable due their flimsy nature. Some PPE (predominantly facemasks) were received for use after their expiry date. However when this did occur, the Trust was provided with assurance records of testing for use.<sup>65</sup>

- 90. The central emergency request system was also used on a regular basis by the Trust's procurement team, and was effective in coordinating additional supply or regional mutual aid at pace when supplies were at (or approaching) critical levels.<sup>66</sup>
- 91. The NCIC procurement team also worked with a local supplier (Alpha Solway) to support supplies of facemasks. Alpha Solway, at the time, were establishing contracts with NHS Scotland. In addition to facemask provision, the supplier also assisted with fit-testing free of charge and the training of fit-testers. These fit-testing train-the-trainer sessions were also provided by other non-NHS organisations including Sellafield Ltd. This support was provided throughout 2020 while the Trust established a PPE Team trained to use both quantitative and qualitative fit-testing.<sup>67</sup>
- 92. In addition, NCIC had a reserve of resilience-stock of face visors and reusable FFP3 masks in preparation for a pandemic event. This stock was utilised and reduced the pressure on colleagues who did not fit-test successfully to a disposable mask but were suitable for a reusable mask (such as the Sundstrom SR100). <sup>68</sup>
- 93. Not all masks fit everyone and, particularly for colleagues with small or large faces, fit-testing to more than one mask was not always possible. In these instances, as with colleagues with protected characteristics, the Trust provided a full face/head respirator. These full face/head respirators were often difficult to obtain due to increased demand and, in some instances when colleagues could not be safely fit-tested, they were deployed away from areas that were high-risk. <sup>69</sup>
- 94. It became apparent very early in the pandemic that some colleagues had not been appropriately fit-tested and had been advised inappropriately in the application and checking of masks. Insufficient numbers of colleagues were fit-tested and knowledge was poor in relation to when and how to wear PPE. The Trust became aware via a local media source, following concerns raised to them by staff from the theatre teams

<sup>69</sup> Ibid

<sup>65</sup> Ibid

<sup>66</sup> Ibid

<sup>67</sup> Ibid

<sup>68</sup> Ibid

at CIC. The Trust conducted a Significant Incident (SI) investigation<sup>70</sup> to understand the potential consequences and lessons that could be learned. It became apparent that incidents relating to PPE had been raised, but not escalated into tactical and strategic teams prior to the media involvement. The learning from this led to the creation of the Trust's PPE Cell, which met daily and reported to the NCIC tactical response group. The focus of PPE Cell was to prioritise 'Fit-test Champions', secure sufficient fist-testing requirement - primarily the qualitative-testing hood system. Colleagues were redeployed to support fit-testing and provided a 07:00 to 22:00 service 7 days per week, and departmental champions trained as competent to deliver fit-testing. Due to changes in supply of facemasks, frequent re-testing was required. By late 2020, colleagues were recruited as PPE Educators. Fit2Fit accreditation and 'IOSH Managing Safely' training was provided for those colleagues involved.<sup>71</sup>

- 95 Name Redacted Head of Resilience, believes that: '*Training within the NHS was (and still is) very limited and could be improved with a national NHS profile and competence for PPE Educators.*<sup>72</sup>
- 96. The Trust has maintained a PPE Team and continues to fit-test new colleagues and conduct annual fit tests on two or more masks.<sup>73</sup>
- 97. Overall, PPE & RPE shortages did affect colleagues' well-being. Increased anxiety was apparent, particularly for colleagues working in areas with high viral load due to the cohorting of COVID-19 patients. Many colleagues requested the reusable FFP3 mask, as they felt safer and preferred an FFP3 to a universal mask. Psychological as well as physical safety is an important aspect of working in challenging situations and staff need to feel confident and as comfortable as possible with the PPE they are wearing. While facemasks were challenging due to the constant change of supply, the provision of Gowns and visors were at times more challenging, as there were limited alternatives.<sup>74</sup>

<sup>&</sup>lt;sup>70</sup> NCIC SI 2020/9331, Fit Testing

<sup>&</sup>lt;sup>71</sup> Ibid

<sup>&</sup>lt;sup>72</sup> Ibid

<sup>&</sup>lt;sup>73</sup> Ibid

<sup>74</sup> Ibid

**98.** Despite these challenges, all staff groups were included and considered for PPE and colleagues with any protected characteristics were provided with full face/head respirators to allow them too safely continue within their roles.<sup>75</sup>

