Witness Name: Emma Watson
Statement No. 1 - Module 3
Exhibits: 29
Dated: 24 May 2024

UK COVID-19 INQUIRY

WITNESS STATEMENT OF PROFESSOR EMMA WATSON,
Executive Medical Director
(NHS Education for Scotland from 01 April 2022 and formerly Deputy Medical Director at NHS Highland from January 2020 until September 2021)

I, Emma Watson, MSc, FRCPath, FRCPEd, will say as follows: -

PROFILE

1. As part of the UK Public Inquiry investigation (Module 3), which is to examine the impact of the COVID-19 pandemic on the care and management of patients, I have been asked to provide a statement as NHS Highland's former Deputy Medical Director about the impact of national decision making and leadership on the healthcare system, challenges that arose and the impact on staff and patients at Raigmore Hospital during the relevant period (01 March 2020 to 28 June 2022).

2. I make this statement on behalf of NHS Highland based on my own knowledge and recollection as well of that of relevant colleagues who held key roles at NHS Highland during the relevant period and who are still actively employed by NHS Highland. My statement should therefore be read as representing the collective understanding.

3. I am currently the Executive Medical Director at NHS Education for Scotland (NES). I took up this position on 01 April 2022. I was Deputy Medical Director in NHS Highland from January 2020 to September 2021. In the intervening period I was a UK Harkness Fellow based at the University of North Carolina in the USA.

4. Prior to my role as Deputy Medical Director NHS Highland, I was both Associate Medical Director NHS Highland and a senior Medical Officer in the Scottish Government Workforce and Strategic Change Directorate. My background is as a

Consultant Medical Microbiologist and a senior clinical systems leader with an interest in quality improvement and in medical education and workforce planning.

5. In both roles as Deputy Medical Director at NHS Highland and as a senior Medical Officer my focus is on developing innovative approaches to ensuring equitable access to high quality health care services with a sustainable health and care workforce, particularly in remote and rural areas. I have led several major change programmes including the development of Scotland's first graduate entry medical school. As Director of Medical Education in NHS Highland I focused on the delivery of high-quality medical education as a tool to increase recruitment and attract young doctors to the region as well as ensuring there is now an established programme to encourage young people from the area to go to medical school.

6. During the COVID-19 pandemic I, along with other senior leaders, led the clinical response in the acute sector of NHS Highland and ensured there was a whole system approach to manage the impact of the virus.

BACKGROUND

7. The population that Highland Health Board (otherwise known as NHS Highland) serves is approximately 320,000 people. This population is broadly equally divided across urban areas, small towns, rural areas, and very rural areas. Outside Inverness and the Inner Moray Firth area there are several key settlements around the area including Wick and Thurso in the far north, Campbeltown in the southwest and Portree in the west. These towns act as local service centres for the extensive rural area which makes up most of the region.

8. NHS Highland covers over 32,500 square km, making it one of the largest and most sparsely populated Health Boards in the UK. NHS Highland has two associated Health and Social Care Partnerships (HSCPs): - North Highland HSCP and Argyll and Bute (A&B) HSCP. **Exhibit EW/01 [INQ000427390]** - Map showing different medical centres within the NHS Highland, including NHS Highland Hospitals, GP Practices and Branches/Partners.

9. North Highland HSCP operates through a lead agency partnership agreement with The Highland Council (THC). THC act as lead agency for delegated functions relating to children and families, whilst NHS Highland undertake functions relating to

adults. A&B HSCP is run under an Integrated Joint Board (IBJ) model in partnership with Argyll & Bute Council.

10. Raigmore Hospital is the District General Hospital providing acute health services for the North Highland population. Acute services are also provided at two Rural General Hospital (RGH) sites at Belford in Fort William and in Caithness. In Argyll & Bute acute health services are provided at Lorn & Islands Hospital in Oban.

11. The main building at Raigmore Hospital was constructed in two main phases between the 1960's and 1980's. It consists of an 8-floor Tower Block housing general and speciality wards, operating theatres, an intensive care unit and a coronary care unit. There is also a maternity unit and a children's ward. All of these are serviced by comprehensive support services.

12. It also houses a main outpatient department along with several specialty outpatient departments including: The Highland Breast Centre; Macmillan Suite (cancer services); eye clinic; ear, nose, and throat clinics. Ophthalmology services, from around April 2023 are housed at the National Treatment Centre, Inverness.

13. There are diagnostic clinic areas providing a range of radiological examinations including plain film x-ray, MRI, and CT. Allied Health Professional clinics also run across the Raigmore site.

14. Raigmore has close links to tertiary services in the central belt of Scotland and in Aberdeen. The Hospital provides comprehensive general care across most clinical specialties and is a training hospital for Nursing and Medical staff in association with NHS Education for Scotland; the University of the Highlands and Islands, Stirling, Aberdeen, St Andrew's, and Dundee Universities. Allied Health Professional (AHPs) and midwifery training is provided in conjunction with Glasgow Caledonian, Queen Margaret, Robert Gordon, and Napier Universities.

15. Raigmore is a Regional Cancer Centre.

16. Outreach Services are provided to remote, rural and island areas including other Territorial Health Boards e.g. the Western Isles.

17. The Hospital is managed by a Director of Operations who is supported by a local Management Team.

18. At the outset of the pandemic, Raigmore Hospital comprised the following divisions: -

- Medical Division – This division delivered an Acute Medical Admission ward, a medical High Dependency Unit and a Coronary Care Unit as well as an Emergency Department and an Integrated Out of Hours Service. The Division also delivered services across Care of the Elderly, Diabetes, Gastroenterology, Infectious Disease, Respiratory, Renal, Stroke and Young Adult Rehabilitation Neurology, Rheumatology, Dermatology and Cardiology. The division also provided Cancer Services (Oncology and Haematology). Surgical Specialties Division – provided services across a wide range of specialities including General Surgery, Upper Gastrointestinal tract, Colorectal and Vascular, Orthopaedics, Ear, Nose and Throat, Urology, Ophthalmology. The Division also managed Anaesthetics, a 7 bed Intensive Care Unit, 11 Theatres and a Day Surgery Unit.
- Women and Child Division – included Obstetrics, Gynaecology, Maternity Services, the Highland Children's Unit and Special Care Baby Unit.
- Clinical Support Division - encompassed Laboratory Services, Radiology, Medical Physics, Outpatients and Patient Booking and Health Records Management.
- Quality and Patient Safety Division - led by the Lead Nurse and Deputy Medical Director and was responsible for developing and monitoring the implementation of quality and patient safety strategies, along with the management of adverse events including Significant Adverse Event Reviews (SAER)s. This Division was also responsible for delivering, maintaining, and enhancing a pro-active and positive Quality and Patient Safety culture contributing to NHS Highland's clinical governance roles, responsibilities, and plans. This division was also responsible for Hotel Services comprising of Domestic Services, Portering and Security, Catering, Telecommunications and Accommodation.

STAFFING CAPACITY

19. NHS Highland had the benefit of time at the start of the pandemic. As COVID-19 spread north through Scotland, we had a two-week period which was not afforded to central Scotland or other areas. At Raigmore, we used this time advantage to prepare for the pandemic. We stepped down some activities at Raigmore Hospital a few days in advance of being asked to/mandated by Scottish Government. On 13 March 2020 NHS Highland instructed that non-urgent outpatient review appointments and non-urgent diagnostic testing should be suspended in response to the COVID-19 pandemic. The pause enabled the following: -

- Preparation of triage areas for patients
- Training of staff in Infection Protection & Control in new techniques (IPC)
- Release of staff to support other areas
- Reduction of footfall through the hospitals
- alternate appointment methods (phone, video) were established across clinical specialities
- Provide access to devices to support self-isolation and home working (laptops, iPads, personal computers, specialist workstations, VPN fobs or tokens, mobile phones, monitors, and other peripherals)
- Provision of accredited tools to host online meetings (WebEx and then Microsoft 365/TEAMS)
- EHealth Department restructured their normal out of hours support to establish a seven-day service via the eHealth Service Desk

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20. We used this period to focus on training and supporting our staff which included upskilling staff to work in areas other than their normal fields of practice. This enabled staff to be released, if needed, to support essential services and patient care during anticipated periods of increased demand and staff unavailability. As prevention of transmission of infection to staff was also of significance importance to ensure their continued availability, face to face outpatient attendances only took place on an exceptional basis.

21. We also focused on reconfiguring and equipping ward areas to house red and green pathway patient groups. Please see **Exhibit EW/02 [INQ000427393]** - Spreadsheet from NHS Highland, titled Estates Operations, COVID 19 Action Tracker and **Exhibit EW/03 [INQ000427394]** - Blueprint of Raigmore Hospital.

22. Planning, reconfiguring areas and allocation of staffing resources was key at the outset. Attached is an example of the initial considerations given to reconfiguring or redesigning the Tower Block at Raigmore Hospital along with considerations to staffing as the numbers of absence increased due to COVID-19 infection or self-isolation. **Exhibit EW/04 [INQ000477633]** - Report titled Changing Tower Block use to prepare for COVID-19.

23. The pandemic had implications for staffing. The health and social care system in Scotland had been undergoing reform before the pandemic. The establishment of health and social care partnerships and a plan to move care out of hospitals and to

reduce the bed compliment in hospitals to release staff to support more people at home. This move was in response to a more person-centred approach. As the population has aged and there has been an increase in multimorbidity it has been challenging to financially sustain necessary growth in healthcare budgets across the NHS and care systems. This impacted on the health and care services ability to sufficiently grow workforce numbers, modernise infrastructure and estate in the years preceding the pandemic. Raigmore hospital experienced these challenges both with pressures on sufficient workforce numbers and an estate that was in need of replacement, indeed plans were being developed for a replacement hospital. Within Raigmore our workforce pressures were exacerbated by staff absence due to infections, self-isolation, shielding, and a reduction in the ability to recruit from overseas. This necessitated redeploying staff to high need areas to maintain service provision in emergency and critical care.

24. In early March 2020, we took the following measures: -

- Stepped down non urgent outpatient clinics
- Specialist nurse clinics were cancelled from 16 March until 01 August except for some intravesical cancer treatments
- Allocated Trauma and Orthopaedics staff as additional support to the Accident & Emergency Department/Minor Injuries Unit
- Redeployed junior doctors to COVID-19 wards
- Training provided in different methods of clinic delivery (such as Near Me and Virtual)
- Redeployed nurses with critical care experience assigned to Intensive Care Unit(s) (ICU)
- Redeployed dental and dermatology staff to Fit Testing Team (for face masks)
- Offered fixed term contracts to bank workers
- Utilised students as support workers
- Re-engaged with retirees whose registration had lapsed in the preceding 3 years
- Redeployed non-clinical staff with active professional registration

25. I am not able to give exact number of redeployments and when these took place, but I can comment that without these redeployments, NHS Highland would not have been able to provide the level of service that it had during the pandemic. My recollection is that prior to the pandemic, the staffing position at Raigmore Hospital was stable considering the ordinary challenges of recruitment. These are particularly pronounced and exacerbated due to the geography and demographics of NHS Highland. Uplifts in nursing staff numbers following Workforce Planning reviews undertaken in 2019 had been recruited prior to the onset of the pandemic.

26. **Exhibit EW/05 [INQ000427395]** - Document from NHS Highland, regarding staff levels at Raigmore Hosptial between March 2020 and June 2022 is attached and shows the staffing level at Raigmore Hospital during the relevant period, as recorded on the electronic Employee Support System (eESS) which is the national workforce system used by NHS Highland. The number of Junior Doctors in training (DDiT) over the same specified period is also shown.

27. **Exhibit EW/06 [INQ000427396]** is a table showing the number of bank shifts requested by month and by job level.

28. **Exhibit EW/07 [INQ000427397]** is a table showing the number of bank shifts by month and location.

29. **Exhibit EW/08 [INQ000427398]** is a table showing the number of bank shifts requested by month and by reason.

30. **Exhibit EW/09 [INQ000427399]** is a table showing the number of staff hours lost to COVID-19 related conditions.

31. The number of Consultants and Speciality and Specialist (SAS) doctors employed at Raigmore during 2019-2022 is detailed below: -

Year	Consultants	SAS
Jan 2019	208	79
Dec 2019	220	81
Jan 2020	214	84
Dec 2020	215	80
Jan 2021	220	90
Dec 2021	228	85
Jan 2022	228	91
Dec 2022	245	104

32. In Spring 2020, workforce capacity was affected as there was no onsite diagnostic testing for COVID-19 at Raigmore until the equipment and testing kits became

available. Tests were sent to Glasgow (Glasgow is approximately 170miles from Inverness) with a turnaround time of about a week, this meant staff awaiting test results had to self-isolate until their results were available. There was limited capacity for all testing and therefore there was a limit imposed on staff testing - initially to 30 COVID tests per day because there were not more test kits available. Offers to recruit bank staff were also challenging with staff not being able to take on shifts due to COVID-19, caring responsibilities and the time it took to get a clear COVID-19 test result.

33. By the end of March 2020, the coordination of advice on fitness for work and any NHS Highland staff testing for COVID-19 was done by our Occupational Health Service. There was limited laboratory testing due to capacity and the eligibility criteria that were applied. The eligibility criteria to be tested were that colleagues must work in an area of critical service need which had been prioritised by senior management. The prioritisation was done daily by a Silver Command Subgroup. While testing was being introduced at the Raigmore Lab the number of tests that could be carried out locally was limited this was due to ensuring quality assurance of results. Priority for Raigmore Lab testing was given to hospital inpatients and for care home outbreaks. All staff samples continued to be sent to the virology lab in Glasgow. The turnaround time was two days or more as the Glasgow lab was receiving increased samples from across the country.

34. Around 26 March 2020, there was a change in the healthcare staff testing guidance; Symptomatic family members living in the same household as NHS workers were to be offered COVID-19 testing from now on. This was a further increase in demand for testing. At that stage, there was still limited local testing.

35. Antibody testing of staff was not carried out at Raigmore Hospital.

36. Two retired Respiratory Consultants returned to work at Raigmore Hospital during the relevant period they were registered with the GMC under the COVID-19 Temporary Emergency Register (TER).

37. We did not send or bring staff in from other hospitals mainly because of the geographical distance between hospitals in our area, but we did attempt to redeploy some of our non-clinical staff who retained professional registration back into the clinical workforce. This proved challenging with some staff reporting heightened

anxiety at returning to the clinical environment and not feeling confident with their clinical skills. We did address that by offering training to support staff experiences those types of issues. I am not able to comment whether there were any patterns to the challenges faced by some staff but anecdotally I was aware of a degree of anxiety amongst some staff who had not been practising in the clinical environment for some time as they were office based.

38. We also did not have any temporary COVID-19 or relief hospitals (such as the NHS Louisa Jordan) in our area and therefore did not have to release staff to other such sites.

39. I am not able to comment on the measures or responses taken by other Health Boards, other NHS Bodies or by the Scottish Government to alleviate staff shortages.

40. Staffing shortages were addressed daily and reported through daily huddles and the operational command structure (Gold, Silver and Bronze Command please see **Exhibit EW/10 [INQ000477634]** - Report titled NHS Highland Response to Corona virus meeting structure as of Monday 09 March 2020.

41. A Workforce Resource Centre was established to meet the changing workforce requirements during the pandemic. The Resource Centre was responsible for matching the supply of internal staff and external resources to the changing demands of the service. Escalation routes are through the command structure. We put in place a range of different options to increase our capacity of available staff, including the use of volunteers, bank workers and support from Council colleagues. We also looked at redeployment of our existing workforce. Training sessions in the Centre for Health Science were set up to enable colleagues to take on parts of the role of Health Care Support Worker, if needed. The training covered infection control, PPE and taking and recording vital signs. We encouraged colleagues to consider this training, particularly those in Corporate Services, Administrative and Support roles. We encouraged colleagues whose work had been reduced or was not considered essential at that time to consider how they could support delivery of critical front-line services. Interested colleagues could register with the recently set up Resource Centre.

42. Military Liaison Officers were deployed to each NHS Board in Scotland to assist in the response. Two Majors were assigned to NHS Highland and were based at Assynt

House, Inverness (NHS Highland Headquarters) for the duration of their deployment. We are grateful for their expertise and knowledge, particularly their logistical expertise. They assisted with coordinating and transporting PPE and other supplies; coordinating the voluntary effort (particularly those more vulnerable who required additional level of welfare support) and gave logistical advice.

43. Around 06 April 2020, we received guidance from Scottish Government that if a colleague wished to return early from maternity leave, adoption or shared parental leave, to support the COVID-19 outbreak, Health Boards would be able to make arrangements to agree leave equivalent to that which remained, once the outbreak was over. This was a practical workaround as the rules of statutory leave provisions could not be changed, but this enabled and ensured that there was no detriment (in terms of holidays/leave) for those colleagues who wished to return to work early.

44. Although we recognised and addressed the need for adequate staffing, we did also encourage and promote the importance of annual leave for colleagues. We encouraged colleagues to take their planned annual and public leave, if possible, and for managers to continue to encourage this, in themselves and others. It was recognised early on that the emerging situation was unprecedented and that it was likely to impact for a lengthy period, so it was not considered sustainable for everyone to be working throughout all this time. We promoted that leave should only be cancelled where there were compelling operational requirements to do so and no other options to cover the work were available.

45. An Agile/Smart Working Group was set up to take forward the development and implementation of our new ways of working. One of the key roles of this group was to oversee and provide support and guidance to the divisional units to ensure they assess and manage the risks of COVID-19 in the workplace.

46. Around September 2020 NHS Highland stepped up its contact tracing capacity to provide support for the national Test and Protect system. We promoted the role of Contact Tracer to colleagues particularly colleagues who could not work in their normal roles due to risk assessment or underlying health conditions, but who could work in a socially distanced office environment and/or from home.

47. Around November 2020 there was some delays with PVG certificates being issued. These are need for anyone working in regulated care. The Protecting Vulnerable

Groups (PVG) scheme is managed by Disclosure Scotland. This was a national issue however our COVID-19 related recruitment was still being turned around.

48. I am not able to go into more detail on staff shortages, but it is widely accepted that across the UK, NHS Trusts and Boards have been affected by staff shortages for many years prior to the pandemic. NHS Highland continues to face workforce shortages, which are exacerbated by the complex geography of the region, competition for scarce resources from other sectors.

LONG COVID

49. I understand there are now around 30 staff known to Occupational Health and the Long Covid Service. These staff members are from a variety of roles across the whole NHS Highland Health Board area and not just the Raigmore site. I am unable to state how many of those were employed specifically in Raigmore Hospital. The majority of those with Long Covid have been on leave for greater than one year and, therefore, their absence is likely to have impacted adversely in the departments in which they work.

50. During the specified period, 693 working days were lost because of staff suffering from Long Covid.

51. We were fortunate that although some of our staff inevitably contracted COVID-19, with some being very unwell consequently, and with others going on to suffer the effects of Long Covid, we did not experience the death of any staff members because of COVID-19.

VACCINATION RATE AMONGST STAFF

52. Vaccination of staff in Raigmore began on 09 December 2020. There was a COVID-19 Vaccination thumbnail on the front page of the NHS Highland intranet site which included leaflets for health and social care staff about the vaccine(s). The initial pilot vaccination of staff took place in ICU at Raigmore Hospital. This area was chosen as it was a high-risk area and we needed to have the space to train staff and to test the appointment application (app) that had been developed by eHealth colleagues. The vaccination campaign was then rolled out to all three localities. Second round vaccination clinics commenced on 16 February 2021 with support from the University of Highlands and Islands who opened their Centre for Health Science building in Inverness as a COVID-19 vaccination hub for NHS Highland workers.

53. **Exhibit EW/11 [INQ000427400]** provides detail of the vaccination programme.