#### The impact of visiting restrictions

- 99. The local Visiting Guidelines were implemented in accordance with National Guidelines. <sup>76</sup>
- 100. With visiting restricted in most situations, staff were often asked for permission to visit inpatients who were end of life in line with guidance. The Trust identified that routine communication with relatives was reduced and measures were therefore put in place so that clinical staff contacted relatives on a regular basis so they could be updated regarding clinical care.<sup>77</sup>
- 101. There was concern regarding the risk of transmission to visitors and subsequent need to isolate, the use of Personal Protective Equipment by visitors in high-risk settings such as Intensive Care where FFP3 masks were recommended. These were managed on a case by case basis.<sup>78</sup>
- 102. Visiting restrictions were eased in April 2022 although additional precautions were put in place to minimise overcrowding particularly in bays given the limited space within these areas.<sup>79</sup>
- 103. The visiting restrictions were considered and discussed. From an Infection Prevention perspective, The Trust was cognisant of the morbidity and mortality of the patients being cared for; the lack of immunity of contacts prior to vaccination becoming available; the vulnerability of elderly relatives; and the ever-present risk of nosocomial infection.<sup>80</sup>
- 104. We understand that these good intentions were not always well received. National guidance may not have been flexible enough at all times, and certainly, as

77 Ibid

bidl <sup>08</sup>

<sup>75</sup> Ibid

<sup>&</sup>lt;sup>76</sup> Source Clive Graham Clinical Director Infection Prevention and Control

<sup>&</sup>lt;sup>78</sup> Ibid

<sup>79</sup> Ibid

vaccination became more widespread visiting could perhaps have been cautiously reintroduced sooner.<sup>81</sup>

- **105.** Based on patient and relative feedback received, the visiting restrictions did have a negative impact on some people's experiences<sup>82</sup>. During the relevant period, the Patient Advice & Liaison Service (PALS) dealt with 161 concerns from family members / loved ones relating to visiting restrictions and lack of communication from ward, trouble contacting the ward or conflicting communication from ward staff. <sup>83</sup>
- 106. Feedback from patients illustrates some of their concerns:
  - "I wish there was some sort of visiting, even just one person for a short time, it is so hard doing this alone".
  - "The only thing is that visiting hours (to Maternity) are a bit awkward when people are working. I was expecting there to be a later slot in the evening".
  - "I get why 'double visiting' isn't allowed but maybe there could be a bit more discretion in the situation. It's hard being a first time mum and it's quiet in here at the moment".
- 107. To offer support to patients and their loved ones during this time the Patient Experience Team implemented a range of measures:
  - Messages to loved one we acted as a point of contact for loved ones to send messages and photos to their loved one who were inpatients – this was available by phone or email. All messages and photos were then copied onto a template, printed and laminated and hand delivered to the ward for staff to hand to patients and or read the messages to them. From 07 April 2020 to 28 June 2022, a total of 938 messages were received and provided to patients.
  - Meet and Greet Volunteers to support family members and patients by transferring patient clothing / items to the ward for patients and returning with any patient clothes that needed laundered.
  - Keeping Patients Connected to support patients keeping in contact with their loved ones via telephone or video calls. The Trust received donations of I-Pads from various companies to support with this e.g. Sellafield and DPD and these were provided to wards along with a mobile phone for patient use.

<sup>&</sup>lt;sup>81</sup> Ibid

<sup>&</sup>lt;sup>82</sup> Information on patient experience provided by Name Redacted Patient Experience Manager

<sup>&</sup>lt;sup>83</sup> Ibid

- The Patient Experience Team purchased a stock of toiletries for patients who needed these during Covid, and a stock of clothes for patients who were at the point of discharge and did not have any family in the area and not able to visit due to lockdown The Trust ensured patients were discharged with dignity by providing appropriate clothes. <sup>84</sup>
- 108. To support this work the Patient Experience Manager made a successful bid for funding to the NHS England "Winter Volunteering Programme' to help recruit a volunteer coordinator to lead on recruiting and managing volunteers. A total of £19,452 was awarded and the Trust worked collaboratively with Cumbria Volunteer Service to recruitment the coordinator. In 2021/2022, a further expression of interest was completed and we received a further £17,500 to extend the Volunteer Coordinator's contract to expand the volunteer role.<sup>85</sup>
- 109. Our 'Keeping Patients Connected' volunteers played an important role in supporting patients through challenging times. They were also able to support the Ward Clerks by answering the phone, taking messages and, on some wards, supported ward staff with the reintroduction of visitors by booking the visiting slots for loved ones. The volunteers supporting patients with phone / video calls enabled ward staff to focus more on patients' clinical care needs and, in doing so, supported staff and patient wellbeing and safety.<sup>86</sup>
- 110. Balancing the need to minimise the risk of infection and enabling patients to benefit from the support of loved ones was a difficult challenge on a daily basis. Based on the information we have received the Trust cannot give a definitive response to whether the right balance was struck.