54. **Exhibit EW/12 [INQ000427401]** shows the staff vaccination numbers for December 2020. Raigmore data would be included in the SM staff column.

55. By 17 March 2021, 86% of NHS Highland staff had received vaccination. I do not have a breakdown for Raigmore specifically.

56. There was no policy of compulsory vaccination for staff. NHS Scotland (NSS) did not mandate vaccinations for staff. I would suggest that NHS Scotland may be able to provide the rationale for taking that stance/approach, but all NHS Highland staff were encouraged to take up any vaccinations offered to them, regardless of their role, however at no stage was this mandatory. My recollection is that staff across the whole of NHS Highland; North Highland HSCP; A&B HSCP; care home sector; community care sector; and primary care/allied health professionals were keen to get vaccinated.

57. Due to the availability of vaccines, the issue for Highland HSCP was not so much staff not participating in vaccination but more how to phase the vaccination programme as we needed to co-prioritise acute in hospital settings and acute in community settings.

58. Raigmore delivered vaccination for all staff-based in Highland (community workers, primary care colleagues, social care colleagues as well as acute staff). In December 2020, when the supply of the vaccine was limited, we were prioritising the vaccination of care home residents and staff, staff undergoing asymptomatic testing, and staff working with COVID-positive patients. Clinical colleagues worked with the Vaccine Strategy Group to further refine the prioritisation. Advice on priority groups for COVID-19 vaccinations had been issued by the Joint Committee on Vaccination and Immunisation (JCVI) and the Chief Medical Officer (CMO). Three Subgroups were set up to oversee the roll-out, alongside associated programmes such as testing and visiting: -

- Primary Care (GPs and their staff, and the wider population)
- Care Homes
- All other health and social care colleagues

59. By 05 April 2020, our numbers of confirmed and suspected COVID-19 cases were increasing in line with predictions. The Microbiology Department had been working for several weeks with staff from the national Labatories Programme, Health Protection Scotland, National Procurement, and the Scottish Microbiology & Virology Network (Joint COVID-19 Diagnostic Group), to introduce local testing and expand testing capacity within Scotland to meet the demands for diagnostic samples and of health and social care workers. Samples were being received and processed on a continuous basis throughout the day, seven days per week. Real Time Polymerase Chain Reaction (RTPCR) runs were performed twice per day at 11.00am and 1pm. Depending on the number of samples and pattern of receipt the runs could be started earlier and an additional, third run could also be done as required to ensure timeous delivery of results. Results were reported as soon as the run was complete and were made available on SCI-Store which is a key patient information repository. Out of hours testing was not available at that time.

60. By 20 April 2020 samples were received and processed on a continuous basis, seven days a week from 8am to 8pm Monday to Friday and from 9am to 5pm on weekends. Samples were batch processed and processed on the next available run.

61. As more vaccines became available, we were able to offer more staff protection which commenced with front line staff but ultimately all NHS Highland staff members, irrespective of whether they had direct patient facing roles.

BED CAPACITY

62. Discussions relating to bed use within Raigmore Hospital to deal with the anticipated significant COVID-19 numbers began in early March 2020. These considered infection control issues and the planning of various alternative changes to be made to the layout and use of the wards in the Tower Block at Raigmore Hospital.

63. Wards were reconfigured to accept, and care for suspected and confirmed COVID-19 patients. Areas were also identified for non-COVID-19 patients.

64. Contingency plans for managing and accommodating COVID-19 positive patients were also made in Paediatrics and Maternity.

65. The social distancing measures required to comply with national guidance led to a

reduction in the number of available beds across adult inpatient areas.

66. In relation to bed capacity, I have included the data below to show the number of occupied beds on general wards as of 06 March 2020 and then on 27 March 2020 after targets had been set by the Director General of Health & Social Care to increase general and ICU beds.

	6th March 2020		27th March 2020	
Ward Type	Available beds	Occupied beds	Available beds	Occupied beds
ICU	7	1	16	1
General	343	325	364	188

Note: General wards have been interpreted as any inpatient bed, excluding beds in ICU, HDU, paediatric wards or maternity wards. The available beds figure is a count equal to the number of funded beds, less any temporary closures, plus any contingency beds opened due to capacity issues. The occupied beds figure is the number of beds used to accommodate inpatients or reserved for patients on pass leave. The daily counts are based on the census position at 10pm.

ICU CAPACITY

67. Initial steps to increase ICU capacity focused on delivering space, equipment, and staff to cope with 200% capacity. Having moved to a new Critical Care Unit comprising 8 ICU beds and 8 High Dependency beds, we also had available the previous/old 8-bedded ICU area. In addition to this, we had retained and maintained a stock of medical equipment from the 2009 H1N1 influenza pandemic that helped with respect to increasing the number of physical ICU beds. A summary of some of the measures are outlined below: -

- Identification of space and equipment to accommodate 16 ICU patients (normal baseline capacity at the time was 7 ICU beds)
- Thereafter the use of additional areas and use of anaesthesia equipment was considered to accommodate up to 40 ICU patients (theatre recovery, Barn Theatre

and Surgical High Dependency (SHDU) space)

- Relocation of other teams from the critical care floor to create space and a safe working environment for non-critical care staff
- Reconfiguration of physical spaces and ventilation equipment to allow negative pressure ventilation in all areas where COVID-19 patients may be cared for
- Identification of all staff with ICU previous experience, who could be seconded to help staff these beds
- Early transfer of deteriorating patients from our Rural General Hospitals (RGHs) to allow all Aerosol Generating Procedures (AGPs) to occur in our main hospital
- Close working with the Emergency Medical Retrieval Service (EMRS) to assist with transfers in or out from the main hospital in our Board
- Reconfiguration of medical staff rotas to allow senior ICU medical staff to cover only ICU and be resident on-call at times of peak pressure
- Training of current staff in the use of PPE and caring for COVID-19 patients
- Training additional staff to support ICU staff at times of extreme pressure (from theatres and theatre recovery)
- Mapping out oxygen flow capacity for the entire hospital to determine safe placement of patients.

68. Senior Leadership Team members made frequent visits to the Critical Care Unit. There was also wider support from the Scottish Intensive Care Society (SICS) and Scottish Government. SICS support involved frequent meetings of Clinical ICU leads from each Territorial Health Board to allow information sharing. Scottish Government support allowed distribution of nationally purchased equipment around the country.

69. Initially, lack of dedicated ICU ventilators and infusion pumps was an obstacle, but later in the pandemic this was addressed by the Scottish Government through the national purchasing route. In the interim, anaesthetic equipment could have been used to support expansion of ICU beds, but this contingency was not needed in our Health Board as additional equipment was delivered before our capacity of ICU equipment was exhausted. We had additional ICU ventilators delivered to us from NHS National Services Scotland in late October 2020. Infusion pumps were sourced continuously from other areas.

70. Throughout the pandemic we had sufficient equipment to care for the patients we had. Our Board's Medical Equipment Department were instrumental in ensuring this

supply.

71. The three capacity levels that you have enquired of constitute normal operation for us and so no additional planning was required for 85%, 92% and 100% capacity.

72. By moving the Surgical High Dependency Unit (SHDU) to theatre recovery we were able to increase our baseline of 7 beds to 16 beds and additionally we were able to utilise the "old ICU" area to provide an additional 8-9 beds. Beyond that, an additional 13 beds could be provided in theatre recovery, by recovering patients in the operating theatres (if needed). This would have mandated moving SHDU again to a surgical floor. Finally, a dedicated Barn Theatre could accommodate a further 4 ICU beds.

73. Neither theatre recovery nor the Barn Theatre was required at any point during the pandemic.

74. Concerns were raised about the impact on safe nurse and medical staffing beyond 100% capacity and these were addressed by seconding any nursing staff with previous ICU experience from other departments and by rewriting junior and senior medical staff rotas. Additionally, training was provided to theatres, recovery, and anaesthesia staff to help support safe patient to staff ratios. Our baseline capacity was 7 ICU beds at the start of the pandemic and there were many times during the pandemic that we exceeded this, mostly in waves 2 & 3. The number of days was so numerous that we would need service planning data to accurately quantify, as I do not have a way of accessing this data. Concerns were raised by our lead Consultant in Intensive Care Medicine through the Bronze, Silver and Gold Commands and our ICU team was supported in changing medical staff rotas, securing additional nursing staff from Theatres and additional junior medical staff from the anaesthesia team.

75. We did not transfer patients to other ICUs and managed to cope with the workload internally. We were in constant contact with other Health Boards through SCIS and contingencies for Mutual Aid were discussed. At the start of the pandemic (wave 1), there were some difficulties for the Scottish Ambulance Service (SAS) and the Emergency Medical Retrieval Service (EMRS) with respect to the transfer of COVID-19 positive patients who were undergoing a therapy considered to be an Aerosol

Generating Procedure (AGP). A solution was found by SAS and EMRS and these organisations would be able to provide further detail directly on their procedures for transferring patients and the relevant dates.

76. We are part of the North of Scotland Trauma Network, which in turn is part of the wider Scottish Trauma Network. Raigmore Hospital is a Trauma Unit (TU), and we have a close working relationship with our Major Trauma Centre (MTC) located in Aberdeen Royal Infirmary (ARI). We meet regularly and review cases within the North Network.

77. The Scottish Trauma Network was set up in 2018 and is split into 4 areas North, East, Southeast, and West. The North network encompasses both NHS Highland and NHS Grampian with Raigmore serving as a Trauma Unit (TU) and Aberdeen Royal Infirmary serving as the Major Trauma Centre (MTC).

78. Between March 2020 and June 2022, we had 259 patients that fell under the Trauma Team umbrella. Of these, 30 patients were admitted to Raigmore ICU and 15 were then transferred to Aberdeen Royal Infirmary which is within our Trauma Network; 1 was transferred to St John's Hospital, Livingston which is within the Southeast Trauma Network and 1 was transferred out with to Royal Preston Hospital, Preston.