## The impact of the pandemic on non-Covid conditions

111. NCIC followed national guidance during the pandemic<sup>87</sup>. On 17th March 2020, Simon Stevens wrote to trusts to instruct them to stand down non-urgent elective operations and to undertake face-to-face outpatient's appointments only when 'absolutely necessary'. NCIC followed that guidance. The Strategic group made the decision in March 2020 to reduce elective activity, in line with Simon Stevens' letter, so that we could release our theatre staff to undertake training on ITU.

<sup>&</sup>lt;sup>84</sup> Ibid

<sup>&</sup>lt;sup>85</sup> Ibid

<sup>&</sup>lt;sup>86</sup> Ibid

<sup>&</sup>lt;sup>87</sup> Source Danny Batten Deputy Chief Operating Officer

- 112. During this period, we maintained urgent cancer and urgent operating. We set up an MDT meeting where clinicians would bring their priority patients and we would allocate the remaining elective capacity to those patients. Each Royal College released guidance to their specialties to set out the changes to pathways that they recommended during Covid. The clinicians reviewed these and followed them. The guidance reduced the recommended amount of operating. In addition, we prioritised patients, in line with national guidance, in the P1-3 categories. These categories supported in us allocating the theatre resource appropriately.<sup>88</sup>
- 113. There were a few challenges with running elective care:
  - Lack of space due to ITU surge into recovery
  - Lack of theatre staff as they were supporting ITU
  - PPE pressures lack of PPE
  - Guidance on cleaning of theatres following aerosol generating procedures (all general anaesthetic) slowing down operating<sup>89</sup>
- 114. We overcame some of these challenges by changing how we worked and reshaping our areas of working to accommodate the electives. The surgeons worked well together in prioritising lists to ensure the most appropriate patients were operated on. In addition, we converted our day surgery wards and theatres to take more complex elective activity. This change has continued following Covid. We increased our elective activity again from May 2020, with routine activity restarting from 26th May 2020.<sup>90</sup>
- 115. During the first wave of the pandemic, elective and non-urgent procedures were suspended due to the surge of COVID patients in the recovery unit at WCH and a shortage of anaesthetic staff for theatres and ICU<sup>91</sup>. This decision, made within the Trust, was influenced by limited capacity in the Integrated Care System (ICS) to accommodate COVID patients requiring ICU support. In subsequent waves, improved support from the ICS and access to private care providers allowed us to resume elective and non-urgent treatments, prioritised based on national guidelines, within our limited capacity in Carlisle's main hospital and independent sector. <sup>92</sup>

<sup>&</sup>lt;sup>88</sup> Ibid

<sup>&</sup>lt;sup>89</sup> Ibid

<sup>90</sup> Ibid

<sup>&</sup>lt;sup>91</sup> Source Ioannis Michalakis Breast Surgeon and Associate Medical Director

<sup>92</sup> Ibid

- 116. Providing care for non-COVID patients was a daily challenge due to limited hospital space, unexpected staff absences, long-term sickness from COVID-19, hospital-acquired COVID (among patients and staff), and external flow issues. Multiple daily tactical-level meetings were often necessary to coordinate staff efforts and maintain an acceptable level of care.<sup>93</sup>
- 117. We adhered to national guidelines for prioritisation and pathway modifications, implementing these based on our capacity and the prevailing conditions dictated by the hospital's COVID status.<sup>94</sup>
- 118. Ioannis Michalakis Clinical Director for Breast Surgery told us how innovation helped ensure elective care could be maintained: "I can provide an example from this specialty. We introduced Radiofrequency seeds for marking non-palpable breast cancers, eliminating the need for pre-surgery breast radiology. This enabled surgeries to take place in the private sector, away from the hospital".
- 119. For the treatment of patients with ischaemic heart disease, we continued throughout this period to provide all inpatient care for those presenting with acute emergencies<sup>95</sup>. We maintained coronary care facilities and ward based care. We continued to provide echocardiography, pacing and coronary angiography with intervention, which was consultant led. This also included the treatment of ST elevation myocardial infarction (STEMI) patients with Primary Percutaneous Coronary intervention (PPCI). A policy was devised for the treatment of STEMI patients with thrombolysis in the event there were not the staff available to provide coronary intervention or in cases in COVID-19 patients where the patient would be deemed high risk or intolerant of lying flat. We also linked in with the regional cardiovascular network.
- 120. From an outpatient perspective, we continued to provide care through remote consultations as appropriate and following the guidance we received through the Trust and discussing at the clinical meetings for sign off. A consultant cardiologist