79. Within this same period, we received 11 patients from Aberdeen Royal Infirmary (ARI); 2 patients were transferred from ICU to ICU and the remaining 9 were transferred from ICU to wards. We also received 1 patient from Queen Elizabeth National Spinal Injuries Unit (Glasgow) which is part of the West of Scotland Trauma Network.

80. We receive trauma patients from around NHS Highland, although some are taken directly to ARI if the injuries are consistent with needing MTC care. To my knowledge, no patients had a pathway different to that in place before the pandemic. There may have been slight delays whilst we awaited COVID-19 swab results, but as far as I recall our trauma pathways functioned as normal, although during the national lockdowns it was my impression that our trauma numbers were significantly down on pre lockdown numbers.

81. We did not engage or utilise the private healthcare sector to address staff capacity, to ensure medical equipment, treat non-COVID conditions and/or carry out elective surgery.

MEDICAL EQUIPMENT/MEDICINES

Ventilators

82. There was a limited number of ventilators available for increased critical care bedspace requirements. However, NHS Highland placed orders from before January 2020 for 3 Draeger critical care ventilators. The orders were honored, and the equipment arrived in April 2020. The older ventilators, which were due to be removed from use, were then kept in use as well. We also repurposed transport ventilators and relocated these to ICU from other areas within Raigmore Hospital. This was a local response involving Medical Physics Technologists and lead clinicians.

83. When there was a need to further expand critical care bed spaces there was a local response in conjunction with the supplier to repurpose and reconfigure anaesthetic machines from Theatre as ventilators for ICU use. A further 5 ventilators were provided by the Scottish Government in November 2020, followed by another 4 in January 2021.

Dialysis

84. Another issue was the provision of dialysis areas for COVID-19 positive patients away from the main renal unit. The sourcing of additional equipment such as water pressure booster pumps was protracted by supply chain issues. These were obtained direct from the usual suppliers by the electromedical equipment service on behalf of the Health Board.

85. Due to the age of some of the areas within Raigmore and the infrastructure, some additional equipment was required to enable correct functionality. For example, there was low water pressure in many areas. Additional pumps were therefore sourced by the electromedical equipment service on behalf of the Health Board and installed to increase the minimum water pressure to enable dialysis to take place.

Haemofiltration Units

86. There was a potential shortage of ICU haemofiltration units if COVID-19 ICU patient numbers spiked. These units were not available direct from the usual supplier. The Scottish Government placed orders nationally. NHS Highland received 2 haemofiltration units in May 2020.

High Acuity Monitoring

87. There was an initial shortage of high acuity monitoring equipment in ICU2. There was limited stock available direct from the supplier. The Scottish Government placed orders nationally.

88. NHS Highland had recently replaced the high acuity monitoring in Belford Hospital and had not disposed of the removed equipment. The monitoring removed from Belford Hospital was relocated to ICU2. This was supplemented in June 2020 by Scottish Government supplied monitoring.

Monitoring Required on Ground Floor

89. There was a shortage of monitoring equipment for ground floor wards at Raigmore Hospital. There was limited availability from suppliers initially. The Scottish Government provided Mindray monitoring. I do recall some slight issues due to unavailability of mounting brackets, however our local Medical Physics team liaised with manufacturers to secure sufficient supplies.

90. The Scottish Government supplied additional monitoring equipment in July 2020. Installation and configuration were handled by our Medical Physics team and clinicians.

Syringe Drivers and Infusion Pumps

91. There was an initial shortage of volumetric infusion pumps because of limited availability direct from supplier. The Scottish Government placed orders with suppliers. Initially, this was addressed locally by reconfiguring syringe drivers to operate as generic ml/hr pumps for infusions. The Scottish Government then provided additional 28 volumetric infusion pumps in July 2020 followed by another 8 in October 2020 and a further 12 in January 2021. 20 additional syringe drivers were also provided by the Scottish Government in January 2021.

Defibrillators

92. There was a lack of defibrillators for additional critical care areas and limited availability direct from suppliers. Our local Medical Physics and Resuscitation Teams relocated all available loan and training devices to required areas.

Oxygen

93. Earlier in April 2020, one Trust in London was reported as nearly running out of oxygen, another declared a critical incident due to an oxygen-related technical issue on 04 April 2020. In Scotland, detailed data on equipment and infrastructure was gathered nationally for several weeks by Health Facilities Scotland (HFS)/National Services Scotland (NSS) to assess readiness for a surge in demand.

94. NHS Highland acute sites, Raigmore, Lorn & Islands, Caithness and Belford hospitals all have piped medical gas systems. Raigmore has the highest provision capacity amongst these sites. Supply of liquid oxygen had been the focus of resilience by the UK and Scottish governments at this time, and assurances were given to Health Boards of robust supply. I would refer to **Exhibit EW/13 [INQ000427402]** - Report from NHS Highland, titled Oxygen Therapy Capacity.

95. **Exhibit EW/14 [INQ000427403]** is the closing report from the Oxygen Resilience Group from 16 June 2020 confirming that the Group had originally estimated the risk of inability to supply oxygen as likely. The risk was reduced as the weeks went on and the actual peak of patient numbers was much lower than the worst-case scenario from modelling.

96. Representatives from Medical Physics, Pharmacy, Estates, and the Oxygen Resilience Group assessed capacity for provision of oxygen across all NHS Highland sites. The assessment found that there was sufficient capacity at acute hospital sites assuming ICU capacity was expanded to 40 beds (as planned) and with a further need for 60 level 2 critical care patients treated in the COVID-19 admissions unit. Further modelling of capacity was subsequently undertaken.

CPAP Machines

97. Regarding CPAP machines, the bigger problem was CPAP consumables rather than CPAP machines. A significant challenge in March 2020 was securing appropriate

CPAP masks which had to be non-vented and have appropriate exhalation valves to be entrained into the circuit. Prior to the pandemic we used vented masks for acute CPAP, so we had no supply of non-vented masks except in ICU. The response was at hospital level. We initially shared stock with ICU and secured a second supplier (Phillips Respironics) who were able to supply additional masks. Supplies were initially slow and low in volume but were delivered.

98. It was difficult to secure a supply of vented circuits to deliver acute CPAP and considerable time was spent 'making up' circuits to allow a non-vented mask and filtered exhalation port in the circuit. This had safety and training implications as staff were using a made up, unfamiliar circuit and mask.

99. We purchased (ResMed Astral) ventilators at the beginning of the pandemic to deliver Non-Invasive Ventilation (NIV), CPAP and allow transfer of patients out of ICU. These devices were supplied without difficulty and have since been used for ventilator dependent patients living in Highland.

100. At the beginning of the pandemic, exact date not known by me, we also secured 4 Philips EVO devices from national services due to potential concerns over increasing rates of infection and admissions at Raigmore, however these devices were never required and subsequently fell under a Field Safety Notice and have since been returned.

101. There were concerns about oxygen availability to drive the CPAP devices, and our Estates Team worked to ensure the clinical areas delivering CPAP (ground floor and first floor) had sufficient delivery systems.

IPC GUIDANCE

102. During the pandemic national IPC guidance was received from various sources, such as the Chief Nursing Officer (CNO), Chief Medical Officer (CMO) and Antimicrobial Resistance & Healthcare Associated Infection (ARHAI) offices. ARHAI met weekly with Government representatives and Infection Control representatives within Health Boards. Information was cascaded internally via various NHS Highland communication channels (email, meetings (formal and informal), bulletins, webpages, posters, staff huddles, education sessions). Additional support was provided by NHS Highland Communications Team to issue global staff communications.

103. National guidance changed frequently and was, on occasion, issued outside of normal working hours. The timeframes for implementation were often short and therefore at times challenging.

104. Urgent guidance changes were emailed to staff and added to the NHS Highland intranet site. To address out of hours requirements the Communications Team's on call rota was available which meant that the Executive on call could request all-staff or global emails were sent at any time by calling the Communications Officer on duty.

105. The Infection Prevention and Control Team prepared a report - **Exhibit EW/15 [INQ000477639]** - Report regarding current PHE guidance for Interim Prevention & Control asking the Highland Board to approve use of fluid resistant surgical masks (FRSM) for all; this was not in the national guidance at that time. The decision to advise the use of FRSM was based on the opinion of the Infection Prevention and Control Team from evidence being presented from other countries that the use of a FRSM for all patients would reduce the risk of transmission. This was discussed by the Senior Management Team and approved which ensured that all patients were nursed by a staff member wearing FRSM. This is an example which shows NHS Highland were proactive in the implementation of control measures which were above the national requirements at the time. This was a measure implemented nationally later.

106. Sometimes changes in guidance were such that they required significant preparation work (such as creating and putting up different signage or providing additional training). One of the examples is when national guidance changed, and it was expected that patients were tested additionally on the 5th day of an inpatient stay l. Implementation of this guidance required a lot of preparation work (education, ensuring that all wards had sufficient tests, increasing capacity, and staffing within laboratory). As a result of the preparation required, the actual implementation did not occur until all preparation work was completed to ensure a coordinated testing regime across the hospital - **Exhibit EW/16 INQ000477640** - Patient label from NHS Highland titled Inpatient COVID 19 Testing Record).

107. Implementing guidance relating to aerosol generating procedures was challenging in the initial period of the pandemic as there was not a nationally agreed definition for

aerosol generating procedures published for some time. Consequently, multiple Royal Colleges published their own guidance which often conflicted. NHS Highland therefore had to adopt a local approach across various disciplines of staff, and this had to evolve with changing information and the publication of updated guidance. As an example, please see attached document - **Exhibit EW/17 INQ000477641** - Report titled Decision over definition of Aerosol Generating Procedures for NHS Highland.

108. Cohorting of patients with COVID-19 (or contacts of a COVID-19 patient), was one of the measures that was used at times when all single rooms were occupied. This occurred under the direction of the Incident Management Team and/or following discussion with members of the Senior Management Team and Infection Prevention and Control and was in line with national guidance (please see National Infection Prevention and Control Manual: COVID-19 NIPCM Archives (scot.nhs.uk)). In addition to this, physical barriers were fitted between curtained bed spaces in the form of plastic screens in December 2020. Where possible, due to infrastructure and in specific areas, additional air cleaning was added from December 2020 onwards using Hepa Cubes which provide additional filtration of circulating air in an area.

109. National procurement had oversight of the distribution of test kits, reagents, and other testing supplies throughout Scotland to ensure there was not a shortage of kits or equipment at any site. Scottish Microbiology and Virology Network's (SMVN) Technical Group had representatives from all Health Boards and discussed laboratory issues collectively. Health Boards worked together to ensure that each lab had necessary supplies, and this sometimes meant posting supplies between labs in Scotland.

110. COVID PCR tests were initially sent to the West of Scotland Specialist Virology Centre (WoSSVC) in Glasgow. In-house testing in Raigmore Hospital then began after that and subsequently local testing was set up across NHS Highlands Rural General Hospitals. NHS Highland also had access to the national hubs for testing when needed.

111. I am not aware of any shortages of test kits, reagents, or other testing supplies during the relevant period. All positive SARS-CoV-2 results were phoned, reported, and documented by laboratory personnel and the clinical microbiologists. Turn-around

times were monitored daily, and a weekly report discussed nationally. A 24-hour target for turn-around times (from receipt of sample in the lab to report being issued) was made nationally. This was on some occasions not met due to equipment issues including faults, staffing pressures, volume of samples, in these instances it is not possible to say from our documented information what the clinical impact was on an individual level. As per national guidance, any symptomatic patient was advised to be isolated prior to a result being available and screening tools were in place to facilitate this.

112. National guidance was followed regarding SARS-CoV-2 testing for symptomatic and asymptomatic patients and staff. This was continually discussed within a local group (NHS Highland Testing Group chaired by Public Health lead) and national groups (SMVN Technical Group) on a regular basis. There were many and frequent updates to the national guidance throughout the period in question which required implementation at pace and dissemination onwards to all staff, visitors, and patients. Clinical teams were responsible for requesting testing. Within the laboratory, tests which were identified as requiring urgent testing were prioritised. NHS Highland is responsible for staff and patients across a variety of health and social care settings, and as a result guidance for all acute, community and care home settings needed to be reviewed and implemented at pace, therefore the total number of Scottish national documents including updated versions was 69. Note that prior to 26 October 2020 UKHSA guidance was used as no Scottish national guidance was published until that date. NHS Highland adhered to national guidance and on some occasions tested over and above the national guidelines, for example all intensive care patients on admission were tested more frequently.

TESTING

113. National procurement had oversight of distribution of test kits throughout Scotland to ensure there was not a shortage of kits at any site. Scottish Microbiology and Virology Network (SMVN) Technical Group had representatives from all Health Boards and discussed laboratory issues collectively. COVID PCR tests were initially sent to the West of Scotland Specialist Virology Centre (WoSSVC) in Glasgow. In-house testing in Raigmore hospital then began after that and subsequently local testing was set up in across Rural General Hospitals. We also had access to the national hubs for testing, if and when needed.

114. National guidance was followed regarding SARS-CoV-2 IPCT testing for symptomatic and asymptomatic patients and staff. This was continually discussed within a local group (NHSH Testing Group chaired by Public Health lead) and national groups (SMVN Technical Group) on a regular basis.

115. In the event of nosocomial outbreaks, the national COVID-19 and National Infection Prevention and Control Manual (NIPCM) outbreak management guidance was followed. Incident Management Teams (IMTs) were initiated for each outbreak and followed the national IPC guidance. Depending on the number of patients affected and the differing areas affected, local measures were implemented. Where any challenges were encountered this was escalated via the Gold, Silver, Bronze Command structures.

PPE/RPE

116. The practical steps taken by the hospital to obtain the quantity of PPE and RPE it required included the following: -

- All Business as Usual (BAU) PPE orders were placed via PECOS (an electronic ordering system) with the majority supplied via the National Distribution Services (NDS) as well as some items such as RPE by external suppliers direct. However, some key lines required as part of the response to the pandemic were in constraint due to the unprecedented volumes required. Items such as Type 11R masks, visors, long sleeved aprons, gowns sterile surgical and non-sterile, consumables for RPE were in limited supply with multiple Boards trying to secure the same stock.
- National Services Scotland (NSS) established the COVID-19 portal and coordinated the supply of the key critical lines of PPE/RPE via push allocations based on fair share allocation. Push allocations were used to gauge demand and anticipate the amount of stock required. Bulk deliveries were made by the NDS to the main central store at Raigmore Hospital where they were held in stock and then distributed to clinical areas. When stock within the central store required replenishment to service demand level, a request was submitted via the COVID-19 portal. Requests were submitted as required, with multiple requests often submitted

during each day/week. NSS supplied the Central Store with available stock which was sourced from multiple suppliers in a range of assorted sizes and due to the severe constraints within the supply chain were not always of the preferred brand/range of sizes.

117. A pandemic Request Form was devised for clinical areas to request these key PPE/RPE items. Upon receipt of the request form, the items were then dispatched by the Central Store and recorded.

118. To preserve and maintain ward stocks at required levels, to prevent over or under stocking, a team at Raigmore Hospital were tasked with specifically checking and replenishing stock in all clinical areas was established. Similar teams/tasks would have been set up in other locations across NHS Highland. The Central Store became the central receipt point for all incoming bulk push allocations deliveries and scaled up operations to facilitate this by extending opening hours to 5am to 8pm 7 days a week, with an on-call service provided out-with these extended opening hours.

119. PPE guidance was changed frequently. NSS provided daily bulletins from around late March 2020. We copied these out to staff to give out information and reassurance. We developed a COVID-19 Thumbnail on our staff intranet page and specifically a PPE COVID-19 Thumbnail.

120. Donations were received from members of the public and companies. We were incredibly grateful to those who donated and supported our staff. Offers of PPE were made as well as other gifts. As an organisation we had to ensure that any PPE issued to staff at NHS Highland was in line with national guidance and standards. during the initial days/weeks/months. We set up a page on our website where any donations could be catalogued in a central location. All donations were then recorded/logged by the Health & Safety Team and each item assessed for suitability, with many items being deemed unsuitable for use within clinical settings.

121. Mutual Aid was in place, coordinated by NSS, as levels of key PPE available within the Central Store Area were reported daily/weekly to NSS. All Mutual Aid was coordinated and supported by NSS with stock being moved according to demand between Boards via NDS BAU deliveries.

122. All requests for supplies from centralised NSS supplies were made via the online COVID-19 Portal set up by NSS. All emergency requests were submitted via the NSS COVID-19 Portal which has been closed and is no longer accessible to Health Boards. NSS may be able to provide details of all tickets/requests raised via this Portal, if required.

123. There were some examples, of note were those who had facial hair, stubble, beards, or small faces, throughout the pandemic period where both PPE and RPE were deemed unsuitable be it through compatibility/standards or expiration issues. In general terms, the supply issues were understandably more prominent at the beginning of the pandemic period when global, national, and local supply chains were at increased demand.

124. Face shields, full face visors, 3D printed visors, hand gels, safety goggles, safety glasses, hazmat and full body protective suits, gloves of multiple types (not an exhaustive list) were offered in the first phase of the pandemic by local construction companies, schools, and other private sector organisations. The products were assessed on a case-by-case basis for suitability against the international and national ISO/EN PPE/ RPE / hand gel standards and condition. If they met the required standard / condition they would be accepted; if not they were kindly declined with a supporting thank you letter/email.

125. There were also issues early in the pandemic (Spring - Summer 2020) with the national supply of visors. This resulted in local schools and businesses innovating 3D printing visors and attempting to donate non-certificated equipment to the NHS.

Despite the best intentions, they failed to meet the required International Organization for Standardisation (ISO) and/or European Standards (EN) and were not used in clinical settings and were only used when NSS / Health Protection Scotland (HPS) gave advice to Health Boards to no longer accept local donated supply.

126. One measure put in place to combat supply chain issues was that the reuse of visors needed to be considered, which resulted in devising new decontamination protocols along with training for staff. Attached is guidance from April 2020 on cleaning of visors – **Exhibit EW/18 [INQ000477635]**- Guidance from NHS Highland titled Guidance of Sessional Use of PPE; **Exhibit EW/19 [INQ000477636]** - Guidance from NHS Highland titled NHS Highland Standard Operating Procedure Decontamination of reusable face and eye protection when disposable visors and eye protection is not available; and **Exhibit EW/20 [INQ000477637]** - Report from NHS Highland titled Respiratory Protective Equipment & Fit Testing.

127. I have no evidence to suggest that the reuse of visors was ineffective, but from a risk perspective moving from disposal to a reuse model with revised decontamination protocols and additional training will increase the potential for increased exposure to clinical disinfectants and skin / respiratory issues, if not managed and controlled well.

128. The availability of protective equipment was a concern for some staff. There was much in the news and press about shortages. The anxiety around face masks was from my memory, not confined to some NHS staff. It was in the public consciousness and affected/made some people more worried and anxious than others.

129. Around the same time in Spring/Summer 2020, hand gels were also locally produced in the community. I am aware anecdotally that hand gel (non-certificated) donated by local whisky distilleries was used locally on occasion. Again, many did not meet the required standards, and usage therefore was restricted. Only those that met the

standards were used. Hand gels, either proprietary (but NHS approved) or locally manufactured e.g., by whisky and gin distillers, were offered during the initial stages of the pandemic (approximately March 2020 to July 2020). They were restricted because they were not NHS approved (e.g. either on the NHS contact, or locally approved by Infection Control, Health and Safety and Occupational Health).

130. Again, in Spring/Summer 2020, there were initial national shortages of aprons and scrub tops nationally which caused some anxiety amongst staff. Although there were concerns amongst some staff, the national shortages described in the press and in the news did not affect availability at Raigmore Hospital.