<sup>93</sup> Ibid

<sup>94</sup> Ibid

<sup>&</sup>lt;sup>95</sup> Information on cardiology provided by Louise Buchanan Clinical Director for Cardiology and Deputy Medical Director

triaged all patients in cardiology and this has been maintained following the pandemic. A remote hub was developed to allow for telephone consultations away from the clinical areas. An ischaemic heart disease specialist nurse returned from retirement to help with telephone consultations when clinicians were required to look after inpatients. There was a period where non-urgent elective cases of coronary intervention were postponed and this decision was taken at Trust level following national advice.<sup>96</sup>

- 121. For the treatment of acute medical patients, we split into a 'red' admissions unit and a 'green' admissions unit, which was based in the cardiology ward. This did result in teams being required to work in different ways; however, the medical consultant team worked collaboratively to ensure the areas were covered.<sup>97</sup>
- 122. In relation to our maternity services, decisions to alter provision of service were taken through tactical command to strategic command for approval<sup>98</sup>.
- 123. In relation to antenatal care:
- Partners were not permitted to attend for scanning appointments in the antenatal period due to the size of the room, number of persons in the room and the risk of infection.
- Antenatal clinic attendance was for the woman only unattended, except in exceptional circumstances in order to reduce the footfall through this department.
- Community midwives undertook antenatal booking appointments via telephone with a shortened face-to-face consultation to follow for phlebotomy etc.
- Antenatal parenting classes / infant feeding support classes were suspended

124. In relation to Intrapartum care:

- The number of attending birth partners for a woman in labour was kept to one with exceptions for exceptional circumstances, bereavement, mental health conditions.
- Home Birth provision was suspended due to the Ambulance service not being able to guarantee transfer times for women wishing homebirths should there be complications.
- Women who were Covid positive / symptomatic were barrier nursed and went to a designated Covid theatre if needed.

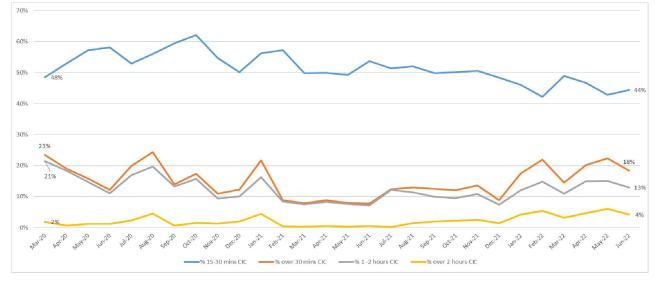
<sup>96</sup> Ibid

<sup>97</sup> Ibid

<sup>&</sup>lt;sup>98</sup> Information on maternity services provided by Amanda Kennet Associate Director of Midwifery from 30.3.2020

- 125. And in relation to visiting
- Changes to visiting were logged on the patient facing website via the Local Maternity and Neonatal System (LMNS)
- Visiting on the postnatal wards was not permitted.
- Postnatal home visits by Community Midwives were a mix of face-to-face and phone support as needed.

126. As the information below demonstrates, the Trust did not experience significant deterioration in ambulance handover times during the relevant period.<sup>99</sup>



Appendix 3. Ambulance handover times March 2020 to June 2022 Exhibit LS/03 INQ000469926

# Ethics and decisions making

127. There was a general concern about the lack of clinical data and evidence to guide clinicians in the care of COVID-19 at the beginning of the first wave<sup>100</sup>. The NICE decision making tool around Clinical Frailty Scores was adopted to aid decision making regarding escalation of care (NG159), and as that was refined by NICE its updates were disseminated for use. The tool was discussed at the daily Clinical Director meetings. An Ethics Advisory Panel chaired by Associate Medical Director Matt Phillips helped to embed this tool. The tool was considered in terms of its ability to apply consistent principles to patient care.