131. Issues and queries regarding PPE and RPE would be raised and resolved daily at the site and at command structure (Gold, Silver, and Bronze Command) meetings.

132. A review of concerns and complaints re PPE has shown the majority related to availability of PPE out with Raigmore. Incidents reported by staff relating to the availability of PPE in Raigmore have been reviewed when raised and do not demonstrate any concerning trends. I am not able to give details on the number of concerns raised but to describe more of the general sense where there were anxieties amongst staff. Concerns may have been raised formally or more softly with the staff members' line manager. We did not have a dedicated system to record concerns relating to the availability of PPE/RPE across the whole of the organisation but I do recall staff are seeking clarification and further guidance on the use of PPE, particularly for those who were not accustomed to wearing PPE or were seeking additional support when the national guidance changed or their individual circumstances changed. One such example of general concerns raised is in the summer of 2020; there were also some general concerns around wearing PPE for prolonged periods in warmer temperatures. PPE can be uncomfortable to wear (not least in the heat) and there were concerns that heat stress, fatigue and heat related illness could result from wearing PPE for lengthy periods of time. We provided practical advice for staff (and patients) to look after themselves in the warmer months when wearing PPE for prolonged periods.

133. So, in summary, although there were examples that demonstrated real and perceived views of risk from staff and patients about the availability and quality of PPE and RPE we were able to maintain sufficient supplies in Raigmore. Most concerns were voiced in the early days of the pandemic and improved over time as guidance and communications improved and supply chains stabilised.

FACE FIT TESTING (FFT)

134. By way of comparison, pre-COVID-19 fit testing requirements were approximately 400 staff per year. During the pandemic, this increased by approximately ten-fold.

135. The practical arrangements for FFT varied over time. Initially, some clinical staff were redeployed into fit testing roles and then trained and subsequently supervised by Health and Safety staff to deliver our fit testing service in Raigmore. The resource to fit test varied continuously throughout the pandemic and was predicated on the volume required to refit as a result of national stock supplies (which were managed by NSS) - **Exhibit EW/21 [INQ000477638]** - Report from NHS Highland titled Respiratory Protective Equipment & Fit Testing Update.

136. Local commercial fit testing contractors offered free services to fit test NHS Highland staff which supported the fit testing effort to get the maximum number of staff fitted in the shortest timeframe.

137. The national IPC guidance on who required fit testing, aerosol generating procedures, and ventilation protocols / requirements for clinical areas changed frequently. The continuous updates were issued throughout the pandemic as evidence and research about the disease developed, guidance changed which therefore required adjustment to the provision of fit mask testing on a continuous basis.

138. There were, and continue to be, some issues with masks which do not/did not fit well. Principally these issues affect people with small faces and people with beards. At times, the shortage of some specific masks directly contributed to an increase in repeat fit testing for our staff.

139. I also recall that there were some issues with expiry dates on some masks (FFP3's 3M1863). Expiration dates were extended on FFP3 mask types to extend their usage. This understandably caused anxiety amongst staff despite assurances from NSS and manufacturers that this was safe practice. I do not have details of the specific concerns raised by any staff members, but I can understand a level of consternation if expiry dates were extended and understand that staff may have, because of those extensions, felt vulnerable at work. We would have given the reassurances that were provided by NSS and the manufacturers to try to alleviate any concerns staff had but it is not possible to measure if those assurances had an impact on how staff felt.

140. Achieving a perfect fit on all faces with FFP3 masks is a major challenge due to face size, face shape, mask size and mask shape. This issue is well known but was magnified with the pandemic due to the exponential increase in fit testing demand at the start and during the pandemic phases. NSS had major challenges in supplying FFP3 masks to Boards to fit small faces and for those staff for beards. This is still the case now in 2024, in my professional view further Research & Development work is required to provide a more effective solution to respiratory protection for NHS staff, which supports all face shape and sizes, rather than relying on FFP3 disposable masks. The logistics in fit testing with the latter are extensive.

141. Staff were fatigued by the constant refitting process. Staff were anxious about not achieving a fit with FFP3. Staff were anxious about having no available Powered Air Purifying Respirators.

142. National Procurement NSS initiated a national Fit Testing Group, with local health and safety, IPC, and procurement representatives across the Territorial Boards to help

coordinate a more consistent approach to fit testing. NSS also secured contracts with suppliers who went on to design new FFP3 masks in consultation with these Boards. NSS would be able to provide more comprehensive information, but I do recall that there were several masks from recall that had expiry date issues (3M 1863, 3M 8833). NSS provided assurance to Health Boards that any decision to extend masks had been made in conjunction with the manufacturer beforehand.

143. Four Portacount machines (the TSI Portacount is an ambient particle counting device which is used to conduct Fit Testing by providing a quantitative assessment of face seal leakage) were bought through COVID-19 funds. These could only be used by Health & Safety Officers, but they provided a greater degree of reassurance for staff that their mask of choice fitted their face well in turn reducing their concerns and helped to reduce anxiety in staff. They were bought to provide fit testing support to all areas across NHS Highland (including Raigmore Hospital and other sites) that required fit testing. We ceased using the qualitative method of fit testing where users detect a bitter or sweet taste to the quantitative approach using the Portacount which is far more objective, reassuring and safer test for staff.

VISITING

144. To ensure patient, staff, and visitor safety and in line with changing national guidance, visiting was, on occasion, suspended at Raigmore apart from essential visits. Visiting of relatives of patients with COVID-19 had to be tightly controlled and visiting during the pandemic was a complex issue.

145. The following principles applied: -

- Essential visiting should be at the discretion of the clinical teams
- Electronic communication should be encouraged
- Communal visitor areas will be closed and not available for use
- Visitors must be symptom free and consent to a temperature check
- Visitors must comply with local infection control measures outlined by the infection control team

- Visitors must enter and leave the hospital by the most direct route and not visit other areas of the hospital
- Febrile/symptomatic visitors will be refused admission

146. In addition to relatives, visiting medical teams should minimise access to the critical care unit and will be encouraged to use other methods of communication to receive updates. An exception to this should be where a consultation has been requested, but this should not require more than one clinician to visit.

147. Hospital visiting throughout the pandemic was complex and frequently changed in line with national guidance and local circumstance. Some keys points were that on 25 March 2020 and in line with the national lockdown, visiting our facilities was suspended except in exceptional circumstances. ·

148. The First Minister announced on 07 October 2020 new regulations on the mandatory use of face coverings in indoor communal settings; this included staff canteen and corridors in workplaces.

149. Visiting guidelines are designed to promote a person-centred approach to visiting and essential visitors are supported for women giving birth, children, people who are receiving end of life care and people with mental health issues including dementia, learning disability, and autism where separation can cause distress in both COVID-19 and non-COVID-19 areas.

150. Around early October 2020 there was feedback from staff that many patients were arriving at outpatients for appointments accompanied by friends/family when it was not necessary clinically for them to be there. Additional signage was displayed to highlight that only patients who needed assistance, for example support from a carer should be in attendance with patients.

151. The Person Centred Visiting in Hospitals Group, continued to meet regularly to respond to the updated national guidance and by the start of December 2020 the national guidance was linked to the national tier system. The guidance, at that time, allowed hospitals in North Highland (which was in the Tier 1 category) to begin to move towards the introduction of two designated visitors over and above essential visitors.

152. Hospitals in A&B, at the time, were In the Tier 2 category where guidance remained unchanged with essential visitors and one designated visitor only.

153. Towards the end of December 2020, the guidance for Tier 4 was that only essential visiting for hospitals and care homes was currently permitted. Outdoor/window visits were still considered for care homes.

154. An essential visit is one where it is imperative that a relative or friend is allowed to see their loved one in a number of exceptional circumstances (women giving birth, children, people who are receiving end of life care and people with mental health issues) but also included any other situation where clinical staff assess that it is essential to involve family or carers for ethical or patient safety reasons to maintain a person-centred approach.

155. From Boxing Day 2020, most of Scotland moved to Tier 4.

156. On 19 January 2021, all visitors (staff and patients too) required to put on FRSM (preferably 3 layers) rather than a face covering upon entering a care facility.

157. From 21 April 2022, visiting guidance was updated to reflect changes to the guidance for wider public use of facemasks/coverings. Patients and visitors were strongly recommended to continue to wear FRSM at all times within clinical and communal settings where it can be tolerated and does not compromise clinical care. Medical exemptions continued to apply, for example those with preexisting medical conditions.

158. Special arrangements in line with national guidance were made to accommodate essential visitors in maternity, paediatrics, neonatal and for those with dementia, learning disability or autism where lack of support may have resulted in unnecessary distress.

159. Perhaps somewhat unique was neonatal visiting where particular effort was made by the team to maximise opportunities for parents to care for their newborns while ensuring infection control needs were met and mitigating any risks of transmission.

160. Although not a written policy, those receiving end of life care could have one family member present during the pandemic when there were visiting restrictions in place elsewhere in the hospital.

161. Visiting was agreed in advance including who would be visiting, and a time allocated for a designated period (unless End of Life). Those visitors who were unwell or displaying signs of COVID-19 were advised visiting was not permitted. Advice and instruction were provided on hand washing and the use of PPE on entry to the wards. Visitors were advised to visit directly to the ward and not visit other areas of the hospital. Signage was provided on the ward entrances to ring the doorbells and wait for staff to meet them before. Advice and instruction were provided on hand washing and the use of any additional PPE on entry to the wards. **Exhibit EW/22 [INQ000427404]** - Guidance from NHS Highland, titled Visiting People in Hospital - Phase 2 from 13th July; Guidance for Patients and Named Visitors.

162. In April 2020, the implementation of a virtual visiting service based on the "Near Me" technology was approved having already been successfully implemented in ICU. This was well received and allowed contact between patients and their loved ones, particularly for those who did not have access to mobile phones or other devices.

163. As the pandemic progressed and again in line with national guidance, Raigmore was able to introduce a reactive phased local return to person centred visiting based on local risk assessments. I do not have a timeline of visiting restrictions or lessening of measures.