<sup>&</sup>lt;sup>99</sup> Source NCIC information team

<sup>&</sup>lt;sup>100</sup> Source – Matt Phillips Associate Medical Director and Chair of Ethics Panel

- 128. In practice, clinicians recognised that dealing with a new illness created new challenges. Jon Sturman Clinical Director for ICU told us: "Since everyone dealing with Covid patients was experiencing a new illness with different features, of course there was uncertainty of who to admit to ICU and when to recognise futility. The team were already briefed by me of the high mortality seen in Wuhan and published by the New England Journal of Medicine. As an ICU team, we briefed frequently and sought second opinions in the vast majority of cases.
- 129. "We used the national frailty score in addition to years of experience in dealing with the standard criteria for admission to ICU – functional status, comorbidity, derangement of acute physiology. In the absence of national guidance in an unknown area, this served us as best as could be expected".
- *130.* There were no significant changes to the criteria for admitting patients to the ICU other than that use of the NICE decision making tool was reinforced. There was some learning regarding the use of oxygen therapy notably that there was poor evidence for continuing CPAP beyond 3-4 days in patients with critical oxygenation indices<sup>101</sup>.
  - 131. Senior doctors report that the Trust did not experience ethical challenges in relation to the rationing of care, though it was an issue that concerned clinicians<sup>102</sup>.
    Associate Medical Director Matt Phillips chaired an Ethics Panel. He told us:
  - 132. "There were national concerns about capacity as demonstrated by the Nightingale hospitals opening, and those concerns were also present within the clinical community. In reality, the concerns were about how to come to a fair and equitable decision should it come to a point where rationing were necessary, and this was a point discussed within the Ethics Advisory Panel. No cases were raised to the Ethics Advisory Panel where this was a reality. The potential for it to occur appeared to weigh on the minds of colleagues."
  - 133. This point was Confirmed by Clinical Director for ICU Jon Sturman:"We discussed this openly as a team (senior ICU doctors and nurses) with cascading to all staff. Since we never reached this point, the discussion remained in abstract."

<sup>&</sup>lt;sup>101</sup> Source Jon Sturman Clinical Director ICU

<sup>&</sup>lt;sup>102</sup> Based on information submitted by Associate Medical Director Matt Phillips, Associate Medical Director Louise Buchanan, and Clinical Director ICU Jon Sturman.

134. Jon Sturman also updated us on the use of ReSPECT forms and whether the existence of a DNACPR notice was used in in any decision to escalate care. He told us:

"The trust does not use respect forms to my knowledge. In various forums the use of pre-printed treatment escalation plans has been debated and rejected as we feel they are either too proscriptive or do not describe potential future eventualities accurately enough to act upon. We rather valued the use of an expert ICU review as more potent and accurate. As an ICU team and as CD we had frequent discussions with physician colleagues regarding escalation thresholds and daily contact with the respiratory team. There was a culture of learning in both ward and ICU areas."

135. NCIC does not yet have an Electronic paper record so DNACPR notices were paper based.<sup>103</sup> Colleagues were not aware of any concerns being raised about DNACPRs which were inappropriate, or being issued disproportionately to patients with protected characteristics. We are not aware of any specific guidance being issued by the Trust how to explain DNACPR notices to patients and families. However, there were a number of training opportunities related to DNACPR, as it is an important part of the role of doctors, nurses and the wider clinical team. Specifically, Bond Solon<sup>104</sup> offered additional training relating to Acting Lawfully and Ethically under the Coronavirus Act. This was provided on three dates to members of the ethics committee and consultants interested in attending. Further training was offered in the Emergency Department through Clinical Psychology relating to difficult conversations.

## Understanding equality impacts

- 136. The widespread use of PPE across the hospitals did create some concerns for patients with protected characteristics<sup>105</sup>. During the period, the PALS service received a 4 concerns relating to PPE from patients or family members:
  - Two PALS concerns related to patients who were exempt from wearing a facemask. When attending an appointment they were challenged by staff for not wearing a mask even though they were wearing exemption lanyards.

<sup>&</sup>lt;sup>103</sup> Information on DNACPRs provided by Matt Phillips AMD and Chair of Ethics Committee And Tom Sams ICU clinician

<sup>&</sup>lt;sup>104</sup> https://www.bondsolon.com/health-social-care/

<sup>&</sup>lt;sup>105</sup> Source Name Redacted Head of Patient Experience

- Two PALS concerns were from patients who had a hearing impairment; one had asked why staff were not using facemasks with the clear section to assist with lip reading. The other PALS concern was from a patient who had asked the staff to pull their mask down so they could lip read but the staff refused to do this.
- 137. A family member raised a formal complaint about the way they were treated when they visited a family member who was receiving end of life care. They also attended a public board meetings to share their experience, and were given a formal apology by the Trust. The family member felt they were treated differently because they were of black ethnicity, they were the only family member requested to put on PPE. The rest of the family members were white, and were not requested to put on PPE. The family member felt that the gloves were a barrier for him when he was saying his final good byes to his sister. At the time of the incident, all visitors should have been required to wear PPE.<sup>106</sup>
- 138. From patient surveys, the following comments were received:
  - "The staff were helpful and pleasant as wearing a facemask makes me tense due to poor hearing (hearing aid lost before recent pandemic)."
  - "Trying very hard to hear a hospital doctor (soft spoken with accent) wearing a mask (most of the time an appointment is exhausting and I did not hear some of what the doctor was saying which is upsetting/sad when you are hearing for the first time about your health. For hearing impaired people of all ages it would be beneficial to patient and doctor if a better solution for this problem could be worked out, whether by the doctor wearing clear Perspex masks or similar to assist the patients especially, or a Perspex shield that other public places use or headphones etc. There are always ways around these problems for us all. However, I am hearing impaired and the doctor wore a facemask throughout my appointment. I told him a few times I could not hear him and sometimes let me see his mouth to lip read."<sup>107</sup>

#### Impacts on hospital staff<sup>108</sup>

139. Inevitably, the pandemic had a significant impact on staff wellbeing and morale. Initially staff expressed concerns about:

<sup>106</sup> Ibid

<sup>107</sup> Ibid

<sup>&</sup>lt;sup>108</sup> In formation in this section provided by David Allen Assistant Director of People Services

- equipment & PPE availability
- lack of timely risk assessments
- correct FITT testing of masks
- being redeployed into areas that required higher / more recent experience of skilled patient care, which they thought put patients at risk
- Concerns about visibility of senior staff on wards
- Concerns about their own families (who may be vulnerable or shielding) if staff contracted Covid.
- reduced numbers of staff caring for patients on wards, due to staff sickness or isolation
- 140. These matters were addressed at the regular tactical meetings that took place, on at least a daily basis, where senior Trust managers discussed PPE issues, staff concerns, staff availability, redeployment and staff capacity as well as NHSE and Government advice & vaccination requirements. Actions from these meetings were captured and tracked.<sup>109</sup>
- 141. Staff and managers were informed of policy requirements and changes through regular bulletins and intranet posts, including:
  - pay issues when they were off sick, shielding, working from home or redeployed
  - welfare support such as the option to use different masks, or be redeployed if they were unable to wear masks due to underlying health issues.
  - signposting to areas of information e.g. mental health support hub
  - the ability to carry over annual leave to the next year (contrary to policy) if staff were required to cancel annual leave due to staffing shortages
  - the ability to obtain hospital or hotel accommodation at no cost to staff, e.g. if on call or they were not able to live at home due their relatives' Covid status
  - the requirement for managers to undertake risk assessments for staff who may be vulnerable – e.g. BAME staff – and refer staff into OH as necessary for advice
  - Support when schools were closed by way of flexible working
  - Letters provided to allow staff travelling as essential workers (especially as there were different government rules around travel etc. for staff living in Scotland but working in England).