164. It is without doubt that restricted visiting had negative effects on our patients and their families, as well as staff members. It is difficult to say with any certainty whether the correct balance was struck between visiting restrictions and the need to minimise the risk of infection whilst enabling patients the support and comfort of visitors. Over the period of March 2020 - June 2022 there were 18 concerns or complaints formally lodged with the feedback team regarding visiting restrictions (the total number of Level 1 complaints received over the relevant period was 570 and 1279 Level 2 complaints were received). This small number may suggest that most were satisfied we were doing the best we could under the unprecedented circumstances.

PATIENT TREATMENT AND CARE

165. In respect of elective and non-urgent theatre activity, in March 2020, Raigmore Theatres were coming to the end of what had been a 3-year Critical Care/Theatre(s) refurbishment programme. In March 2020, we had three Theatres closed for refurbishment although, by that stage, the refurbishments were almost complete. The new Trauma Theatre was already complete, and we had secured the provision of a second Vanguard Theatre. The Theatre complex was already operating at a reduced capacity of 1 Theatre. The Theatres available at this time were:

- Theatres 1 to 6 & 11
- Eye Day Case Unit

- Trauma Theatre
- Vanguard Theatre 1 & 2

166. In a normal working week, Theatre 5 was the dedicated Emergency Theatre running 24/7. Theatre 11 was the Obstetric Theatre and again available 24/7. The Trauma Theatre ran 7 days a week, 7 hours a day. The remaining Theatres were predominately used for elective work, although if there was any space at the end of an elective list, emergencies/trauma cases were often slotted in.

167. Through January and February 2020 there was a normal pattern of elective and emergency work.

168. As the number of cases of COVID-19 increased during February and March 2020, concern was growing regarding the impact it would have on our Critical Care provision. Through discussion at Bronze Command, it was agreed to reduce our elective programme, particularly cases that may require a Critical Care bed.

169. Much of the focus was on preserving Emergency/Trauma, Obstetrics and Urgent Cancer Surgery.

170. The following is a basic timeline through March and April 2020 outlining some of the key dates: -

- 09 March 2020 - Reduction in elective cases where there was a possibility of needing a critical care bed
- 12 March 2020 - Further reduction in elective cases to local anaesthetic cases, predominately Ophthalmology in the Eye Day Case Unit
- 17 March 2020 - At this stage elective ophthalmology operating was suspended, several ENT and breast surgery cases were carried out in the Eye Day Case unit. and Both Vanguard Theatres were available for cancer patients

- 23 March 2020 - Elective work was now focused on the Eye Day Case Unit and Vanguard Theatre 2 – with the majority of specialties who have cancer patients having access to lists – ENT, Urology, Colorectal, Upper GI, Gynaecology and Breast. This scenario continued for some time until mid-May. Cancer cases were prioritised during this period.
- w/c 18 May 2020 - Restarted some elective ophthalmology procedures in Eye Day Case Unit and opened Theatre 5 up for additional elective work
- w/c 08 June 2020 - Opened another theatre for elective work – theatre 6 focusing on Urology
- w/c 06 July 2020- Re-gigged the theatres back to theatre 5 being emergency theatre, and theatre 1 for elective surgery and other theatres re-opened

171. A table of elective, non-urgent operating numbers throughout the pandemic is detailed at **Exhibit EW/23 [INQ000427405]** - illustrating the impact of COVID-19.

172. Any decision regarding the reduction in elective activity, or the stepping up of elective activity, was discussed clinically with the Clinical Director for Surgery and the Clinical Lead for Critical Care, who took requests up to and down from the Bronze, Silver and Gold Commands which is the structure that was put in place for the whole of NHS Highland (and other Health Boards), not specifically Raigmore Hospital as a single site. All decisions were clearly communicated via regular emails from both the Clinical Director for Surgery and the Clinical Lead for Critical Care.

173. A clinical review group was established to ensure that theatre slots were allocated to those patients who needed them the most. Clinical Leads for the main specialties plus anaesthetics, brought cases each week to discuss and agree operating slots for these cases. Specialties who had non-cancer (but clinically urgent patients); Orthopaedics; and Dental also had the opportunity to present cases. The Clinical Review Group worked very well and was well supported by the clinical teams, however by mid-July 2020, once more theatres were back up and running, the need for the group and the clinical review diminished and the Group was stood down.

174. **Exhibit EW/24 [INQ000427406]** is a briefing on Orthopaedic waiting times.

Colorectal

175. Urgent suspect cancer colorectal cases continued to be prioritised in the manner detailed in **Exhibit EW/25 [INQ000427391]** shows the colorectal pathway.

Ischaemic Heart Disease (IHD)

176. Emergency management and treatment of patients presenting with symptoms of Ischaemic Heart Disease continued. The Rapid Access Chest Pain Clinic continued as normal. The cardiac catheterisation lab also continued business as usual. Urgent patients on the waiting list continued to be seen and managed. Clinical dialogue, a secure text-based communication method, between cardiologists and primary care was a useful tool for the ongoing management of patients with Ischaemic Heart Disease or new non urgent referrals to the service. The use of clinical dialogue continues to expand not just in cardiology but in other services too.

Other innovations

177. NHS Highland was an early adopter and pilot site for "Near Me" prior to the pandemic and as such we were able to upscale its use very easily. Even with the return of face-to-face outpatient appointments, the use of Near Me has continued. This brings obvious advantages and benefits to both our patients and staff in the Highland, where travel distance and times can be long.

178. FLORENCE (FLO) was originally introduced in Highland in 2015. It was developed in 2017 for blood pressure monitoring. It is a text service designed by NHS professionals to provide support and advice for patients. It is primarily a text messaging service that links patients' mobile phones to clinicians' computer systems and can be used in almost any healthcare setting.

179. During the pandemic, the use of FLORENCE increased. The attached table – **Exhibit EW/26 [INQ000477631]** - illustrates the number of enrolments with the NHS Highland Technology Enabled Care Team (TEC).

180. Prior to the emergence of COVID-19, the Raigmore maternity unit had access to only five single rooms and each of the multi bed bays housed up to six women and their babies. The decision was taken to move gynaecology inpatients from ward 9A in the Maternity Unit to the Tower Block to enable access to an additional six single rooms, whilst also reducing the multi bed bays to four, without significantly impacting on the number of maternity beds available. None of these single rooms had anterooms for putting on or removing PPE. This change also allowed a designated obstetric red area to be created, where pregnant women who were suspected or confirmed to be positive for COVID-19 could be looked after by the appropriate team during the antenatal and post-natal period. Attached is the Pathway for Pregnant COVID Women – **Exhibit EW/27 [INQ000427407].**

181. The Raigmore Maternity Unit does not have ensuite birthing rooms, so an area at the end of the unit was identified for use by COVID-19 suspected or positive women in labour. However, this meant that the only shower in labour suite could not be used by any of the other patients. A second (disabled) toilet was however available within labour suite. As there was no Isolation Room available in the department, the solution that was agreed was to create a form of Isolation Room by creating an Ante-Room within the footprint of Room 8 with the existing ventilation system and a room with a Hepa Cube which extracted air from the room to the outside - **Exhibit EW/28 [INQ000477632]** - diagram of Room 8. It was made clear at the time that it did not provide the air regime of a compliant Isolation room, however, it did provide a room that was negative to the corridor. The guidance being provided at this time was to provide a negative pressure regime where possible when caring for COVID-19 patients. The works were completed by 14 April 2020.

182. A single room with a mobile extractor ventilation cube and an anteroom were installed in a space previously utilised for staff training within the Neonatal Unit.

183. Significant changes were made to the visiting arrangements within the Unit, which impacted on the wider family at what should be a joyous occasion. At times, discretion was used by staff when additional support was required if either mother or baby were unwell. For many cases, partners were allowed to attend the delivery but their visiting in the postnatal wards was restricted to one hour only, at times. No other visitors were allowed into the hospital, which therefore excluded grandparents, siblings, and other family members of significant interest. These restrictions were reviewed regularly by NHS Highland; however, I am unable to recall the dates when the changes were implemented.

184. The Inverness community midwives were unable to access clinic spaces within GP premises, so a temporary arrangement was made to house them within a dental clinic. They have since moved into a dedicated space within the New Craigs site.

ESCALATION OF CARE – DECISION MAKING

185. Raigmore did not have a specific decision-making tool in relation to escalation of care and I am not aware of any concerns voiced by clinicians regarding the absence of a national decision-making tool for potentially rationing care. Referral to Critical Care remained as normal and escalation of care was handled exactly as it had always been. The criteria for admission of patients to ICU did not differ during the relevant period.

186. Additionally, the criteria for receiving oxygen therapy did not change. However, we did make changes to locations for receiving any aerosol generating procedures (AGPs) so that all COVID-19 patients receiving an AGP (such as High flow oxygen, CPAP, NIV, or mechanical ventilation) were housed within Raigmore Hospital, and not the RGH's, by seeking early referral and transfer into Raigmore before oxygen requirements escalated to those considered an AGP. Also, latterly (beyond wave 1)

we attempted to house all AGP's within our Critical Care department where isolation facilities, nursing ratios and ventilation systems were best placed to house such patients. All these changes were ratified and agreed in advance by the Bronze Command.

DNA CPR NOTICES

187. Treatment Escalation Plans are the NHS Highland version of ReSPECT forms. The use of these forms in relation to escalation of care did not change.

188. The established guidance and practice around the use of DNA CPR and communication to patients and families regarding this did not change during the pandemic. Overall, I do not recall increasing numbers of DNA CPRs or the appropriateness of their use being a specific issue raised by clinicians or patients/families at Raigmore. During the specified period DNA CPR notices did not form part of an electronic record.

HEALTH INEQUALITIES

189. Common observations included that those staff and/or patients who are deaf or lipread experienced greater communication challenges due to masks. Colleagues in Community Paediatrics and Neurodevelopmental Assessment Services (NDAS) and Child and Adolescent Mental Health Service (CMAHS) also expressed concerns that communicating with children effectively was hampered using masks. Attached is a joint SBAR on the use of PPE, specifically face masks, and how these were hindering the clinician's in assessing children and the proposal to use visors - **Exhibit EW/29 [INQ000427392]** - Minutes of a meeting of the NHS Highland Children and Young People's the Clinical Governance Group.

MEASURES TO ALLEVIATE IMPACT ON HOSPITAL STAFF

190. The impact on frontline NHS staff throughout the pandemic has been widely documented. We do not have a formal system to record the effects in terms of morale and physical and mental wellbeing that is directly attributed to frontline staff and other staff working throughout the pandemic. Steps taken by the organisation to minimise the impact include: -

- All non-essential meetings cancelled
- Upgrade to Windows 10 at pace
- Introduction of M365 products such as TEAMs to enable video conferencing
- Assistance with food and drinks whilst at work
- Access to safe spaces both indoors and outdoors
- Doctors mess space made available to all staff
- Availability of heated outdoor areas
- Access to the National Wellbeing Hub
- Staff had 24hrs/7day a week access to a range of online resources were available on our staff intranet page and via Validium which is an Employee Assistance Programme
- Wellbeing Wednesday and Weekly Round Up was put together by HR (Human Resource) Director and Communications Team
- The onsite Chaplain and Spiritual Care Department was available and present to give staff additional support (not exclusively spiritual care)
- A Long COVID-19 service has been set up to support both staff and patients
- Occupational Health services continued with psychological and wellbeing support sessions being offered to staff
- Accommodation and "too tired to travel home" support packs; and
- Dedicated Wellbeing Intranet page

CHANNELS OF COMMUNICATION TO STAFF

191. Despite using numerous modes of communication with staff daily, it is difficult to measure effectiveness as not all staff will routinely read or access communications. We do now measure the readership of our Weekly Round-Up, but this was not possible during the pandemic.

192. Communication followed command and control structures of Gold, Silver, and Bronze with communication to staff disseminated through line management structures. In addition, there were departmental/ward huddles, broadcasts via teams to all staff each Wednesday from 5pm to 6pm, email communication, newsletters, video blogs from executives and senior leaders, internal announcements, and intranet page updates. The Communications team were key in facilitating this.

193. Where national clinical guidance was to be disseminated or where local guidance required to be produced, once approved using the command structure described, it would then be published on the NHS Highland intranet page under the Treatment and Medicines (TAM) thumbnail. This Application is intended as a primary reference source for the guidance of staff as to how conditions are normally managed within the clinical areas.

194. Within Raigmore, there were regular walk arounds by senior leader and executive team members. The Chief Office and I as Deputy Medical Director were purposefully based in the hospital to strengthen lines of communication and provide a visible and accessible presence for staff.

195. There were regular internal briefs between executive and operational leaders and with the Scottish Government which involved acute staff.

RECOMMENDATIONS

196. Over the course of the pandemic and beyond, our staff worked hard to provide care for patients. We are proud of our staff for their unwavering commitment. There were times when it was confusing and worrying for staff; just as it was confusing and worrying for members of the public. Staff at all levels of the organisation demonstrated that, as public servants, they were and continue to be committed to their duties and they continue to perform their work with kindness, consideration, empathy, and compassion.

197. One of the main reflections of the pandemic is to ensure that we value and support our staff in these challenging roles. It would be prudent to ensure that staff wellbeing is explicitly considered first and foremost in the future.

198. Part of ensuring staff feel valued and supported is ensuring that health and social care services are staffed appropriately so that they can respond effectively to future pandemics. Recruitment and staff retention are key issues affecting all areas across the UK.

199. General wellbeing support was available to staff at all levels, but it is crucial that this remains in place to support staff regardless of role or location to ensure that staff can recover from pressures and burnout.

200. Continue to routinely monitor the effectiveness of hospital ventilation systems and ensure that these are routinely tested.

201. Maintain knowledge for all staff about the donning and doffing of PPE and RPE, specifically regarding new staff but also refreshers for existing staff.

202. Encourage, by providing protected time, all our non-clinical staff with current professional registration to engage in staying connected days to retain a degree of confidence in-patient facing roles so that if required, the transition back to clinical roles is less daunting.

203. Consideration given to stress testing our guidance and responses against different infective agents.

204. The pandemic resulted in the rapid adoption of digital technology, which led to changes in service delivery. Digital technology was used to free up space and capacity in acute hospitals, to enable home and remote working and to reduce the risk of infection transmission in NHS settings. Both primary care and secondary care have seen a substantial increase in remote appointments, but it is essential that we understand, through evaluation and research, what the impact of the rapid shift towards digital technology has had on clinical practice, patients' access to care, the quality of care provided and the experiences of both staff and patients.

205. Taking a "Once for Scotland" approach and early coordination across Health Boards may help to improve consistency across Health Boards particularly regarding advancements in digital technology and IT infrastructure.

206. Technology did play a role in the pandemic and the continued use and/or expansion in use of digital technology in health and social care settings means that conversations about how the NHS delivers services in the future are warranted with technology providing an opportunity for care to be tailored according to the needs and preferences of patients. This might include how hospitals and other health and social care settings are designed in the future.

207. Revised management arrangements – As per our pandemic planning, initially, an IMT was set up. This was quickly superseded (in days) by initiating the Gold, Silver, and Bronze Command structure. The Gold and Silver Command covered all of NHS Highland and included A&B HSCP as well as North Highland HSCP and covered all acute hospitals. There was a Raigmore Hospital specific Bronze Command which reported into these structures. After the first wave in June 2020, System Leadership (Tactical) stood up, and the Operational Management units restarted. Clinical Expert Group continued. Around November 2020 the Clinical Expert Group was renamed to the Clinical Response Group.

208. An agreed national approach to fit testing encompasses current research, development, and innovation.

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: 24 May 2024

INVENTORY OF EXHIBITS

1. EW/01 INQ000427390 - Map showing different medical centres within the NHS Highland, including NHS Highland Hospitals, GP Practices and Branches/Partners, undated.
2. EW/02 INQ000427393 - Spreadsheet from NHS Highland, titled Estates Operations, COVID 19 Action Tracker, undated
3. EW/03 INQ000427394 - Blueprint of Raigmore Hospital, dated 28/03/2020.
4. EW/04 INQ000477633 - Report titled Changing Tower Block use to prepare for COVID-19, dated 10/03/2020.
5. EW/05 INQ000427395 - Document from NHS Highland, regarding staff levels at Raigmore Hosptial between March 2020 and June 2022.
6. EW/06 INQ000427396 - Table from NHS Highland, illustrating the number of Bank/Agency shifts requested at Raigmore Hospital by month and job level, dated June 2022.
7. EW/07 INQ000427397 - Table from NHS Highland, illustrating the number of Bank/Agency shifts requested at Raigmore Hospital by month and location, dated June 2022.
8. EW/08 INQ000427398 - Table from NHS Highland, illustrating the number of Bank/Agency shifts requested at Raigmore Hospital by month and reason, dated June 2022.
9. EW/09 INQ000427399 - Table from NHS Highland, illustrating the numbers of special leave with COVID-19 related reasons for Raigmore Hosptial taken from the SSTS system, dated June 2022.
10. EW/10 INQ000477634 - Report titled NHS Highland Response to Corona virus meeting structure as of Monday 9th March 2020 (key reference documents NHSH MI plan and Pandemic flu plan), undated.
11. EW/11 INQ000427400 - Document from NHS Highland, titled NHS Highland Performance Recovery Board – Status Report, dated 03/12/2020.
12. EW/12 INQ000427401 - Document from NHS Highland, titled NHS Highland Performance Recovery Board – Status Report, dated 10/12/2020.
13. EW/13 INQ000427402 - Report from NHS Highland, titled Oxygen Therapy Capacity, dated 23/04/2020.
14. EW/14 INQ000427403 - Report from NHS Highland, titled Oxygen Resilience Group - Standing Down - SBAR, dated 16/06/2020.

15. EW/15 INQ000477639 - SBAR report regarding current PHE guidance for Interim Prevention & Control, dated 31/03/2020.
16. EW/16 INQ000477640 - Patient label from NHS Highland titled Inpatient COVID 19 Testing Record, dated January 2022.
17. EW/17 INQ000477641 - SBAR report titled Decision over definition of Aerosol Generating Procedures for NHS Highland, dated 17/04/2020.
18. EW/18 INQ000477635 - Guidance from NHS Highland titled Guidance of Sessional Use of PPE, dated 27/04/2020.
19. EW/19 INQ000477636 - Guidance from NHS Highland titled NHS Highland Standard Operating Procedure Decontamination of reusable face and eye protection when disposable visors and eye protection is not available, dated March 2020.
20. EW/20 INQ000477637 - Report from NHS Highland titled Respiratory Protective Equipment & Fit Testing, dated 26/08/2020.
21. EW/21 INQ000477638 - Report from NHS Highland titled Respiratory Protective Equipment & Fit Testing Update, dated 22/09/2020.
22. EW/22 INQ000427404 - Guidance from NHS Highland, titled Visiting People in Hospital - Phase 2 from 13th July; Guidance for Patients and Named Visitors, dated 13th July.
23. EW/23 INQ000427405 - Table from NHS Highland, illustrating the impact of COVID-19, undated.
24. EW/24 INQ000427406 - Briefing from NHS Highland, titled NHS Highland Briefing: Orthopaedic Waiting Times, undated.
25. EW/25 INQ000427391 - Flowchart illustrating a colorectal pathway, undated.
26. EW/26 INQ000477631 - Data graph regarding Total Florence enrolments, undated.
27. EW/27 INQ000427407 - Flowchart from NHS Highland, titled Pathway for Pregnant COVID women, undated.
28. EW/28 INQ000477632 - Diagram regarding Room 8 Floor Plan Air Regime after Works, undated.
29. EW/29 INQ000427392 - Minutes of a meeting of the NHS Highland Children and Young People's the Clinical Governance Group, dated 01/10/2020.