<sup>109</sup> Ibid

- Advice for pregnant staff who were concerned about attending work and vaccination requirements.
- Green Zones / Red Zones were put in place to identify areas that were Covid free allowing redeployment of vulnerable staff.<sup>110</sup>

142. Non patient- facing staff were encouraged to work from home when possible. Areas where staff were continuing to attend work were risk assessed and designed to enable appropriate separation; there was an increased use of Teams meetings and reduced travel between sites / attendance at face-to-face meetings; all areas were provided with wipes and facemasks. All staff were provided with Covid testing kits and given clear, updated, flow charts explaining what to do re absence or return to work if they tested positive or were symptomatic.<sup>111</sup>

143. Human Resources processes were reviewed, including:

- agreement to pay full pay for staff off due to Covid
- staff would not be placed on a trigger under the Attendance Management Policy due to Covid absence
- staff with long Covid were supported during the pandemic by not following the usual Attendance Management Policy to terminate employment; adjustments were put in place to allow a return to work; staff were also encouraged to approach Access to Work for advice on reasonable adjustments, which were put in place.
- less serious disciplinary cases were put on hold or dealt with through agreed sanctions.
- flexible working was encouraged to allow caring responsibilities as well as attending work
- recently retired or bank staff were approached, to ask if they would return; pension requirements re break in service were relaxed to allow return.<sup>112</sup>
- 144. Inevitably, our Occupational Health team were busy. Through the relevant period, management referrals for mental health and wellbeing increased significantly including 1,583 for anxiety, depression and bereavement and 132 for long Covid.

<sup>110</sup> Ibid

<sup>111</sup> Ibid

<sup>112</sup> Ibid

There were also 752 referrals for physical health issues during this period including support for musculoskeletal issues, cancer and other long-term conditions. <sup>113</sup>

- 145. The Trust acted proactively to take steps to minimise the impact of the pandemic on staff. Measures to address physical health included.
  - Fast track referral process to physiotherapy for staff
  - Urgent referrals to long Covid clinics, chest physician, dermatology
  - Wellbeing conversations
  - Regional wellbeing hub
  - Local Wellbeing Hub and phone line/network
  - PPE advise and specialist support from IPC
  - Access to swabs, appropriate PPE, hand hygiene and emollients<sup>114</sup>

146. A wide range of mental health and wellbeing support was available to colleagues.

- A huge range of local and regional options for support via teams, telephone, NHS attend anywhere, text services or face to face appointments
- Trauma response psychology staff supported with debriefs and risk assessment of staff involved in incidents, and arranged follow up with individuals and teams
- Team Time and Schwartz Rounds<sup>115</sup> with teams
- CMT training with teams
- Intensive six weeks programmes with some front line teams such as ITU, and a psychologist to support with distress, moral injury
- Access to chaplaincy and bereavement services on site or remotely
- Supervision and appraisal processes with managers
- Wellbeing conversations
- Wellbeing hub
- Wellbeing resources via the staff intranet including promotion of the NHS
  National Staff Support Line: 0300 131 7000 and Text FRONTLINE to 85258 <sup>116</sup>
- 147. In terms of physical wellbeing spaces, it is difficult to give a general view on their efficacy because estates pressures and the social distancing guidance will have had a different impact in different locations, resulting in a variation across teams. Virtual
- 113 Ibid

<sup>114</sup> Ibid

<sup>&</sup>lt;sup>115</sup> The Schwartz Centre website

<sup>&</sup>lt;sup>116</sup> David Allen, Assistant Director People Services

forums to discuss wellbeing were highly effective and are still highly effective as a way of delivering support. For example, over 60% of OH consultations remain virtual e.g. phone or teams and the outcomes have been as positive if not better for some staff.<sup>117</sup>

- 148. The national Covid-19 risk assessment for staff was found to be resource intensive to deliver at pace, particularly on the smaller specialist teams such as Health & Safety, Occupational Health and the Infection Prevention Team who supported Managers in understanding the requirements of the assessment. However, it was found to be a useful tool to identify staff at risk and who may need to be redeployed. It also identified gaps in knowledge on some employees' health that were not recorded.<sup>118</sup>
- 149. EIA's were not formally carried out, but equality impacts were considered to ensure, wherever possible, the impact of PPE on all staff groups were provided for. For example, facial hair was required to be removed for the wearing of FFP3 masks. However where this was not acceptable to an individual due to a faith belief. As an alternative, the Trust provided a full-face hood mask. This was well received by the individual concerned, and other staff in this group as they could perform their roles safely without compromising their faith beliefs. Staff and patients with sensory losses were accommodated by undertaking dynamic risk assessments to allow visual viewing particularly for lip reading, social distancing, visors, and methods of swabbing to minimise risk to either party.<sup>119</sup>

#### **Relationships with national bodies**

150. The first cases had to be discussed with National Teams as a "High Consequence Infectious Disease" and there was very clear case-by-case management with strict isolation measures implemented. Our planning process for High Consequence Infectious Diseases (HCIDs) is that, after appropriate rapid testing, cases are transferred to a designated HCID treatment centre, our policies and procedures were therefore designed around this with an anticipation that any isolation will be temporary when testing is under way. As a result, when Covid-19 was

<sup>&</sup>lt;sup>117</sup> lbid

<sup>&</sup>lt;sup>118</sup> Source Name Redacted Head of Emergency Planning and Resilience

<sup>&</sup>lt;sup>119</sup> Ibid

removed from the HCID list our facilities were limited, as were the number of staff who had received training to manage such cases <sup>120</sup>

- 151. Clive Graham, Clinical Director for Infection Prevention and Control, told us: "As case numbers increased in the community it became apparent that PHE colleagues were becoming overwhelmed by the number of cases/enquiries. Locally we evolved contact with local Public Health colleagues and this allowed mutual sharing of knowledge of cases and outbreaks within our local population. Our local Director of Public Health had good access to local epidemiological data, which I am aware some of my colleagues in Acute Trusts did not have.
- 152. "Colleagues in PHE gave useful input into our outbreaks and also to Local Authority Public Health colleagues.
- 153. "We were frustrated by the publication of National Guidelines often on a Friday and could not understand why draft versions had not been shared more widely so we could feedback to help improve them, allow us to prepare communication and work with our teams on implementation. Communicating and updating staff remained a challenge through the Outbreak.
- 154. "We did set up a Regional Infection Prevention Group so we could share practice, this included Consultant Microbiologists and Infection Prevention leads and remains in place. It has been a positive legacy of the pandemic.
- **155.** *"One of the national leads (Susan Hopkins) was exemplary in her support of Infection Prevention leads".*

## **Recommendations from the Trust**

- 156. COVID had a major impact on the NHS and we need to be better prepared for future pandemics there are a number of elements to this<sup>121</sup>:
- Ways in which to support staff resilience: The Trust helped to support staff during the pandemic. Subsequent research has analysed the impact of the pandemic amongst

<sup>&</sup>lt;sup>120</sup> Source Clive Graham Clinical Director for Infection Prevention and Control

<sup>&</sup>lt;sup>121</sup> Source Clive Graham Clinical Director Infection Prevention and Control

staff groups, both in the UK and elsewhere<sup>122</sup>. Although resilience is not formally assessed work-related stress is a part of the NHS Staff Survey<sup>123</sup> and appears to remain elevated although improving.

- Personal Protective Equipment resilience: Availability of PPE was a major issue in the early phases of the pandemic, and the procurement lessons from this (supply chains, volumes used and time to upscale) should be used to inform planning for future pandemics. Furthermore specific items of PPE (such as FFP3 masks) require training and individual organisations needs to have plans in place to rapidly upscale fit testing and training on PPE use.
- Adequate Estate to both reduce the risk of nosocomial transmission but also to allow as much elective and emergency activity to continue as possible. Research studies match the Trust's local experience – in particular: "Increased transmission to inpatients was associated with hospitals having fewer single rooms and lower heated volume per bed.<sup>124</sup>" To mitigate the impact of future pandemics, consideration might be given to how the NHS might improve availability of single rooms and the spacing between patients.
- More integrated working both at the national level (clear on roles of UKHSA and NHS England) and at the local level (NHS Trust and Local Authority (including Care Homes)). Locally this worked well with, at times, daily meetings between UKHSA, local authority and Trust staff to provide mutual support. We are aware that colleagues in other areas did not have the same experience and struggled to obtain local epidemiological data.
- Greater resilience in Supply Chains (laboratory reagents, PPE, vaccines, medication). During the pandemic a number of supply problems were encountered, not just PPE. In particular, if the Trust did not have a variety of molecular diagnostic platforms, we would not have been able to continue to test in-house resulting in delayed diagnosis of cases

<sup>&</sup>lt;sup>122</sup> Healthcare worker resilience during the COVID-19 pandemic: An integrative review. Rachel Baskin and Robin Bartlett: Wiley Online Review February 2021

<sup>&</sup>lt;sup>123</sup> NHS National Staff survey 2023

<sup>&</sup>lt;sup>124</sup> The burden and dynamics of hospital acquired SARS-CoV-2 in England: Nature Vol 623 2 November 2023

# 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.

	Personal Data	
Signed:	[]	

Lyn Simpson. Chief Executive Officer NCIC

Dated: 12 April 2024